



DETROIT HOMELAND SECURITY & EMERGENCY MANAGEMENT

13331 LYNDON · DETROIT, MI 48227
TEL: 313.596.2590 · FAX: 313.596.1712
HSEM@DETROITMI.GOV

January 16, 2018

Director of FSME
Attn: GLTS
USNRC
Washington, DC 20555-0001

In fulfillment of the requirements of 10 CFR 31.5(c) 8, we hereby notify you that on January 11, 2018, we transferred 11 sources to Chase Environmental Group located at 11450 Watterson Court, Louisville, Kentucky 40299-2389, License Number # 201-605-15-35. These devices were previously located at the Greatlakes Water Authority, 2727 2nd Avenue, Detroit, Michigan 48201. The sources bare the following serial numbers:

- | | |
|--------------------------|-------------------------|
| 1. R0123, Ni-63, 15 mCi | 7. A6124, Ni-63, 15 mCi |
| 2. R0124, Ni-63, 15 mCi | 8. TV252, Ni-63, 15 mCi |
| 3. R0125, Ni-63, 15 mCi | 9. TR691, Ni-63, 15 mCi |
| 4. A12761, Ni-63, 15 mCi | 10. 5887, Ni-63, 15 mCi |
| 5. A11326, Ni-63, 15 mCi | 11. 5916, Ni-63, 15 mCi |
| 6. A15119, Ni-63, 15 mCi | |

I have attached the following forms provided to me by Chase Environmental:

1. Uniform Low- Level Radioactive Waste Manifest, NRC form, 540, 541, 542.
2. Request for Shipment of Sealed Source to Aleron.
3. Generator Authorization to Aleron.

If you should have any questions, please contact Rachel Thomas (313) 596-5071.

Sincerely,

Rachel Thomas
Police Officer, RSO
City of Detroit Office of Homeland Security

NMSSIO

NRC FORM 540 UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST SHIPPING PAPER		5. SHIPPER- NAME AND FACILITY Chase Environmental Group, Inc. 11450 Watterson Court Louisville, KY 40299		SHIPPER ID # N/A	7. NRC FORM 540 AND 540A PAGE 1 <u>1</u> PAGE(S) NRC FORM 541 AND 541A OF <u>1</u> PAGE(S) NRC FORM 542 AND 542A <u>1</u> PAGE(S) ADDITIONAL INFORMATION <u>None</u> PAGE(S)	8. Manifest Number (Use this number on all continuation pages) AL-2018-007
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1. EMERGENCY TELEPHONE NUMBER (INCLUDE AREA CODE) 800-424-9300		USER PERMIT NUMBER T-KY003-L18	SHIPMENT # N/A	GENERATOR TYPE (SPECIFY) X COLLECTOR PROCESSOR	9. CONSIGNEE-NAME AND FACILITY ADDRESS Alaron Corporation 2138 State Route 18 Wampum, PA 16157	Contact Mike Otlowski Telephone Number (include area code) 724-535-5777
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ORGANIZATION CHEMTREC WSDS #: CHEN01RAD Customer #: 4395		6. CARRIER NAME AND ADDRESS SJ Transportation Co., Inc. PO Box 169 Woodstown, NJ 08098		EPA ID # NJD071629976	SIGNATURE-Authorized consignee acknowledging waste receipt Date	
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2. IS THIS AN "EXCLUSIVE USE" SHIPMENT? [] YES [x] NO		3. TOTAL NUMBER OF PACKAGES IDENTIFIED ON THIS MANIFEST 1		10. Certification This is to certify that the herein-named materials are acceptable for disposal, 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 and the Commission.	
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4. DOES EPA REGULATE WASTE REQUIRING A MANIFEST ACCOMPANY THIS SHIPMENT? [] YES [x] NO		EPA MANIFEST NUMBER N/A	CONTACT Kevin Elder	TELEPHONE # 856-769-2741	SIGNATURE <i>[Signature]</i>	DATE 1-11-2018	AUTHORIZED SIGNATURE <i>[Signature]</i>	TITLE Tech	DATE 1-11-2018
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HM	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 RADIONUCLIDES	16. TOTAL PACKAGE ACTIVITY IN MBq	17. LSA/SCO CLASS	18. TOTAL WEIGHT OR VOLUME m ³	19. ID NUMBER OF PACKAGE
			N/A	N/A	Solid/Oxide	Ni-63	6.11E+03	N/A	0.114
X	UN2910 Radioactive material, excepted package-limited quantity of material, 7 One drum with ECD's for disposal	N/A	N/A	Solid/Oxide	Ni-63	6.11E+03	N/A	0.114	AL-SD-WV-18-006

