

Cabinet for Health and Family Services
Commonwealth of Kentucky
Department for Public Health
275 E Main Street
Frankfort, KY 40621

Andy Beshear
Governor

Eric C. Friedlander
Secretary

Steven J. Stack, MD
Commissioner

Radioactive Material License

Ronan Engineering Company
8050 Production Drive
Florence, KY 41042

Attention: David Yungkau
Telephone: (859) 342-8500

Pursuant to KRS 211.842 et seq., the Kentucky Cabinet for Health and Family Services regulations 902 KAR Chapter 100, and in reliance on statements and representations heretofore made by the licensee, a license is hereby issued to receive, acquire, own, 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, regulations, and orders of the Cabinet for Health and Family Services, now or hereinafter in effect and to any conditions specified below.

3. License Number: 201-260-95
Amendment No: 86
4. Expiration Date: September 30, 2023
5. Reviewer: 49

Cabinet for Health and Family Services
Commonwealth of Kentucky
Department for Public Health
275 E Main Street
Frankfort, KY 40621

License Number:201-260-95 Amendment:86 Radioactive Material License

6. Licensed Material	7. Form	8. Possession Limit
A. Cesium-137	A. Sealed Sources, as evaluated and approved by the Cabinet, the U. S. Nuclear Regulatory Commission Under 10 CFR 32.210 or another Agreement State under equivalent Regulations.	A. No single source to exceed 10,000 millicuries. Total possession limit not to exceed 425 curies
B. Cobalt-60	B. Sealed Sources, as evaluated and approved by the Cabinet, the U. S. Nuclear Regulatory Commission under 10 CFR 32.210 or another Agreement State under equivalent regulations.	B. No single source to exceed 5000 millicuries. Total possession limit not to exceed 80 curies
C. Americium-241	C. Sealed Sources, as evaluated and approved by the Cabinet, the U. S. Nuclear Regulatory Commission under 10 CFR 32.210 or another Agreement State under equivalent regulations.	C. No single source to exceed 1000 millicuries. Total possession limit not to exceed 40 curies
D. Californium-252	D. Sealed Source (QSA Model CVN101, Isotope Products Lab Model N-252-1, Frontier Technology Corporation Model 10S)	D. No single source to exceed 10 microcuries; not to exceed 1 millicurie

Cabinet for Health and Family Services
Commonwealth of Kentucky
Department for Public Health
275 E Main Street
Frankfort, KY 40621

License Number:201-260-95 Amendment:86 Radioactive Material License

E. Americium-241/
Beryllium

E. Sealed Sources, as
Evaluated and
approved by The
Cabinet, the U. S.
Nuclear Regulatory
Commission under 10
CFR 32.210 or another
Agreement State under
equivalent regulations.

E. No single source to
exceed 300 millicuries;
not to exceed 1 curie

F. Any radioactive
material with atomic
number 3-98

F. Any



F. 500 microcuries. No
single radionuclide to
exceed 100 microcuries

9. Authorized Use

A. See F.

B. See F.

C. See F.

D. For research and neutron detector testing.

E. For research and neutron detector testing.

Cabinet for Health and Family Services
Commonwealth of Kentucky
Department for Public Health
275 E Main Street
Frankfort, KY 40621

