



January 18, 2017

FED EX TRACKING NO.

Director of Office of Nuclear Material Safety and Safeguards  
Attn: GLTS  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

7782 0087 8663

To Whom it may concern:

Obsolete equipment containing radioactive material has been shipped for disposal. In accordance with the requirements of 10 CFR 31.5, this letter serves to notify the US NRC that on January 12, 2017, the General Motors LLC – Bay City facility, located at 1001 Woodside Avenue, Bay City, MI 48708 shipped an Alnor Dew Pointer containing radioactive material (radium) offsite for disposal. All available information on the equipment is listed below:

- Isotope – radium
- Strength of radiation –  $7e^{-3}$  mCi
- Model – unknown
- Serial No. – unknown
- Age – exact date unknown
- Contact of Manufacturer – Alnor is out of business

The equipment was transported for General Motors by Bionomics, Inc.:

Bionomics, Inc.  
PO Box 817, Kingston, TN 37763  
Phone (865) 220-8501  
License number - R-73021-E25

The designated disposal facility is Waste Control Specialists, LLC, located in Andrews, TX, phone number (432) 523-4444.

A copy of the manifest, number 0117GM, is included as an attachment.

If you have any questions or require additional information, please contact me at (989) 239-8413.

Sincerely,

Lynn Porath, CHMM  
Sr. Environmental Project Engineer

General Motors LLC  
Bay City Components – 1001 Woodside Avenue.  
Bay City, Michigan 48708 – mail code 486-100-210

Estimate burden estimate of the records and FOIA/Privacy Services Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by Internet e-mail to info@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, A/E/CB-10202, (3165-0164), 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.

