

**OHIO DEPARTMENT OF HEALTH  
LICENSE FOR RADIOACTIVE MATERIAL**

Pursuant to Chapter 3748 of the Ohio Revised Code, and in reliance on statements and representations made by the licensee, a license is hereby issued authorizing the licensee named herein to receive, acquire, possess, and transfer radioactive material as 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 applications of Chapter 3748 of the Ohio Revised Code and all applicable rules promulgated thereunder. This license is subject to all applicable rules, regulations and orders of the Ohio Department of Health now or hereinafter in effect and to any conditions specified below.

LICENSEE 1. <b>Frontier Technology Corporation</b>  2. <b>1641 Burnett Drive Xenia, OH 45385</b>	LICENSE NUMBER 3. <b>03214290000</b>  EXPIRATION DATE 4. <b>September 1, 2022</b>  FILE NUMBER - ID NUMBER 5. <b>501133-14054</b>
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| 6. <b>RADIOACTIVE MATERIAL</b><br><br>A. <b>Californium-252 (Cf-252 being the principal radionuclide with Cf-249, Cf-250, Cf-252, Cf-253 and Cf-254 impurities included)</b><br>B. <b>Cobalt-60</b><br>C. <b>Americium-241</b><br>D. <b>Cesium-137</b><br>E. <b>Carbon-14</b><br>F. <b>Plutonium-238</b><br>G. <b>Plutonium-239, Americium-241, Thorium-230</b><br>H. <b>Cesium-137</b><br>I. <b>Any byproduct material or special nuclear material</b><br>J. <b>Cesium-137</b> | 7. <b>CHEMICAL AND/OR PHYSICAL FORM</b><br><br>A. <b>Any</b><br>B. <b>Metal wire or pellets</b><br>C. <b>Sealed neutron sources (Monsanto Model 2726 A or Model 24146)</b><br>D. <b>Sealed Sources (Monsanto Model 24148)</b><br>E. <b>Sealed Source (Searle Model 184141)</b><br>F. <b>Plated Source</b><br>G. <b>Plated Sources (Eberline Set Model DNS-17)</b><br>H. <b>Sealed sources</b><br>I. <b>See Item 9.I. below</b><br>J. <b>Sealed sources</b> | 8. <b>MAXIMUM QUANTITY THAT LICENSEE MAY POSSESS AT ANY ONE TIME UNDER THIS LICENSE</b><br><br>A. <b>Total possession not to exceed 300 GBq (8.11 Ci) (15 milligrams).</b><br>B. <b>Total possession not to exceed 37 GBq (1 Ci).</b><br>C. <b>736.3 GBq (19.9 Ci) per source, not to exceed 3.66 TBq (99 Ci) total.</b><br>D. <b>18.5 GBq (500 mCi) per source. Not to exceed 366.3 GBq (9.9 Ci) total.</b><br>E. <b>One source, not to exceed 1.85 kBq (0.05 µCi).</b><br>F. <b>One source, not to exceed 185 Bq (0.005 µCi).</b><br>G. <b>37 Bq (0.001 µCi) per source, not to exceed 111 Bq (0.003 µCi) total.</b><br>H. <b>296 kBq (8 µCi) each, not to exceed 1.48 MBq (40 µCi) total.</b><br>I. <b>See Item 9.I. below.</b><br>J. <b>No single source to exceed 18.5 GBq (500 mCi). Not to exceed 370 GBq (10 Ci) total.</b> |
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9. **Authorized Use**
- A. and B. **Manufacture and distribution of radiation sources and/or devices containing licensed material and instrument calibration. Transfer of radioactive material will be in accordance with the appropriate state and/or federal code.**
- C. Through H. **For use in calibration of instruments.**
- I. **Possession incident to one time receipt of contaminated equipment from Monsanto Corp. NRC License number SNM-567. Removable contamination not to exceed 600 dpm/100 cm<sup>2</sup> alpha and/or 2200 dpm/100 cm<sup>2</sup> beta-gamma. Total Am-241 contamination not to exceed 10 mCi. Total Cs-137 contamination not to exceed 100 µCi.**
- J. **For receipt and storage incident to distribution as sealed sources to specific licensees.**

**OFFICIAL USE ONLY**  
**Withhold from Public Disclosure under Revised Code 149.433(A) & (B)**

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	License Number: 03214290000
	File Number – ID Number: 501133-14054
	Amendment No. 13

**CONDITIONS**

10. Licensed material may only be used at the licensee's facilities located at:
  - A. 1641 Burnett Drive, Xenia, OH 45385
  - B. Licensed material may be used at temporary jobsites anywhere in the state of Ohio.
11. The Radiation Safety Officer for this license is: **Treva Janzow**  
The Assistant Radiation Safety Officer for this license is: *Jeniece G. Budner*
12. Licensed material shall be used by, or under the supervision of Treva Janzow, *Jeniece G. Budner*, Dwayne A. Carl, *Michael C. Payne*, or *Michael R. Shearer*.
13.
  - A. All sealed sources that are used or obtained shall have been evaluated or approved under the provisions of *OAC 3701:1-46-49* or by equivalent NRC or Agreement State regulation.
  - B. Sealed sources need not be evaluated or approved, as described in Paragraph A, of this Condition when they are possessed for the purpose of extracting the radioactive material content for manufacture and distribution of Frontier Technology Corporation registered sources.
14. Sealed sources shall be tested for leakage or contamination in accordance with *OAC 3701:1-38-24*.
15. The licensee shall not use licensed material in field applications where activity is released except as provided otherwise by specific condition of this license
16. The licensee shall conduct a physical inventory every 6 months to account for all sources and/or devices received and possessed under the license. Records of inventories shall be maintained for 3 years from the date of each inventory, and shall include the quantities and kinds of radioactive material, manufacturer's name and model numbers, location of the sources and/or devices, and the date of the inventory.
17. Drums containing radioactive waste shall not be retained for a period that exceeds one year from the date of filling the drum.
18. The licensee is authorized to transport licensed material only in accordance with *OAC 3701:1-50* and ODH correspondence dated December 10, 2002.
19. The licensee shall maintain records of information related to decommissioning at 1641 Burnett Drive, Xenia, Ohio as specified in *OAC 3701:1-40-17(1)* for establishing decommissioning financial assurance.
20. The manufacture and distribution of the following sealed source and device registrations, and the items referenced therein, are incorporated into this license.
  - A. OH-0298-S-101-S for source model series 10 dated May 31, 2005;
  - B. OH-0298-S-102-S for source model series 100 dated March 3, 2009.
21.
  - A. The licensee shall implement the applicable requirements specified in *OAC 3701:1-37* if the licensee possesses an aggregated category one or category two quantity of radioactive material as specified in Appendix A to *OAC 3701:1-37-01*.
  - B. The licensee shall notify the director at the location specified in *OAC 3701:1-40-04* at least ninety days prior to:
    - i. Relocation of an aggregated category one or category two quantity of radioactive material to a new location.
    - ii. Receipt or aggregation of a category one or category two quantity of radioactive material, if the licensee is authorized to possess those quantities of materials but is not currently required to implement the applicable requirements specified in Chapter 3701:1-37 of the OAC.
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. The Ohio Department of Health'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 August 10, 2017; Amendment 13 renews license number 03214290000 in its entirety.*

For the Ohio Department of Health

DATE: 11-16-17

BY: *Gene Phillips, RS*

W. Gene Phillips, MBA, RS  
Chief, Bureau of Environmental Health and Radiation Protection  
on behalf of the Director of Health