Emergency Response Guide Reference: 161 Job Number 03-WM-010918-D	Generator Certification Statement: The constituents of the waste manifested herein are known to the generator. There are no EPA RCRA, pathogenic or other hazards present other than those specifically listed on the Form 541. Signature: <i>Rachel Thomas</i> Print name: Rachel Thomas Signature: <i>[Signature]</i> Date: 1-11-18
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CONSIGNEE ORIGINAL (MUST ACCOMPANY WASTE IN TRANSIT)

NRC FORM 541	US NUCLEAR REGULATORY COMMISSION	1. MANIFEST TOTALS					2. MANIFEST NUMBER	
UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST CONTAINER AND WASTE DESCRIPTION		NUMBER OF PACKAGES	NET WASTE VOL. m ³ /3	NET WASTE WGHT kg	SPECIAL NUCLEAR MATERIAL (grams)			AL-2018-007
		1	0.114	23.0	U-233 NP	U-235 NP	Pu NP	
						4.0		
		ACTIVITY (MBq/mCi)					SOURCE (kg)	4. SHIPPER NAME Chase Environmental Group
		ALL NUCLIDES	TRITIUM	C-14	Tc-99	I-129	0.00E+00	SHIPPER ID NUMBER NA
		6.11E+03 MBq	NP	NP	NP	NP		
		1.65E+02 mCi						

DISPOSAL CONTAINER DESCRIPTION					WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER											16. WASTE CLASS AS-A STABLE AU-A UNSTABLE B-CLASS B C-CLASS C			
5. CONTAINER IDENTIFICATION NUMBER/ GENERATOR NUMBER	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME (m ³)	8. WASTE AND CONTAINER WEIGHT (kg)	9. SURFACE RADIATION LEVEL <u>X</u> uSwhr <u> </u> mSwhr	10. SURFACE CONTAMINATION MBq/100 cm ²		11. WASTE DESCRIPTOR			12. Approximate WASTE VOLUMES IN CONTAINER (m ³)		13. SORBENT SOLIDIFICATION STABILIZATION MEDIA (See Note 3)		14. CHEMICAL DESCRIPTION CHEMICAL FORM / CHELATING AGENT			15. RADIOLOGICAL DESCRIPTION INDIVIDUAL RADIONUCLIDES AND ACTIVITY (MBq) AND CONTAINER TOTAL OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT		
					ALPHA	BETA- GAMMA	DESCRIPTOR (See Note 2)	WASTE VOLUMES (m ³)	SOLIDIFICATION STABILIZATION MEDIA (See Note 3)	CHEMICAL FORM / CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	Nuclide	MBq	mCi					
AL-SD-W-18-006 1826	4	0.114	23.0	<5.0	<3.67E-6	<3.67E-5	36	0.114	100	Oxide/NP	NP	Ni-63	6.11E+03	1.65E+02	NA				
												Package total	6.11E+03	1.65E+02					

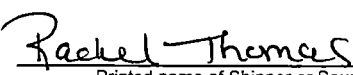
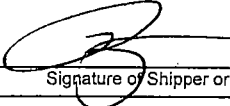

