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MATERIAL LICENSE

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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. Safety Light Corporation</p> <p>2. 4150-A Old Berwick Road Bloomsburg, Pennsylvania 17815</p>	<p>In accordance with the application dated April 9, 1999,</p> <p>3. License number 37-00030-08 is amended in its entirety to read as follows:</p> <p>4. Expiration date, December 31, 2004</p> <p>5. Docket No. 030-05982 Reference No.</p>
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<p>6. Byproduct, source, and/or special nuclear material</p> <p>A. Hydrogen 3</p> <p>B. Carbon 14</p> <p>C. Krypton 85</p> <p>D. Any byproduct material with atomic numbers 1 through 83</p>	<p>7. Chemical and/or physical form</p> <p>A.</p> <p>B.</p> <p>C.</p> <p>D.</p>	<p>8. Maximum amount that licensee may possess at any one time under this license</p> <p>A.</p> <p>B.</p> <p>C.</p> <p>D.</p>
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9. Authorized use:
- A. Research and development as defined in 10 CFR 30.4; manufacturing of electron tubes, self-luminous devices, foils, targets, rods, and pins; distribution to persons authorized to receive licensed material pursuant to the terms and conditions of a specific license issued by the Nuclear Regulatory Commission or an Agreement State; and demonstration of prototype products at customer facilities.
 - B. through D. Reference standards for radiation and/or luminous measurements.

CONDITIONS

- 10. Licensed material may be used or stored at the licensee's facilities located at 4150-A Old Berwick Road, Bloomsburg, Pennsylvania. Licensed material in Item 6.A. may also be used 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.

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Docket or Reference Number

030-05982

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11. A. Licensed material shall be used by, or under the supervision of, Charles G. Berlin, Denise Dohl, Norman G. Fritz, Larry Harmon, John G. MacHutchin, Ph.D., Martha J. Rider, or Jerry L. Slowick.
- B. The Radiation Safety Officer for this license is Norman G. Fritz.
12. This license does not authorize commercial distribution of licensed material to persons generally licensed pursuant to 10 CFR Part 31 or equivalent regulations of any Agreement State or to persons exempt from licensing pursuant to 10 CFR 30.14 through 30.20 inclusive or equivalent regulations of any Agreement State.
13. Licensed material shall not be used in or on human beings.
14. A. Sealed sources and detector cells containing licensed material shall be tested for leakage and/or contamination at intervals not to exceed six months or at such other intervals as are specified by the certificate of registration referred to in 10 CFR 32.210, not to exceed three years.
- B. Notwithstanding Paragraph A of this Condition, sealed sources designed to emit alpha particles shall be tested for leakage and/or contamination at intervals not to exceed three months.
- C. In the absence of a certificate from a transferor indicating that a leak test has been made within six months prior to the transfer, a sealed source or detector cell received from another person shall not be put into use until tested.
- D. Each sealed source fabricated by the licensee shall be inspected and tested for construction defects, leakage, and contamination prior to any use or transfer as a sealed source.
- E. Sealed sources and detector cells need not be leak tested if:
- (i) they contain only hydrogen-3; or
 - (ii) they contain only a radioactive gas; or
 - (iii) the half-life of the isotope is 30 days or less; or
 - (iv) they contain not more than 100 microcuries of beta and/or gamma emitting material or not more than 10 microcuries of alpha emitting material; or
 - (v) they are not designed to emit alpha particles, are in storage, and are not being used. However, when they are removed from storage for use or transfer 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 or detector cell shall be stored for a period of more than 10 years without being tested for leakage and/or contamination.

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- F. The test shall be capable of detecting the presence of 0.005 microcurie of radioactive material on the test sample. If the test reveals the presence of 0.005 microcurie or more of removable contamination, a report shall be filed with the U.S. Nuclear Regulatory Commission and the source or detector cell shall be removed immediately from service and decontaminated, repaired, or disposed of in accordance with Commission regulations. The report shall be filed within five days of the date the leak test result is known with the appropriate U.S. Nuclear Regulatory Commission, Regional Office referenced in Appendix D of 10 CFR Part 20. The report shall specify the source or detector cell involved, the test results, and corrective action taken.
- G. The licensee is authorized to collect leak test samples for analysis by the licensee. 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.
15. The licensee shall conduct a physical inventory every six months, or at other interval approved by the U.S. Nuclear Regulatory Commission, to account for all sealed sources and/or devices received and possessed under the license.
 16. In addition to the possession limits in Item 8, the licensee shall further restrict the quantity of hydrogen-3 (tritium) waste stored on the licensee's premises to a maximum of 35,000 curies.
 17. Radioactive waste shall be stored in accordance with the statements, representations, and procedures included with the waste storage plan described in the licensee's letters dated March 8, 1994, and April 9, 1999.
 18. Radioactive waste generated after January 1, 2000, from operations under this license shall be analyzed at least once each year, and shall be disposed of within two years of generation, providing a waste disposal site is open.
 19. Radioactive waste generated from activities performed prior to January 1, 2000, shall be disposed of or otherwise removed from the site by December 31, 2004. A report of the inventory of waste in storage, and the waste disposed of each year, shall be provided to the NRC Region I Office by December 31 of each year beginning December 31, 2000.

