



14 September 2012

Regional Administrator  
U.S. Nuclear Regulatory Commission Region III  
Commercial and R&D Branch  
Division of Nuclear Materials Safety  
2443 Warrenville Road, Suite 210  
Lisle, IL 60532-4352

SUBJECT: **Amendment NRC Lic: 21-32190-01MD**

Regional Administrator:

PharmaLogic respectfully submits a request to amend the existing commercial nuclear pharmacy US NRC Radioactive Materials License # 21-32190-01MD to include the following change:

1. Remove the following commercial nuclear pharmacy location from the existing U.S. Nuclear Regulatory Commission Radioactive Materials License.

**PharmaLogic MI  
1144 Boon Street  
Traverse City, MI 49686**

The original nuclear pharmacy radioactive materials have been transferred to the new commercial nuclear pharmacy location.

**PharmaLogic MI  
1501 Cass Street, Suite E  
Traverse City, MI 49684**

Radiation surveys were performed and confirms the absence of radioactive materials at the Boon Street location. The survey results and survey diagrams and a completed NRC Form 314 are attached.

I wish to thank you for your consideration of this request. Upon review, if there are any questions, please contact me directly.

Sincerely,

Dana Suttle, RPh  
Radiation Safety Officer  
[dana.suttle@gmail.com](mailto:dana.suttle@gmail.com)

ATT: **Radiation Survey Reports and Diagrams  
NRC FORM 314  
NRC RAM License  
Sealed Source Inventory & Wipe Tests Results**

**PharmaLogic MI LLC  
1 S. Ocean Blvd ♦ Suite 206 ♦ Traverse City ♦ Michigan 49684  
231-929-7200 ♦ 231-929-4457 FAX**

1 RECEIVED SEP 17 2012

<b>NRC FORM 314</b> <small>(05-2012)</small> <small>10 CFR 30.38(j)(1); 40.42(j)(1);  70.38(j)(1); and 72.54(k)(5)(1)(1)</small>	<b>U.S. NUCLEAR REGULATORY COMMISSION</b>	<b>APPROVED BY OMB: NO. 3150-0028</b> <b>EXPIRES: 10/31/2013</b> <small>Estimated burden per response to comply with this mandatory collection request: 30 minutes. This submittal is used by NRC as part of the basis for its determination that the facility is released for unrestricted use. Send comments regarding burden estimate to the Information Services Branch (T-5 F53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to <a href="mailto:Infocollects.Resource@nrc.gov">Infocollects.Resource@nrc.gov</a>, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0028), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.</small>
<b>CERTIFICATE OF DISPOSITION OF MATERIALS</b>		

<b>LICENSEE NAME AND ADDRESS</b>  PharmaLogic Michigan LLC 1144 Boon Street Traverse City, MI 49686	<b>LICENSE NUMBER</b> 21-321090-0-MD	<b>DOCKET NUMBER</b>  
<b>LICENSE EXPIRATION DATE</b> <p style="text-align: right;">02/29/2020</p>		

**A. LICENSE STATUS (Check the appropriate box)**

This license has expired.     
 This license has not yet expired; please terminate it.
ACTIVE ✓

**B. DISPOSAL OF RADIOACTIVE MATERIAL**

*(Check the appropriate boxes and complete as necessary. If additional space is needed, provide attachments)*

The licensee, or any individual executing this certificate on behalf of the licensee, certifies that:

1. No radioactive materials have ever been procured or possessed by the licensee under this license.

2. All activities authorized by this license have ceased, and all radioactive materials procured and/or possessed by the licensee under this license number cited above have been disposed of in the following manner.

a. Transfer of radioactive materials to the licensee listed below:  
PharmaLogic Michigan LLC, 1501 Cass Street, Suite E, Traverse City, MI 49684

b. Disposal of radioactive materials:

1. Directly by the licensee:

2. By licensed disposal site:

3. By waste contractor:

c. All radioactive materials have been removed such that any remaining residual radioactivity is within the limits of 10 CFR Part 20, Subpart E, and is ALARA.

**C. SURVEYS PERFORMED AND REPORTED**

1. A radiation survey was conducted by the licensee. The survey confirms:

a. the absence of licensed radioactive materials

b. that any remaining residual radioactivity is within the limits of 10 CFR 20, Subpart E, and is ALARA.

2. A copy of the radiation survey results:

a. is attached; or  b. is not attached (Provide explanation); or  c. was forwarded to NRC on: \_\_\_\_\_ Date

3. A radiation survey is not required as only sealed sources were ever possessed under this license, and

a. The results of the latest leak test are attached; and/or  b. No leaking sources have ever been identified.