FORM 540 UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST SHIPPING PAPER		Bionomics, Inc.		5. SHIPPER - NAME AND FACILITY Bionomics, Inc. for General Motors LLC - Bay City Plant 1001 Woodside Ave. Bay City, MI 48708		SHIPMENT ID NUMBER 0117GM		7. FORM 540 AND 540A FORM 541 AND 541A FORM 542 AND 542A ADDITIONAL INFORMATION		PAGE 1 OF 1 PAGE(S) 1 PAGE(S) NONE PAGE(S) NONE PAGE(S)		8. MANIFEST NUMBER (Use this number on all continuation pages) 0117GM					
1. EMERGENCY TELEPHONE NUMBER (Include Area Code) (800) 535-5053		USER PERMIT NUMBER		SHIPMENT NUMBER 0117GM		COLLECTOR PROCESSOR X GENERATOR TYPE (Specify) 1		9. CONSIGNEE - Name and Facility Address Bionomics, Inc. Operated By Bionomics, Inc. 1550 Bear Creek Road Oak Ridge, TN 37830		CONTACT John McCormick TELEPHONE NUMBER (Include Area Code) (865) 220-8501		SIGNATURE - Authorized consignee acknowledging waste receipt <i>Paul Nipper</i> DATE 1-13-17					
ORGANIZATION Infotrac Acct# 80016		CONTACT Lynn Porath		TELEPHONE NUMBER (Include Area Code) (989) 239-8413		EPA I.D. NUMBER TND982118493		10. CERTIFICATION This is to certify that the herein-named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. This also certifies that the materials are classified, packaged, marked, and labeled and in proper condition for transportation and disposal in accordance with the requirements of 10 CFR Parts 20 and 61, or equivalent state regulation.		DATE		DATE					
2. IS THIS AN "EXCLUSIVE USE" SHIPMENT? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		3. TOTAL NUMBER OF PACKAGES IDENTIFIED ON THIS MANIFEST 1		6. CARRIER - Name and Address Bionomics, Inc. 1550 Bear Creek Road Oak Ridge, TN 37830		TRUCK #: TRAILER #:		SHIPPING DATE 1-12-17		TELEPHONE NUMBER (Include Area Code) 865-220-8501		AUTHORIZED SIGNATURE <i>John Kelly</i> TITLE Technician DATE 1-12-17					
4. DOES EPA REGULATED WASTE REQUIRING A MANIFEST ACCOMPANY THIS SHIPMENT? If "Yes", provide Manifest Number		EPA MANIFEST NUMBER N/A		CONTACT John McCormick		SIGNATURE - Authorized carrier acknowledging waste receipt <i>John Kelly</i> DATE 1-12-17		DATE		DATE		DATE					
11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (including proper shipping name, hazard class, UN ID number, and any additional information)		12. DOT LABEL "RADIOACTIVE"		13. TRANSPORT INDEX		14. PHYSICAL AND CHEMICAL FORM		15. INDIVIDUAL RADIOISOTOPES		16. TOTAL PACKAGE ACTIVITY MBq mCi		17. LSA/SCO CLASS		18. TOTAL WEIGHT OR VOLUME (Use appropriate units)		19. IDENTIFICATION NUMBER OF PACKAGE	
UN2915, RADIOACTIVE MATERIAL, TYPE A PACKAGE, 7 SEALED SOURCES 1 - 10 GAL METAL DRUM		White I		NA		SOLID/OXIDES RA-226				2.5900E-01 (7.0000E-03)		NA		1.36 R <sup>3</sup> 30.00 lb		GM-01 (17-000001)	
FOR CONSIGNEE USE ONLY		<input type="checkbox"/> Record Waste Description Inadequate <input type="checkbox"/> Contamination or Leakage Detected <input type="checkbox"/> Unexpected Exposure Rates Detected <input type="checkbox"/> Labels, Markings, etc. Inadequate <input type="checkbox"/> Container Integrity Inadequate <input type="checkbox"/> Other <input checked="" type="checkbox"/> No Violations Detected on this Shipment		20. TERMS AND CONDITIONS A. HAZARDOUS MATERIALS: Generator represents & warrants that Waste Material is (or) is not hazardous waste as defined in 40 CFR 261. Where the material is a hazardous waste, this shipment is also accompanied by a separate and completed hazardous waste manifest, along with the appropriate land disposal restriction notice and/or certification as required by 40 CFR 268.1. B. TITLE: Upon acceptance at the disposal site by EnergySolutions, Inc. and all appropriate regulatory authorities, title to the Waste Material which conforms to Generator's representations herein shall thereupon transfer from Generator and be vested in EnergySolutions, Inc. C. WASTE MATERIAL: Generator represents and warrants that all data set forth in this UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST are true and correct in all respects and in accordance with all applicable governmental laws, rules, and regulations and Envirocare of Utah, Inc.'s facility license. D. INDEMNIFICATION: Generator agrees to indemnify EnergySolutions, Inc., its officers, employees, and agents against all losses and liability whatsoever if such losses and liability result from the failure of the Waste Material to conform in all material respects to the data supplied on the UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST, or if this shipment fails to meet the standards prescribed by the Department of Transportation or any governmental agency having jurisdiction over such matter.													

To comply with this information, the manifest is required by NRC, State Agencies for the safe transport, disposal of low-level waste. Send comments regarding this information to the Records and FOIA/Privacy Service Branch, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, by internet e-mail to info@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOP-10202, (3150-0166), 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.

