

**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. 32 amends

LICENSEE		3. License Number:
1. Name:	GEL Laboratories, LLC	362 in its entirety.
2. Address:	2040 Savage Road Charleston, SC 29407	4. Expiration Date: December 31, 2024
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 Numbers 2 through 83.	A. Any	A. 100 millicuries.
B. Any radioactive material with Atomic Numbers 84 through 100.	B. Any	B. 10 millicuries.
C. Source material (natural or depleted Uranium or Thorium)	C. Any	C. 70 kilograms.
D. Uranium 235	D. Any	D. 300 grams.
E. Uranium 233	E. Any	E. 2 grams.
F. Plutonium	F. Any	F. 2 grams.
G. Hydrogen 3	G. Any	G. 1.0 curie.
H. Any radioactive material with Atomic Numbers 1 through 98.	H. Any	H. 2.0 millicuries per source and 100 millicuries total.

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
 Radioactive Material License
 Supplementary Sheet

License No. 362
 Amendment No. 32

-
- | | | |
|-----------------------------|-------------------------|---|
| I. Technetium 99m | I. Any | I. 5 millicuries per source and 50 millicuries total. |
| J. Any radioactive material | J. See Item 8.J. below. | J. See Item 8.J. below. |
-

8. Authorized Use:

- A. through G. As contaminants in environmental waste samples of unknown chemical composition.
- H. To be used as calibration and reference standards.
- I. To be used as calibration and reference standards.
- J. The licensee is authorized to perform tests for leakage and/or contamination of sealed sources and of devices containing sealed sources of radioactive material. The quantities and forms of radioactive material authorized are limited to those contained in swabs or smears for analysis.
-

Conditions

9. Unless otherwise specified, the authorized place of use is the licensee's address stated in Item 2 above.
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 II - Licensing of Radioactive Materials; Part III - Standards for Protection Against Radiation; and Part VI - Notices, Instructions, and Reports to Workers; Inspections.
11. Radioactive material shall be used by, or under the supervision of Gregory Austin (RSO), James Westmoreland, or Lonnie Morris.
12. Sealed sources containing radioactive material shall not be opened or removed from their respective source holders by the licensee.
13. A. Each sealed source containing radioactive material, other than Hydrogen-3, with a half-life greater than thirty (30) days and in any form other than gas shall be tested for leakage and/or contamination at intervals not to exceed the intervals set forth in the NRC Registry of Radioactive Sealed Sources and Devices for that make and model source and/or device. In the absence of a certificate from a transferor indicating that a test has been made within the specified time prior to transfer, the sealed source shall not be put into use until tested.
- B. The test shall be capable of detecting the presence of 0.005 microcuries of radioactive material on the test sample. The test sample shall be taken from the sealed source or from the surfaces of the device in which the sealed source is permanently mounted or stored on which one might expect contamination to accumulate. Records of leak test results shall be kept in units of microcuries and maintained for inspection by the Department.

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
Radioactive Material License
Supplementary Sheet