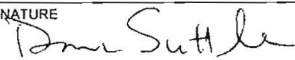
The person to be contacted regarding the information provided on this form:

NAME	TITLE	TELEPHONE (Include Area Code)	E-MAIL ADDRESS
Dana Suttle, RPh	Radiation Safety Officer	(231) 929-7200	dana.suttle@gmail.com

Mail all future correspondence regarding this license to:  
PharmaLogic MI LLC, 1501 Cass Street, Suite E, Traverse City, MI 49684

**C. CERTIFYING OFFICIAL**

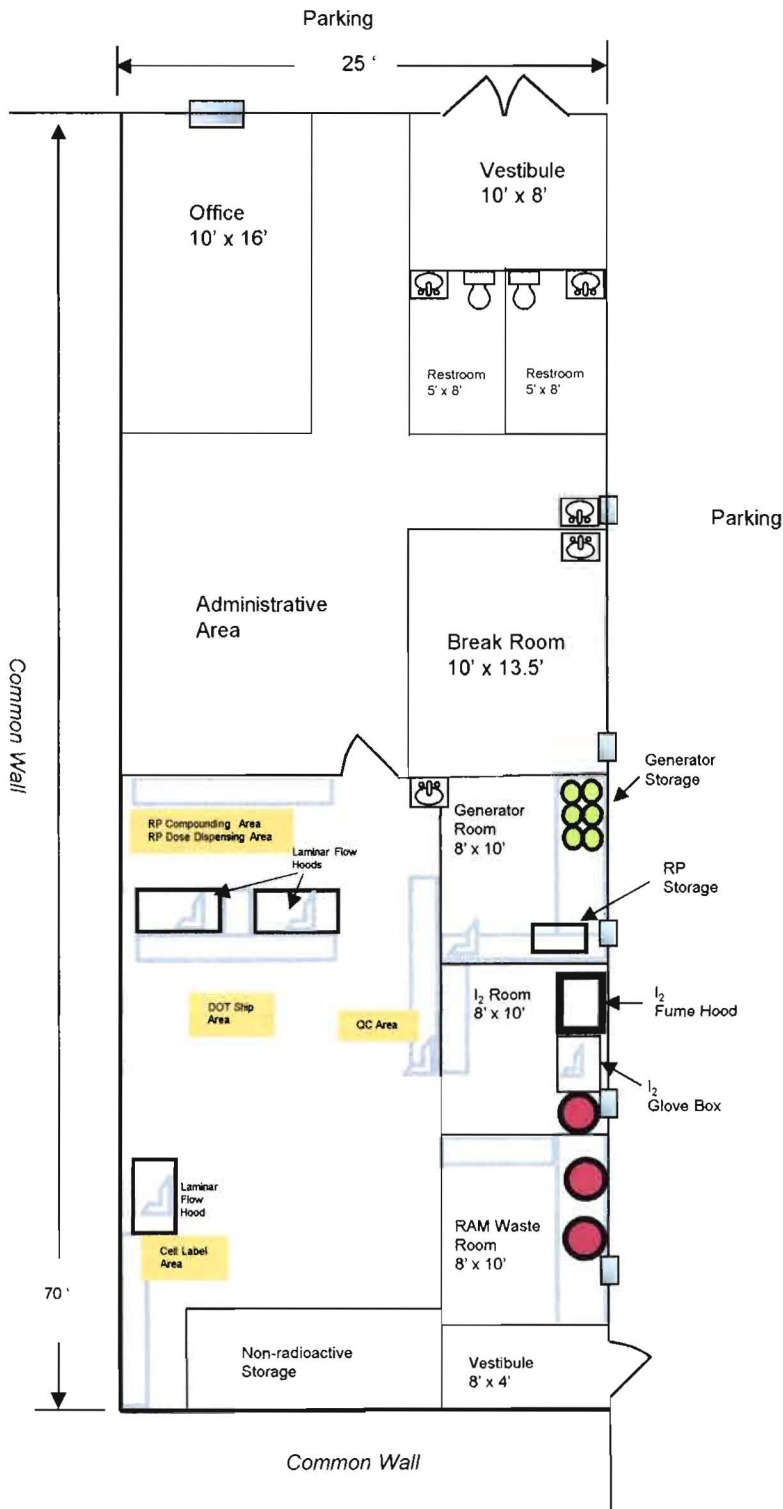
**I CERTIFY UNDER PENALTY OF PERJURY THAT THE FOREGOING IS TRUE AND CORRECT**





PRINTED NAME AND TITLE	SIGNATURE	DATE
Dana Suttle, Radiation Safety Officer		9-13-2012

**WARNING: FALSE STATEMENTS IN THIS CERTIFICATE MAY BE SUBJECT TO CIVIL AND/OR CRIMINAL PENALTIES. NRC REGULATIONS REQUIRE THAT SUBMISSIONS TO THE NRC BE COMPLETE AND ACCURATE IN ALL MATERIAL RESPECT. 18 U.S.C. SECTION 1001 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.**

# Pharmalogic MI 1144 Boon St, Traverse City, MI

Total Space ~ 1750 ft<sup>2</sup>  
 Restricted Area ~ 925 ft<sup>2</sup>  
 Unrestricted Area ~ 825 ft<sup>2</sup>