License Number:201-260-95 Amendment:86 Radioactive Material License

F. A.- C. AND F.

- (1) Research and Development with Sources in Source Holders; Manufacture and Testing of Ronan Engineering Company Gauging Devices;
 - (2) Installation Into or Removal from Ronan Engineering Company Gauging Devices;
 - (3) A-C Engineering Company Gauging Devices Including the Leak Testing of Sealed Sources and Radiation Surveys Of Devices;
 - (4) Installation, Relocation, and Servicing of Gauging Devices Including the Leak Testing of Sealed Sources and Radiation Surveys of the Devices Not Manufactured by Ronan Engineering Company.
 - (5) Picking Up, Storage, and Transfer of Sealed Sources And Devices Used For Gauging From Customers for Transfer to Specific Licensees.
 - (6) Distribution of Any Ronan Device or Sealed Source That Has Been Evaluated, Approved and Registered With The Cabinet Under 902 Kar 100:058 to Persons Authorized to Receive the Radioactive Material Pursuant to the Terms And Conditions of a Specific License Issued by the Cabinet, U.S. Nuclear Regulatory Commission or An Agreement State.
 - (7) Storage.
10. The licensee shall comply with the provisions of the Kentucky Cabinet for Health and Family Services Administrative Radiation Regulations 902 KAR Chapter 100.
 11. Radioactive material may be used or stored at the licensee's facility located at 8050 Production Drive, Florence, Kentucky.

Radioactive material may be used at temporary job sites, in areas not under exclusive federal jurisdiction, anywhere in the Commonwealth of Kentucky where the Cabinet maintains jurisdiction for regulating the use of radioactive material. (This condition does not prohibit use in other states under reciprocity privileges which may be granted by the regulatory agency having jurisdiction.)
 12. Copies of records required pursuant to 902 KAR Chapter 100 or conditions of the license shall be maintained for inspection by the Cabinet at 8050 Production Drive, Florence, Kentucky.

Cabinet for Health and Family Services
Commonwealth of Kentucky
Department for Public Health
275 E Main Street
Frankfort, KY 40621

License Number:201-260-95 Amendment:86 Radioactive Material License

13. Radioactive Material Shall Be Used by, or Under the Supervision of Individuals Designated by the Radiation Safety Officer In Writing. The Licensee Shall Maintain Records of Individuals Designated as Users and Their Training for Three (3) Years After the Individual's Last Use of Radioactive Material
14. The radiation safety officer for the activities authorized by this license is David Yungkau.
15. Sealed sources containing radioactive material shall not be opened.
16. The licensee shall conduct a quarterly physical inventory to account for all sealed sources received and possessed under the license. The records of the inventories shall be maintained for three (3) years from the date of the inventory for inspection by the cabinet, and shall include the radionuclides, quantities, manufacturer's name and model numbers, location of sealed sources, the dates of the inventory, and the name of the individual conducting the inventory.
17. Field service work shall be performed by individuals who have successfully completed the Ronan Radiation Safety School.
18. The licensee shall survey the source head during "On" and "Off" modes of operation following installation and/or reinstallation of the device and shall provide a copy of the results to the customers.

Cabinet for Health and Family Services
Commonwealth of Kentucky
Department for Public Health
275 E Main Street
Frankfort, KY 40621

License Number:201-260-95 Amendment:86 Radioactive Material License

19. Except as specifically provided otherwise, the licensee shall manufacture and distribute devices under this license only according to the exact specifications and conditions contained in the following sealed Source and Device (SS&D) Certificates:

Devices manufactured for export must be evaluated and tested per U.S. Dot 7A for transport in the United States to the port of departure, but may be manufactured to specifications of the import country.

KY-0576-D-101-B 08/16/13 SA-1
KY-0576-D-105-B 11/05/91 SA-8
KY-0576-D-106-S 06/24/93 SA-15
KY-0576-D-107-S 06/24/93 SA-4
KY-0576-D-108-S 04/19/07 SA-10
KY-0576-D-109-B 11/05/91 GS-200
KY-0576-D-110-S 03/12/91 GS-300
KY-0576-D-111-B 03/12/91 LS-(S) and LS-(D)
KY-0576-D-113-B 05/30/02 RLL-1 Series
KY-5076-D-114-B 07/19/99 RLL-2 Series
KY-5076-D-115-S 03/28/13 GS-400 Series (GS-400, GS-400-A)
KY-0576-D-116-S 06/02/21 SA-16
KY-0576-D-802-B 11/30/07 X90 point level monitor

If the licensee makes changes to a device possessed by a general licensee authorized under 902 KAR 100:050, Section 3; 10 CFR Part 31, Section 31.5 or Agreement State equivalent, such that the label must be changed to update required information, the report must identify the general licensee, the device, and the changes to information on the device label.