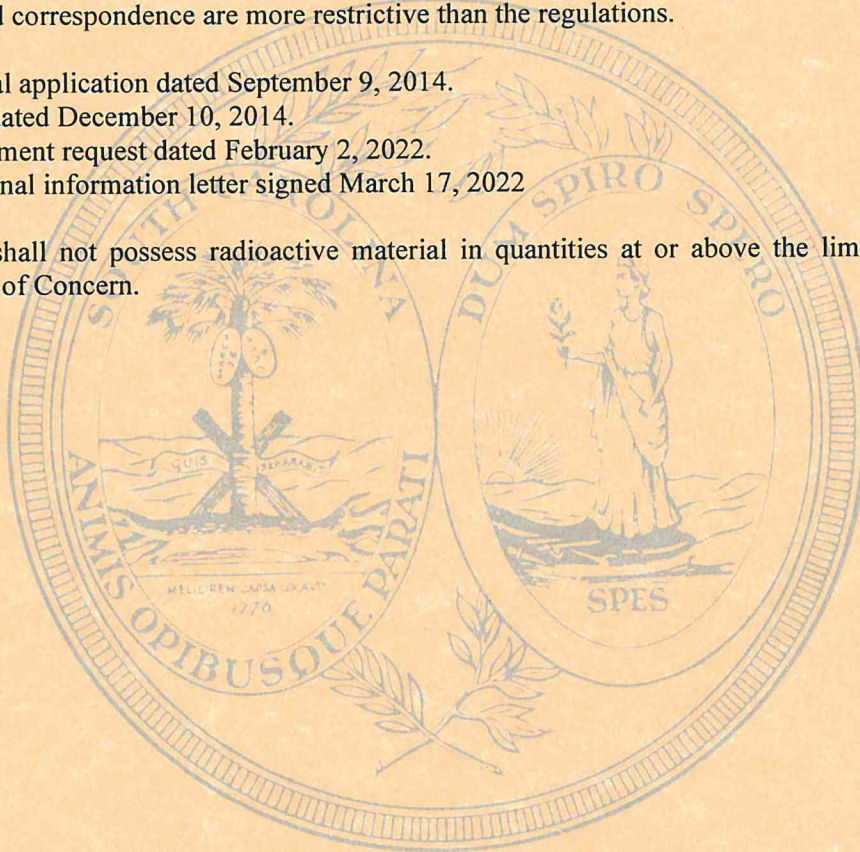
License No. 362
Amendment No. 32

- C. If the test reveals the presence of 0.005 microcuries or more of removable contamination, the licensee shall immediately withdraw the sealed source from use and shall cause it to be decontaminated and repaired or to be disposed of in accordance with Department regulations. A report shall be filed within five (5) days of the test with the Chief, Bureau of Radiological Health, South Carolina Department of Health & Environmental Control, 2600 Bull Street, Columbia, South Carolina 29201, describing the equipment involved, the test results, and the corrective action taken.
14. Except for plutonium contained in a medical device designed for individual human application, no plutonium, regardless of form, shall be delivered to a carrier for shipment by air transport or transported in an aircraft by the licensee except in packages the design of which the U.S. Nuclear Regulatory Commission has specifically approved for transport of plutonium by air.
 15. The licensee shall perform surveys of all incoming samples. Records of these surveys shall be maintained for review by the Department.
 16. The licensee shall maintain a current inventory log of all samples received. This log shall be maintained for review by the Department.
 17. The licensee shall conduct a physical inventory every six (6) months to account for all radioactive material received and possessed under the license. The records of the inventories shall be maintained for inspection by the Department and shall include the quantities and kinds of licensed material, location of radioactive material, and the date of the inventory.
 18. In lieu of using the conventional radiation caution colors (magenta or purple on yellow background) as provided in RHA 3.21.1 of Part III, the licensee is hereby authorized to label detector cells and cell baths, containing radioactive material and used in gas chromatograph devices, with conspicuously etched or stamped radiation caution symbols without a color requirement.
 19. Tests for leakage and/or contamination shall be performed by the licensee or by other persons specifically authorized by the U.S. Nuclear Regulatory Commission or an Agreement State to perform such service.
 20. The licensee shall dispose of all radioactive samples and wastes by return to the sample generator or by transfer to persons specifically licensed by the U.S. Nuclear Regulatory Commission or an Agreement State to receive and dispose of these radioactive samples and waste.
 21. The licensee shall maintain itemized disposal records for review by the Department.
 22. The licensee shall transport and dispose of low-level radioactive waste in accordance with Department Regulation 61-83 and applicable disposal site requirements. Any mixed low-level radioactive waste defined as waste that contains radioactivity and, either listed hazardous waste in Subpart D, 40 CFR 261, or, 2) waste that exhibits any of the hazardous characteristics identified in Subpart C, 40 CFR 261, shall be returned to the sample generator or accumulated and transported in accordance with applicable regulatory requirements to a licensed/permitted mixed waste facility for recycling, treatment, and/or disposal.

SOUTH CAROLINA DEPARTMENT OF HEALTH AND ENVIRONMENTAL CONTROL
Radioactive Material License
Supplementary Sheet

License No. 362
Amendment No. 32

23. A. 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 Department's regulations shall govern unless the statements, representations and procedures in the licensee's application and correspondence are more restrictive than the regulations.
- a) Renewal application dated September 9, 2014.
 - b) Letter dated December 10, 2014.
 - c) Amendment request dated February 2, 2022.
 - d) Additional information letter signed March 17, 2022
- B. The licensee shall not possess radioactive material in quantities at or above the limits specified in Table 1: Radionuclides of Concern.



For the South Carolina Department
of Health and Environmental Control

By: *Susan E. Jenkins*
Susan E. Jenkins, Chief
Bureau of Radiological Health

Date of Issuance: March 25, 2022