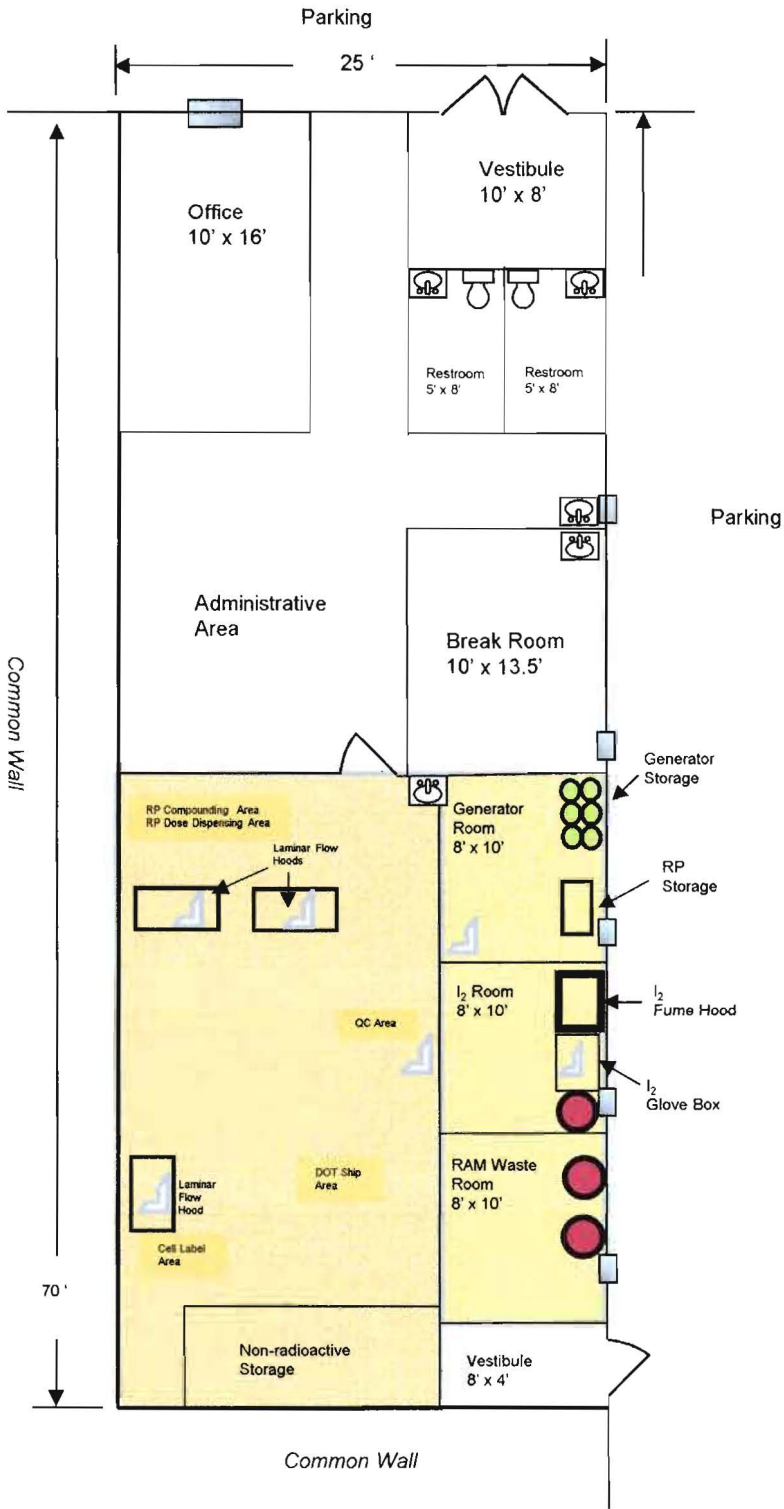


-  L Shield
-  Generator Shield
-  Lead Lined Storage Cabinet
-  RAM Waste Lead Lined Storage



**Pharmalogic MI  
1144 Boon St, Traverse City, MI**

Total Space ~ 1750 ft<sup>2</sup>  
 Restricted Area ~ 925 ft<sup>2</sup>  
 Unrestricted Area ~ 825 ft<sup>2</sup>