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20. A. Pursuant to 10 CFR 30.11, the licensee is exempted from the provisions of 10 CFR 30.32(h) and 30.35(a) through 30.35(f), provided that the licensee sets aside from operating funds or any other funds, except insurance litigation funds, the following amounts as described in the licensee's letter dated August 3, 1999:

January 1, 2000 and each month thereafter for 12 months: \$7,000.00;

January 1, 2001 and each month thereafter for 24 months: \$8,000.00;

January 1, 2003 and each month thereafter for 24 months: \$9,000.00

for a total of \$492,000.00. These funds shall be deposited into Trust Account Number C32520 with the Chase Manhattan Bank. The use of these funds, including disbursement of assets, shall be governed by the Trust Agreement which established the trust account. This exemption is valid until the date shown in Item 4 or the date of any failure to comply with this license condition.

- B. Notwithstanding Paragraph A of this Condition, the licensee shall provide by December 31, 2000, a cost estimate for decommissioning of facilities and equipment authorized by this license, including disposal of wastes generated by activities authorized by this license. The cost estimate shall be based on compliance with the criteria in 10 CFR Part 20, Subpart E, "Radiological Criteria for License Termination."
21. The licensee is authorized to transport licensed material in accordance with the provisions of 10 CFR Part 71, "Packaging and Transportation of Radioactive Material."

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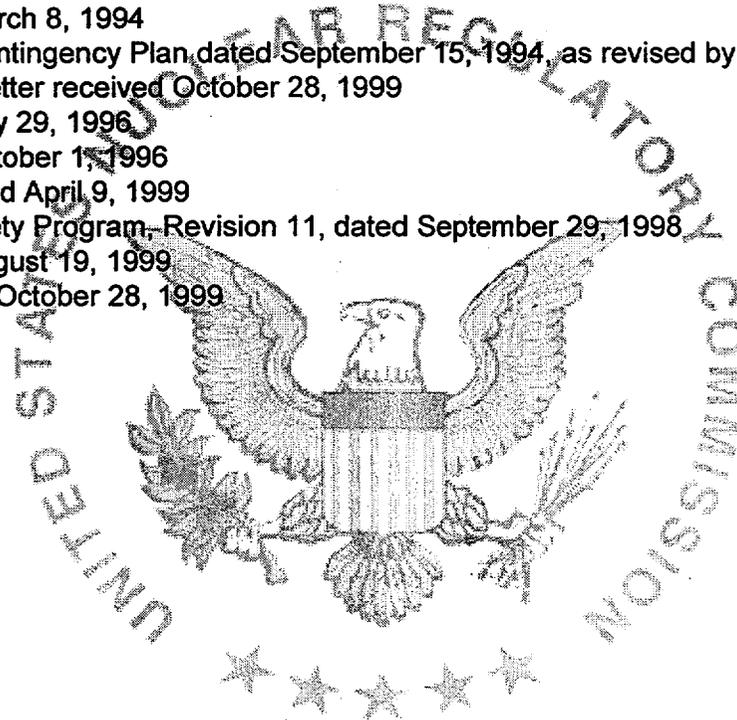
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22. Except as specifically provided otherwise in this license, the licensee shall conduct its program in accordance with the statements, representations, and procedures contained in the documents, including any enclosures, listed below. The U.S. Nuclear 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. Letter dated March 8, 1994
- B. Radiological Contingency Plan, dated September 15, 1994, as revised by the letter dated August 19, 1999, and the letter received October 28, 1999
- C. Letter dated July 29, 1996
- D. Letter dated October 1, 1996
- E. Application dated April 9, 1999
- F. Health and Safety Program, Revision 11, dated September 29, 1998
- G. Letter dated August 19, 1999
- H. Letter received October 28, 1999



For the U.S. Nuclear Regulatory Commission

Original signed by Elizabeth Ullrich

Date January 26, 2000

Elizabeth Ullrich
 Nuclear Materials Safety Branch 2
 Division of Nuclear Materials Safety
 Region I
 King of Prussia, Pennsylvania 19406

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