FORM 541		Bionomics, Inc.		1. MANIFEST TOTALS										2. MANIFEST NUMBER		
UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST				NUMBER OF PACKAGES/ DISPOSAL CONTAINERS	NET WASTE VOLUME	NET WASTE WEIGHT	SPECIAL NUCLEAR MATERIAL (grams)			TOTAL	0117GM					
CONTAINER AND WASTE DESCRIPTION				1	m <sup>3</sup> ft <sup>3</sup>	0.0385 kg 1.3600 ton	0.45 0.00	U-233 NP	U-235 NP	Pu NP	NP	PAGE 1 OF 1 PAGE(S)				
Additional Nuclear Regulatory Commission (NRC) Requirements for Control, Transfer and Disposal of Radioactive Waste				ALL NUCLIDES			ACTIVITY (MBq/mCi) (LLD UNITS IN uCi/cc)			SOURCE		4. SHIPPER NAME				
				MBq mCi	2.5900E-01 7.0000E-03	TRITIUM NP	C-14 NP	Tc-99 NP	I-129 NP	NP	Bionomics, Inc for General Motors LLC - Bay C					
							NP	NP	NP	NP	SHIPMENT ID NUMBER					
							NP	NP	NP	NP	0117GM					
5. DISPOSAL CONTAINER DESCRIPTION																
6. CONTAINER IDENTIFICATION NUMBER	7. CONTAINER DESCRIPTION (See Note 1 & 1A)	8. VOLUME (m <sup>3</sup> , ft <sup>3</sup> )	9. WASTE AND CONTAINER WEIGHT (kg, ton)	10. SURFACE RADIATION LEVEL (mSv/hr, mrem/hr)	11. SURFACE CONTAMINATION (MBq/100 cm <sup>2</sup> , dpm/100 cm <sup>2</sup> )	12. PHYSICAL DESCRIPTION	13. WASTE DESCRIPTOR (See Note 2 & Note 2A)	14. CHEMICAL DESCRIPTION	15. RADIOLOGICAL DESCRIPTION	16. WASTE CLASSIFICATION AS - Class A Stable AU - Class A Unstable B - Class B C - Class C						
17-000001 (GM-01)	4	0.0385	13.61	< 0.005	< 0.00000334	< 0.0000187	H 36	0.0385	100	SOLID OXIDES / NP	NP	RA-226	1.5432E+04	2.5900E-01	7.0000E-03	C
Orig'n: MI General Motors LLC - Bay City Plant 1001 Woodside Ave Bay City, MI 48708		1.3600	0.02	< 0.5	< 20	< 1000		1.3600				Sub Total	1.5432E+04	2.5900E-01	7.0000E-03	
Package Total													1.5432E+04	2.5900E-01	7.0000E-03	
Shipment Total		0.0385	13.61											2.5900E-01	7.0000E-03	
		1.3600	0.02													

**NOTE 1: Container Description Codes.** For containers/waste requiring disposal in approved structural overpacks, the numerical code must be followed by "OP."

1. Wooden Box or Crate	9. Drum/barrel
2. Metal Box	10. Gas Cylinder
3. Plastic Drum or Pail	11. Bulk, Unpackaged Waste
4. Metal Drum or Pail	12. Unpackaged Components
5. Metal Tank or Liner	13. High Integrity Container
6. Concrete Tank or Liner	14. Other, Describe in Item 6, or additional page
7. Polyethylene Tank or Liner	
8. Fiberglass Tank or Liner	

**NOTE 1A: Bulk Packaging Description Codes** (Choose one code as may be applicable.)

A. Gondola
B. Intermediate
C. End-dump
D. Roll-off
E. Seaman

**NOTE 2: Waste Descriptor Codes.** (Choose up to three which predominate by volume.)

20. Charcoal	28. Demolition Rubble	36. Evaporator Bottoms/Sludges/Concentrates
21. Incinerator Ash	29. Cation Ion-exchange Media	37. Compressible Trash
22. Soil	30. Anion Ion-exchange Media	38. Noncompressible Trash
23. Gas	31. Mixed Bed Ion-exchange Media	39. Animal Carcass
24. Oil	32. Contaminated Equipment	40. Biological Material (except Animal Carcass)
25. Aqueous Liquid	33. Organic Liquid (except oil)	41. Activated Material
26. Filter Media	34. Glassware or Labware	42. Other, Describe in Item 11, or additional page
27. Mechanical Filter	35. Sealed Source/Device	
28. EPA or State Hazardous	37. Paint or Plating	

**NOTE 2A: Specific Waste Descriptions** (Choose all applicable codes.)

Q. Deactivated
H. Solid
I. Combustible
J. Non-combustible
K. Air Filtration Filter
L. Asbestos

**NOTE 3: Solidification and Stabilization Media Codes.** (Choose up to three which predominate by volume.) For media meeting disposal site structural stability requirements, the numerical code must be followed by "S" and the media vendor and brand name must also be identified in Item 13. Code 100=None Required

30. Cement	84. Vinyl Ester Styrene
31. Concrete (encapsulation)	85. Other, Describe in Item 13, or additional page
32. Bitumen	100. None Required
33. Vinyl Chloride	