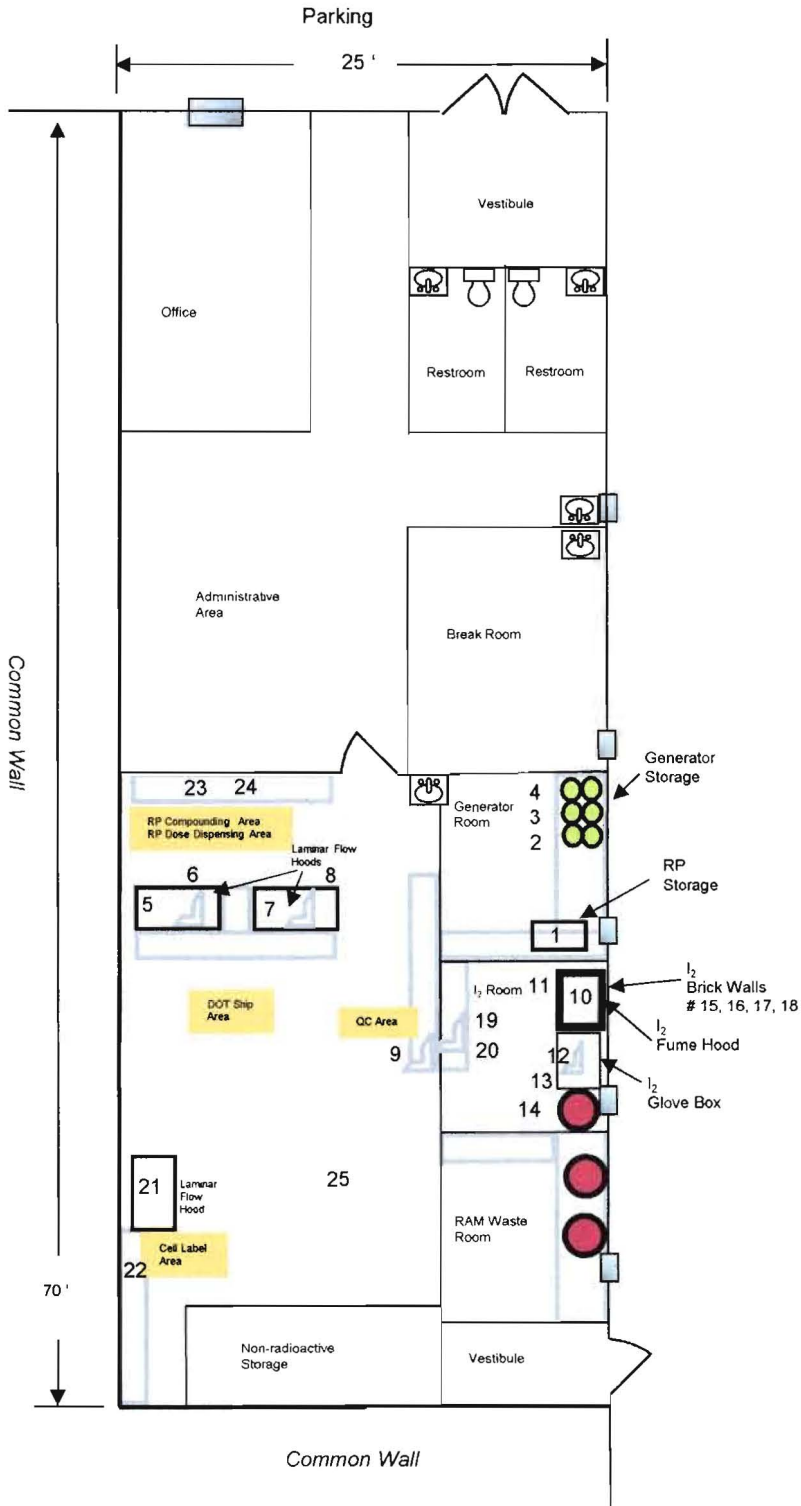
 Restricted Area



# Pharmalogic MI 1144 Boon St, Traverse City, MI

## Equipment Removable Contamination Survey Results (dpm):

- 1 RP Storage Cabinet - 0
- 2 Generator Shields - 0
- 3 Generator Shields - 10
- 4 Generator Shields - 13
- 5 Dose Drawing LFH #1 - 0
- 6 Dose Drawing L Shield - 0
- 7 Compounding LFH # 2 - 0
- 8 Compounding L Shield - 22
- 9 QC L Shield - 46
- 10 Iodine Fume Hood Interior - 39
- 11 Iodine Fume Hood Exterior - 0
- 12 Iodine Glove Box Interior - 54
- 13 Iodine Glove Box Exterior - 0
- 14 Iodine Glove Box L Shield - 66
- 15 Iodine Room Lead Brick Wall #1 - 10
- 16 Iodine Room Lead Brick Wall #2 - 0
- 17 Iodine Room Lead Brick Wall #3 - 51
- 18 Iodine Room Lead Brick Wall # 4 - 43
- 19 Heating Block L Shield - 0
- 20 Heating Block - 0
- 21 Cell Label LFH - 0
- 22 Cell Label Centrifuge - 0
- 23 Pharmacy Refrigerator - 0
- 24 Pharmacy Freezer - 0
- 25 DOT Shipping Racks - 0