20. The licensee may transport radioactive material, or deliver radioactive material to a carrier for transport, in accordance with the provisions of 902 KAR 100:070, and other departments of the Commonwealth of Kentucky having jurisdiction.

Cabinet for Health and Family Services
Commonwealth of Kentucky
Department for Public Health
275 E Main Street
Frankfort, KY 40621

License Number:201-260-95 Amendment:86 Radioactive Material License

21. Sealed sources or detector cells need not be leak tested if they are in storage and not being used. Prior to removal from storage for use or transfer to another person, the sealed source or detector cell shall be tested before use or transfer if it has not been tested within the required leak test interval. No sealed source or detector cell shall be stored for a period of more than ten (10) years without being tested for leakage and/or contamination.
22. The licensee shall report to the Cabinet, the U.S. Nuclear Regulatory Commission, or an Agreement State, as appropriate, all transfers of devices to persons for use under the general license authorized by 902 KAR 100:050, Section 3; 10 CFR Part 31, Section 31.5; 10 CFR Part 32, Section 32.52 or Agreement State equivalent. The report shall contain 1) the identity of each general licensee by name and mailing address for the location of use; 2) the name, title, and phone number of the person identified by the general licensee as having knowledge of and authority to take required actions to ensure compliance with the appropriate regulations and requirements; 3) the date of transfer; 4) the type, model number, and serial number of the device transferred; and 5) the quantity and type of byproduct material contained in the device. If one (1) or more intermediate persons will temporarily possess the device at the intended place of use before its possession by the user, the report must include the same information for both the intended user and each intermediate person, and clearly designate the intermediate person(s). This report shall cover each calendar quarter and shall be filed within thirty (30) days of the close of the quarter and shall clearly indicate the period covered by the report. If no transfers have been made to persons authorized under the general license under the above mentioned provisions during the reporting period, the report must so indicate. The licensee shall maintain all information concerning transfers of devices that supports the reports required by this condition for a period of three (3) years following the date of the recorded event.

Cabinet for Health and Family Services
Commonwealth of Kentucky
Department for Public Health
275 E Main Street
Frankfort, KY 40621

License Number:201-260-95 Amendment:86 Radioactive Material License

23. The licensee shall report to the Cabinet, the U.S. Nuclear Regulatory Commission, or an Agreement State, as appropriate, all receipts of devices from general licensees. The report shall contain (1) the identity of the general licensee by name and address; (2) the date of transfer; (3) the type, model number, and serial number of the device received; (4) the quantity and type of byproduct material contained in the device; and (5) in the case the device is not initially transferred by the reporting licensee, the name of the manufacturer or initial transferor. This report shall cover each calendar quarter and shall be filed within thirty (30) days of the close of the quarter and shall clearly indicate the period covered by the report. If no receipts of devices from general licensees have occurred during the reporting period, the report must so indicate. The licensee shall maintain all information concerning receipts of devices that supports the reports required by this condition for a period of three (3) years following the date of the recorded event.
24. Manufacturers shall report defects, deviations or non-conformance of safety-related systems, structures, or components relating to their registered devices within thirty (30) days of receiving the information unless a more restrictive reporting requirement are applicable. This reporting requirement shall apply regardless of the location or condition of use or possession.
25. The licensee shall submit an annual report of the results of individual monitoring carried out by the licensee for each individual for whom monitoring was required by 902 KAR 100:019, section 13 at any time during the preceding year using form NRC 5-occupational dose record for a monitoring period, or other clear and legible record, which contains all the information required by form NRC 5. Reports shall be submitted in hardcopy or electronic format to the manager of the Radiation Health Branch, Department for Health Services, 275 East Main Street, Mailstop HS1C-A, Frankfort, Kentucky 40621 on or before April 30 of each year as required by 902 KAR 100:019, section 42.
26. In addition to the possession limits in Item 8, the licensee shall further restrict the possession of radioactive material to quantities below the minimum limit specified in 902 KAR 100:042, Sections 11, 12, and 13 for establishing decommissioning financial assurance.
27. The licensee shall comply with 902 KAR 100:037. Physical protection of Category 1 and Category 2 quantities of radioactive material.

