Amendment No. *11*

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	LICENSE NUMBER
1. **Microbac Laboratories, Inc.**	3. **03123850006**
	EXPIRATION DATE
2. **158 Starlite Drive** **Marietta, Ohio 45750**	4. **June 1, 2020**
	FILE NUMBER – ID NUMBER
	5. **500410-*12288***

6. RADIOACTIVE MATERIAL	7. CHEMICAL AND/OR PHYSICAL FORM	8. MAXIMUM QUANTITY THAT LICENSEE MAY POSSESS AT ANY ONE TIME UNDER THIS LICENSE
A. **Any radioactive material with Atomic Numbers 2 through 83**	A. **Any**	A. **Total possession not to exceed 3.7 GBq (100 mCi).**
B. **Any radioactive material with Atomic Numbers 84 through 100**	B. **Any**	B. **Total possession not to exceed 370 MBq (10 mCi).**
C. **Source material (natural or depleted Uranium to Thorium)**	C. **Any**	C. **Total possession not to exceed 70 kilograms.**
D. **Uranium-235**	D. **Any**	D. **Total possession not to exceed 300 grams.**
E. **Uranium-233**	E. **Any**	E. **Total possession not to exceed 2 grams.**
F. **Plutonium-238**	F. **Any**	F. **Total possession not to exceed 2 grams.**
G. **Hydrogen-3**	G. **Any**	G. **Total possession not to exceed 37 GBq (1 Ci).**
H. **Any radioactive material with Atomic Numbers 1 through 98**	H. **Any**	H. **No single source to exceed 74 MBq (2 mCi), total possession not to exceed 740 MBq (20 mCi).**
I. **Nickel-63**	I. **Foils or plated sources.**	I. **No single source to exceed 0.56 GBq (15 mCi), total possession not to exceed 5.04 GBq (135 mCi).**
J. **Technetium-99m**	J. **Any**	J. **No single source to exceed 185 MBq (5 mCi).**
K. **Any radioactive material**	K. **Any**	K. **See item 8.K. below.**

9. Authorized Use

A. through G.	**As contaminants in environmental waste sample of unknown chemical composition.**
H.	**To be used as calibration reference standards.**
I.	**(9 devices) To be used in Agilent model gas chromatographs for sample analysis.**
J.	**To be used as calibration and reference standards.**
K.	**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

10. Licensed material may only be used at the licensee's facilities located at: **158 Starlite Drive, Marietta, Ohio 45750**.

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11. The Radiation Safety Officer for this license is: ***Dominic Gehret.***

12. **Licensed material shall be used by, or under the supervision of the Radiation Safety Officer or individuals who have satisfactorily completed training for the use of the device and have who have been designated as authorized users by the licensee's Radiation Safety Officer. The licensee shall maintain records of the individuals who have been designated as authorized users.**

13. **All sealed sources that are used or obtained shall have been evaluated or approved under the provisions of OAC 3701:1-46-49, or equivalent NRC or Agreement State regulations.**

14. **Sealed sources shall be tested for leakage and/or contamination according to OAC 3701:1-38-24.**

15. **Sealed sources containing licensed material shall not be opened or sources removed from source holders by the licensee.**

16. **The licensee shall conduct a physical inventory every six months to account for all sources and/or devices received and possessed under the license.**

17. **Maintenance, repair, cleaning, replacement, and disposal of foils contained in detector cells shall be performed only by the device manufacturer or other persons specifically licensed by the Director, NRC or an Agreement State to perform such services.**

18. **The licensee shall perform surveys of all incoming samples. Records of these surveys shall be maintained for review in accordance with OAC 3701:1-38-18.**

19. **The licensee shall maintain a current inventory log of all samples received in accordance with OAC 3701:1-38-20.**

20. **The licensee shall conduct a physical inventory every 6 months, or at another interval approved by the Director, to account for all sources and/or devices received and possessed under the license. Records of inventories shall be maintained for at least 3 years from the date of each inventory, and shall include the quantities and kinds of licensed material, manufacturer's name and model numbers, location of the sources and/or devices, and the date of the inventory.**

21. **Tests for leakage or/contamination shall be performed by the licensee or by other persons specifically licensed by the Director, NRC or an Agreement State to perform such services.**

22. **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 Director, NRC or an Agreement State to perform such services.**

23. **The licensee shall maintain itemized disposal records in accordance with OAC 3701:1-38-19.**

24. **In addition to the possession limits in Item 8, the licensee shall further restrict the possession of sealed source licensed material to quantities below the minimum limit specified in OAC 3701:1-40-17 for establishing decommissioning financial assurance.**

25. **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 Ohio Department of Health's statutes, rules, and orders shall govern unless statements, representations, and procedures in the licensee's application and correspondence are more restrictive than the regulations.**

    A. **Renewal application dated March 12, 2015; amendment 9 renews license number 03123850006 in its entirety.**

    B. **Correspondence dated November 4, 2015and email dated December 9, 2015 (Amendment 10).**

    C. ***Correspondence dated May 31, 2016 (Amendment 11).***

For the Ohio Department of Health

DATE: 7/27/16 **BY:** _____

Michael J. Snee
Bureau of Environmental Health and Radiation Protection
On behalf of the Director of Health