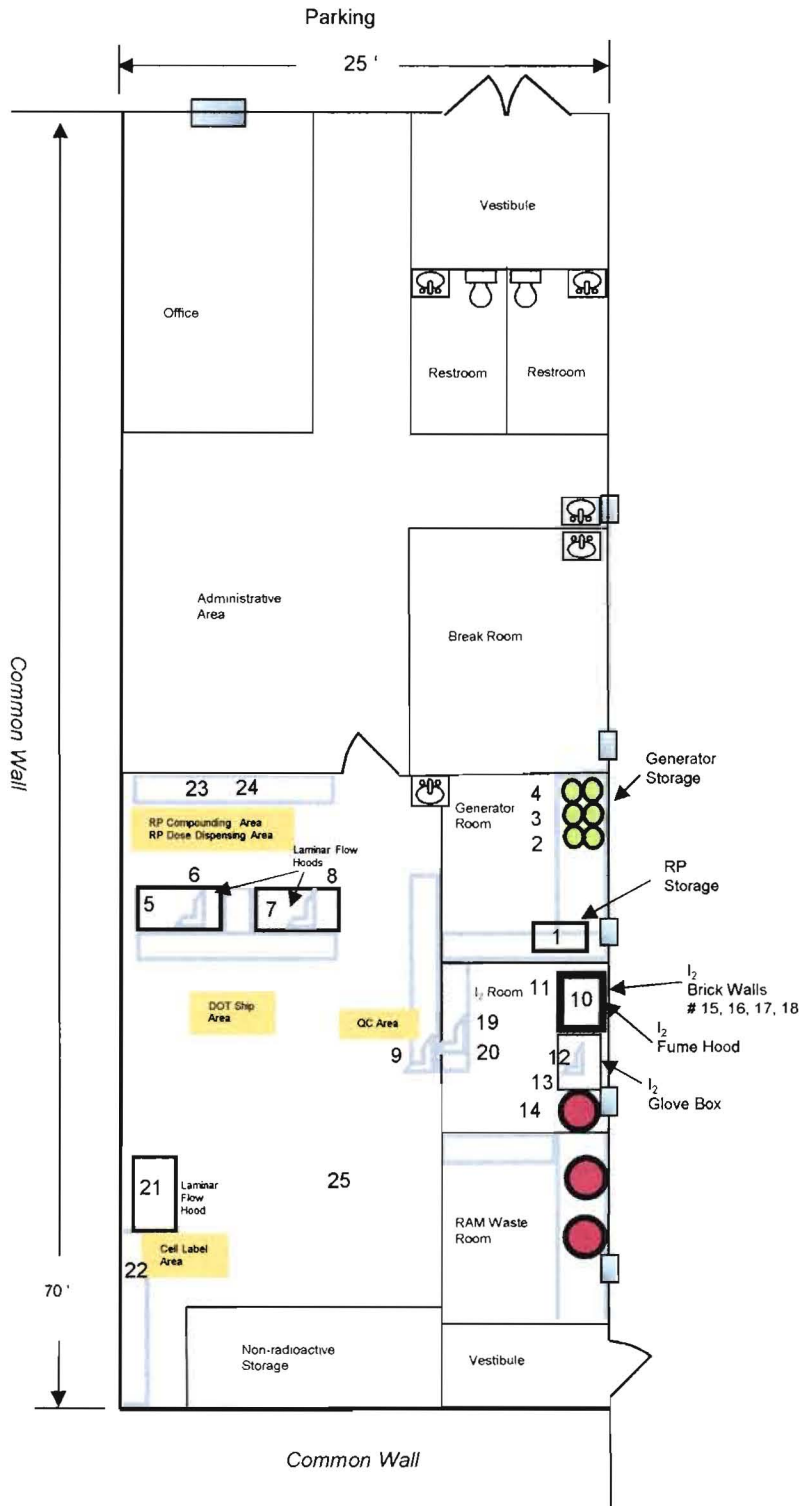
Date Survey Performed: 29 August 2012  
 Surveyor: G Strugala  
 Instrument Used: MCA  
 Mfg: Biodex  
 Model #: 187-246 (Atomlab)  
 Serial #: 9908003  
 Calibration Date: 3 August 2011