Cabinet for Health and Family Services
Commonwealth of Kentucky
Department for Public Health
275 E Main Street
Frankfort, KY 40621

License Number:201-260-95 Amendment:86 Radioactive Material License

28. This license and the right to possess or utilize radioactive material granted by this license issued under 902 KAR Chapter 100 shall not be transferred, assigned, or otherwise disposed of, through transfer of control of a license to a person unless the Cabinet, after securing full information, finds that the transfer is in accordance with the requirements of 902 KAR Chapter 100 and gives its consent, in writing, in accordance with 902 KAR 100:040, Section 11.
29. 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. The Cabinet for Health and Family Services Regulations, 902 KAR 100, Shall Govern Unless Statements, Representations, and Procedures in the Licensee's Application and Correspondence Are More Restrictive than the Regulation.
- A. Application Dated April 30, 2001, Signed by Thomas Niinements, General Manager.
- B. Ronan Engineering Company Radiation Safety School Manual Dated April 30, 2001.
- C. Letters Dated:
1. September 27, 2001, Signed by Thomas Niinements, General Manager.
 2. November 12, 2001, Signed by J.E. Eckhardt, Division Manager.
 3. January 3, 2002, Signed by Craig A. Caris, Quality Manager.
 4. January 24, 2002 Signed by Craig A. Caris , RSO
 5. January 29, 2002 Signed by Craig A. Caris , RSO
 6. December 5, 2002 Signed by Craig A. Caris , RSO
 7. January 15, 2007 Signed by Craig A. Caris , RSO
 8. April 10, 2007, Signed by Craig A. Caris, Radiation Safety Officer.
 9. March 5, 2010, Signed by Craig A. Caris, Radiation Safety Officer.
 10. March 28, 2012, Signed by Craig A. Caris, RSO (Adding Record Keeping Requirements).
 11. November 15, 2012, Memorandum From Eric D. Perry to Ronan File (added condition requiring submission of annual individual monitoring reports}.
 12. November 19, 2012, Email Signed by Craig Caris, RSO (removed items 6-9E. allowing possession of any radioactive material).
 13. August 15, 2013, Signed by Craig Caris, Radiation Safety Officer (modified SS&D listing).
 14. August 18, 2014, Signed by Craig A. Caris, Radiation Safety Officer (added

Cabinet for Health and Family Services
Commonwealth of Kentucky
Department for Public Health
275 E Main Street
Frankfort, KY 40621

License Number:201-260-95 Amendment:86 Radioactive Material License

items 6 through 8.F.).

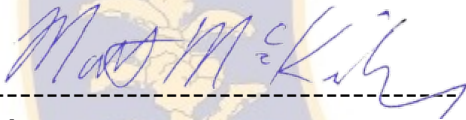
15. February 5, 2016, Implementation of 902 KAR 100: 037. Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material.

16. June 16, 2021 Email Signed by Craig Caris (Increase maximum activity per Co-60 source and possession limit).

17. June 13, 2022 Signed by Craig Caris, RSO (increase GS-400 Co-60 activity Limit)

18. November 4, 2022, Signed by Craig Caris, RSO (Change of RSO)

19. March 24, 2023, Signed by James Shockey, General Manager and David Yungkau (delegation of Authority to RSO, Duties and Responsibilities of RSO, Signature Authorization and supporting documents)



Manager
Radiation Health Branch



Eric C. Friedlander

Secretary
Cabinet for Health and Family Services

Date Issued:April 14, 2023