# Pharmalogic MI 1144 Boon St, Traverse City, MI

## Equipment Radiation Exposure Survey Results (mR/hr):

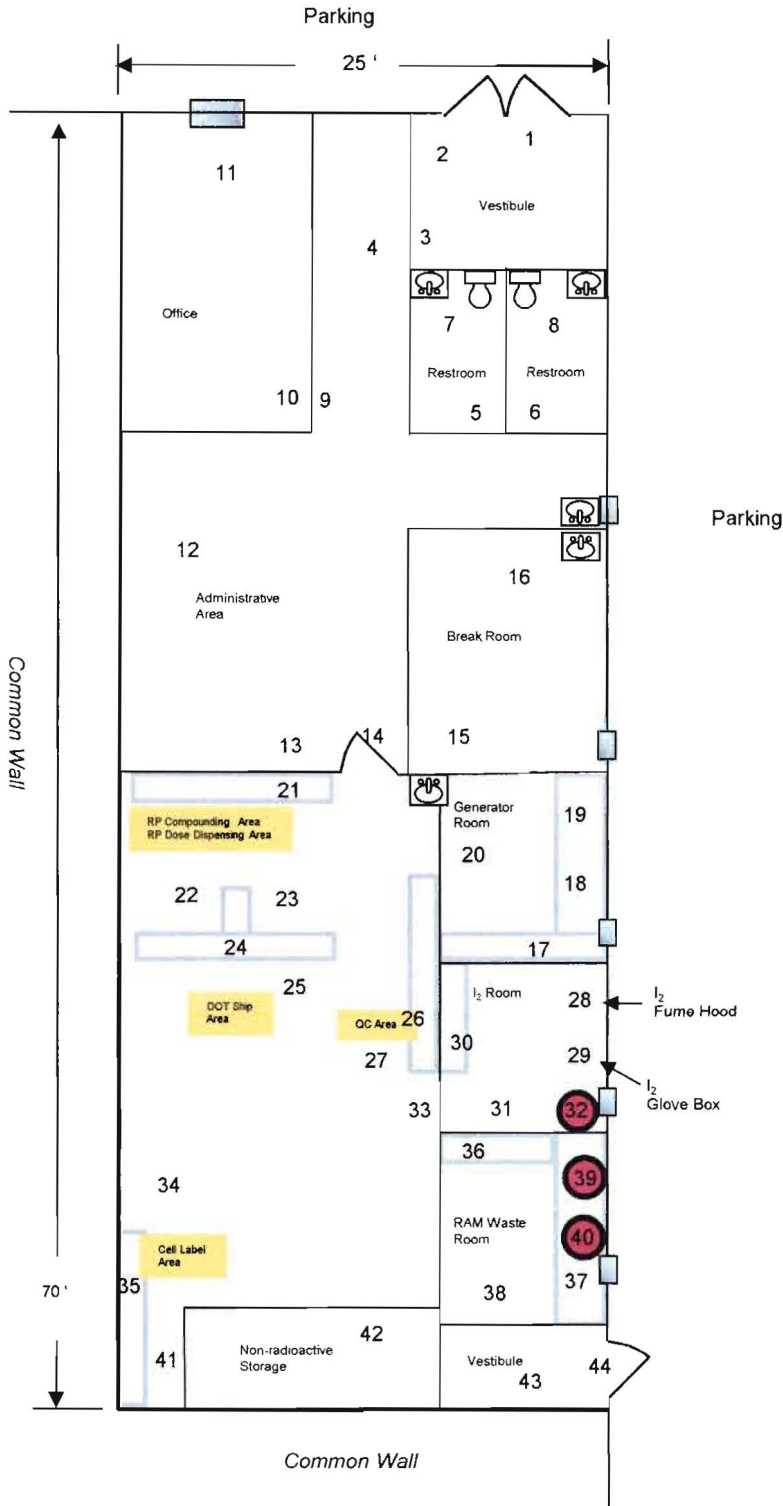
- 1 RP Storage Cabinet - 0.07
- 2 Generator Shields - 0.07
- 3 Generator Shields - 0.07
- 4 Generator Shields - 0.07
- 5 Dose Drawing LFH #1 - 0.07
- 6 Dose Drawing L Shield - 0.07
- 7 Compounding LFH # 2 - 0.07
- 8 Compounding L Shield - 0.07
- 9 QC L Shield - 0.1
- 10 Iodine Fume Hood Interior - 0.07
- 11 Iodine Fume Hood Exterior - 0.07
- 12 Iodine Glove Box Interior - 0.12
- 13 Iodine Glove Box Exterior - 0.1
- 14 Iodine Glove Box L Shield - 0.12
- 15 Iodine Room Lead Brick Wall #1 - 0.07
- 16 Iodine Room Lead Brick Wall #2 - 0.07
- 17 Iodine Room Lead Brick Wall #3 - 0.1
- 18 Iodine Room Lead Brick Wall # 4 - 0.1
- 19 Heating Block L Shield - 0.07
- 20 Heating Block - 0.07
- 21 Cell Label LFH - 0.07
- 22 Cell Label Centrifuge - 0.07
- 23 Pharmacy Refrigerator - 0.07
- 24 Pharmacy Freezer - 0.07
- 25 DOT Shipping Racks - 0.07
- 26 Background - 0.07



Date Survey Performed: 29 August 2012  
 Surveyor: G Strugala  
 Instrument Used: GM Meter  
 Mfg: Ludlum  
 Model #: 14-C  
 Serial #: 159458  
 Calibration Date: 11 July 2012



# Pharmalogic MI 1144 Boon St, Traverse City, MI



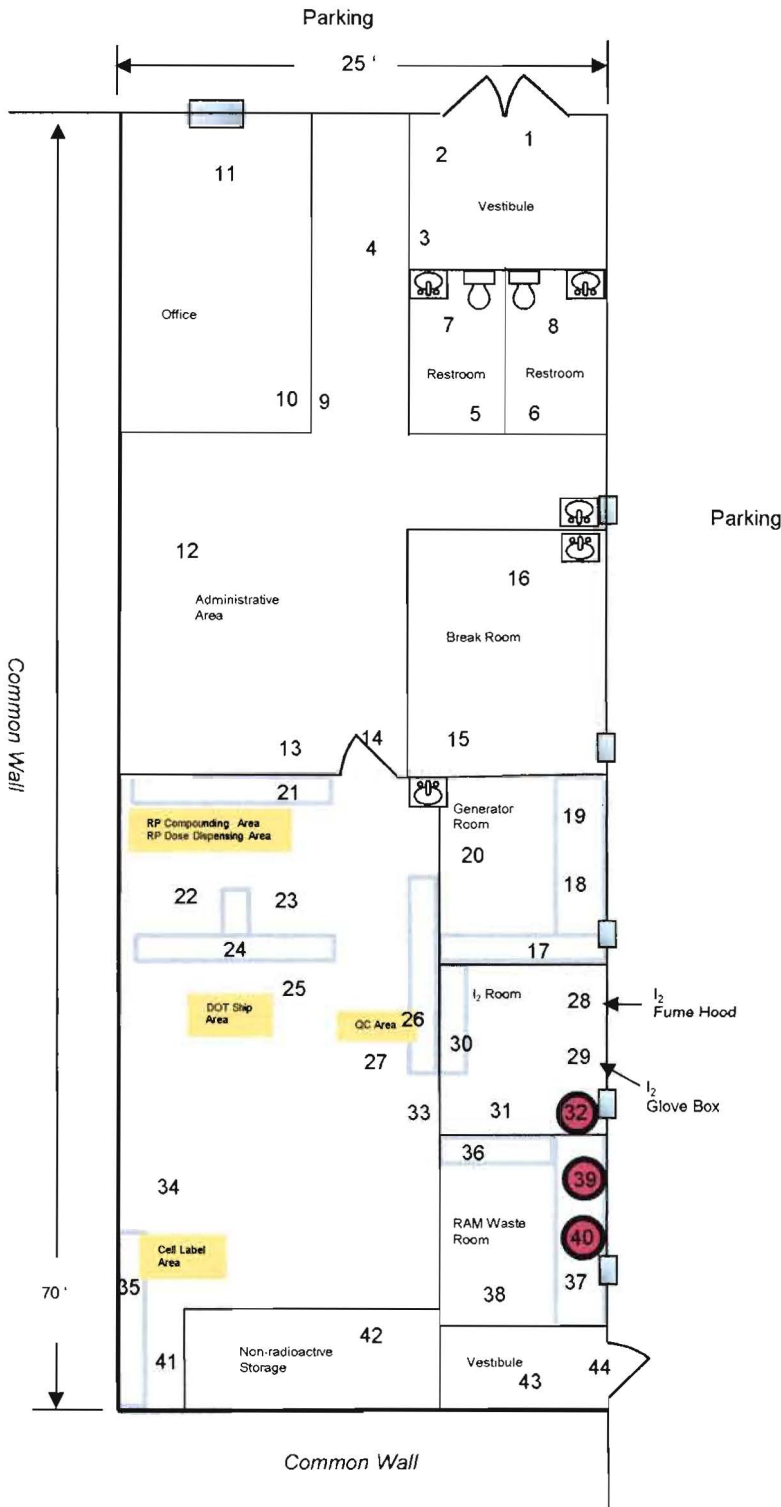
## Removable Contamination Survey Results (dpm):

1. Outer Vestibule Doors - 16
2. Vestibule Floor - 17
3. Inner Vestibule Doors - 6
4. Hallway Floor - 8
5. Female Restroom Door - 10
6. Female Restroom Floor - 19
7. Male Restroom Door - 30
8. Male Restroom Floor - 1
9. Office Door - 6
10. Office Floor - 31
11. Office Floor - 4
12. Administrative Desk - 16
13. Administrative Counter - 16
14. Administrative Door - 0
15. Break Room Floor - 17
16. Break Room Floor - 11
17. RP Storage Counter - 36
18. Generator Counter - 11
19. Tc99m Vial Shields - 0
20. Generator Room Floor - 13
21. Compounding Area Counter - 20
22. Compounding Area Floor # 1 - 12
23. Compounding Area Floor # 2 - 0
24. Shipping Counter - 6
25. Shipping Area Floor - 3
26. QC Area Counter - 62
27. QC Area Floor - 4
28. Iodine Fume Hood Exhaust Duct (interior sample) - 82
29. Iodine Glove Box Exhaust Duct (interior sample) - 65
30. Iodine Room Counter - 31
31. Iodine Room Floor - 63
32. Iodine RAM Waste Barrel - 77
33. Iodine Room Door - 50
34. Cell Label Area Floor - 1
35. Cell Label Countertop - 0
36. RAM Waste Counter - 23
37. RAM Waste Counter - 21
38. RAM Waste Room Floor - 34
39. RAM Waste Barrel #1 - 68
40. RAM Waste Barrel #2 - 7
41. Storage Area Door - 58
42. Storage Room Floor - 18
43. Rear Vestibule Floor - 50
44. Rear Vestibule Door - 37
45. Iodine Rooftop Stack (interior sample - proximal end) - 78
46. Iodine Rooftop Stack (interior sample - distal end) - 66

Date Survey Performed: 14 September 2012  
 Surveyor: Dana Suttle  
 Instrument Used: SCA  
 Mfg: Ludlum  
 Model #: 2200  
 Serial #: 159064  
 Calibration Date: 13 September 2011



# Pharmalogic MI 1144 Boon St, Traverse City, MI



### Radiation Exposure Survey Results (mR/hr):

1. Outer Vestibule Doors – 0.02
2. Vestibule Floor – 0.03
3. Inner Vestibule Doors – 0.03
4. Hallway Floor – 0.03
5. Female Restroom Door – 0.03
6. Female Restroom Floor – 0.03
7. Male Restroom Door – 0.04
8. Male Restroom Floor – 0.03
9. Office Door – 0.02
10. Office Floor – 0.02
11. Office Floor – 0.03
12. Administrative Desk – 0.03
13. Administrative Counter – 0.03
14. Administrative Door – 0.04
15. Break Room Floor – 0.03
16. Break Room Floor – 0.03
17. RP Storage Counter – 0.04
18. Generator Counter – 0.04
19. Tc99m Vial Shields – 0.04
20. Generator Room Floor – 0.04
21. Compounding Area Counter – 0.03
22. Compounding Area Floor # 1 – 0.03
23. Compounding Area Floor # 2 – 0.03
24. Shipping Counter – 0.03
25. Shipping Area Floor – 0.04
26. QC Area Counter – 0.03
27. QC Area Floor – 0.04
28. Iodine Fume Hood Exhaust Duct (interior survey) – 0.05
29. Iodine Glove Box Exhaust Duct (interior survey) – 0.05
30. Iodine Room Counter – 0.05
31. Iodine Room Floor – 0.05
32. Iodine RAM Waste Barrel – 0.05
33. Iodine Room Door – 0.04
34. Cell Label Area Floor – 0.03
35. Cell Label Countertop – 0.03
36. RAM Waste Counter – 0.04
37. RAM Waste Counter – 0.04
38. RAM Waste Room Floor – 0.04
39. RAM Waste Barrel #1 – 0.03
40. RAM Waste Barrel #2 – 0.04
41. Storage Area Door – 0.02
42. Storage Room Floor – 0.03
43. Rear Vestibule Floor – 0.03
44. Rear Vestibule Door – 0.03
45. Iodine Rooftop Stack (interior survey-proximal end) – 0.05
46. Iodine Rooftop Stack (interior survey-distal end) – 0.04

Date Survey Performed: 14 September 2012

Surveyor: Dana Suttle

Instrument Used: GM Meter

Mfg: Ludlum

Model #: 14-C

Serial #: 159458

Calibration Date: 11 July 2012





From: (231) 929-7200  
PHARMALOGIC MI  
PHARMALOGIC MI  
1144 BOON STREET

Origin ID: TVCA



J12201207160325

Ship Date: 17SEP12  
ActWgt: 1.0 LB  
CAD: 4783436/NET3300

TRAVERSE CITY, MI 49686

Delivery Address Bar Code



SHIP TO: (630) 829-9500

BILL SENDER

Regional Administrator

US Nuclear Regulatory Commission

2443 WARRENVILLE RD

STE 210 *Commercial and R&D Branch  
Division of nuclear materials  
Safety*  
LISLE, IL 60532

Ref #  
Invoice #  
PO #  
Dept #

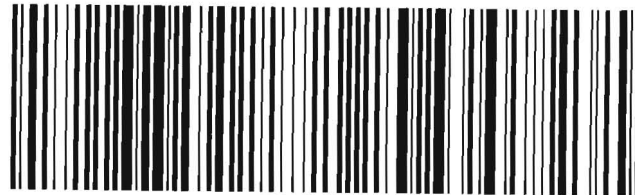
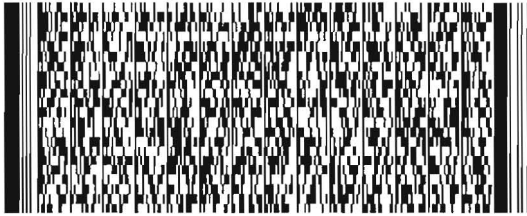
FedEx

TRK# 7989 6796 1113  
0201

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#819054 09/14 515G1/0D3A/AA44

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