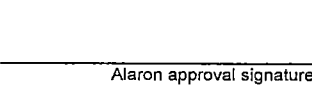
<p>NOTE 1: Container Description Codes. For containers/ waste requiring disposal in approved structural overpacks, the numerical code must be followed by "OP".</p> <table style="width:100%;"> <tr><td>1. Wooden Box or Crate</td><td>9. Demineralizer</td></tr> <tr><td>2. Metal Box</td><td>10. Gas Cylinder</td></tr> <tr><td>3. Plastic Drum or Pail</td><td>11. Bulk, Unpackaged Waste</td></tr> <tr><td>4. Metal Drum or Pail</td><td>12. Unpackaged Components</td></tr> <tr><td>5. Metal Tank or Uner</td><td>13. High Integrity Container</td></tr> <tr><td>6. Concrete Tank or Uner</td><td>19. Other, describe in Item 6, or additional page</td></tr> <tr><td>7. Polyethylene Tank or Uner</td><td></td></tr> <tr><td>8. Fiberglass Tank or Uner</td><td></td></tr> </table>	1. Wooden Box or Crate	9. Demineralizer	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 Uner	13. High Integrity Container	6. Concrete Tank or Uner	19. Other, describe in Item 6, or additional page	7. Polyethylene Tank or Uner		8. Fiberglass Tank or Uner		<p>Note 2: Waste Descriptor Codes. (Choose up to three which predominates by volume.)</p> <table style="width:100%;"> <tr><td>20. Charcoal</td><td>29. Demolition Rubble</td><td>38. Evaporator Bottoms/Sedges/ Concentrates</td></tr> <tr><td>21. Incinerator Ash</td><td>30. Cation Ion Exchange Media</td><td></td></tr> <tr><td>22. Soil</td><td>31. Anion Ion Exchange Media</td><td>39. Compactible Trash</td></tr> <tr><td>23. Gas</td><td>32. Mixed Bed Ion Exchange Media</td><td>40. Noncompactible Trash</td></tr> <tr><td>24. Oil</td><td>33. Contaminated Equipment</td><td>41. Animal Carcass</td></tr> <tr><td>25. Aqueous Liquid</td><td>34. Organic Liquid (Except Oil)</td><td>42. Biological Material (Except Animal Carcass)</td></tr> <tr><td>26. Filter Media</td><td>35. Glassware or Labware</td><td>43. Activated Material</td></tr> <tr><td>27. Mechanical Filter</td><td>36. Sealed Source/Device</td><td>59. Other, Describe in Item 11, or Additional Page</td></tr> <tr><td>28. EPA or State Hazardous</td><td>37. Paint or Plating</td><td></td></tr> </table>	20. Charcoal	29. Demolition Rubble	38. Evaporator Bottoms/Sedges/ Concentrates	21. Incinerator Ash	30. Cation Ion Exchange Media		22. Soil	31. Anion Ion Exchange Media	39. Compactible Trash	23. Gas	32. Mixed Bed Ion Exchange Media	40. Noncompactible Trash	24. Oil	33. Contaminated Equipment	41. Animal Carcass	25. Aqueous Liquid	34. Organic Liquid (Except Oil)	42. Biological Material (Except Animal Carcass)	26. Filter Media	35. Glassware or Labware	43. Activated Material	27. Mechanical Filter	36. Sealed Source/Device	59. Other, Describe in Item 11, or Additional Page	28. EPA or State Hazardous	37. Paint or Plating		<p>Note 3: For solidification media that meet disposal site structural stability requirements, the numerical code must be followed by "-S." For all solidification media, the vendor (manufacturer) and brand name must also be identified in Item 13. Code 100 = NONE REQUIRED.</p> <table style="width:100%;"> <tr> <td>60. Speedi Dri</td> <td>66. Florco</td> <td>73. Dicapet HP500</td> <td>89. Other, Describe in Item 13, or additional page</td> <td>90. Concrete (Encapsulation)</td> <td>100. None Required</td> </tr> <tr> <td>61. Caleform</td> <td>67. Florco X</td> <td>74. Petroset</td> <td></td> <td>91. Concrete (Encapsulation)</td> <td></td> </tr> <tr> <td>62. Floor Dry/ Superfine</td> <td>68. Solid-A-Sorb</td> <td>75. Petroset II</td> <td></td> <td>92. Bitumen</td> <td></td> </tr> <tr> <td>63. HI Dri</td> <td>69. Chemst 30</td> <td>76. Aquaset</td> <td></td> <td>93. Vinyl Chloride</td> <td></td> </tr> <tr> <td>64. Safe-T-Sorb</td> <td>70. Chemst 50</td> <td>77. Aquaset II</td> <td></td> <td>94. Vinyl Ester Styrene</td> <td></td> </tr> <tr> <td>65. Safe-N-Dri</td> <td>71. Chemst 3000</td> <td></td> <td></td> <td>99. Other, Describe in Item 13, or Additional Page</td> <td></td> </tr> <tr> <td></td> <td>72. Dicapet HP200</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	60. Speedi Dri	66. Florco	73. Dicapet HP500	89. Other, Describe in Item 13, or additional page	90. Concrete (Encapsulation)	100. None Required	61. Caleform	67. Florco X	74. Petroset		91. Concrete (Encapsulation)		62. Floor Dry/ Superfine	68. Solid-A-Sorb	75. Petroset II		92. Bitumen		63. HI Dri	69. Chemst 30	76. Aquaset		93. Vinyl Chloride		64. Safe-T-Sorb	70. Chemst 50	77. Aquaset II		94. Vinyl Ester Styrene		65. Safe-N-Dri	71. Chemst 3000			99. Other, Describe in Item 13, or Additional Page			72. Dicapet HP200				
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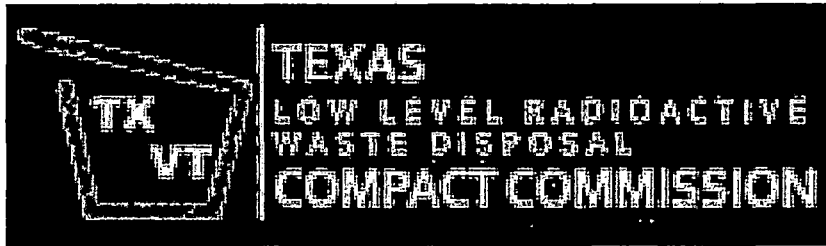
4. GENERATOR IDENTIFICATION NUMBER		5. GENERATOR NAME PERMIT NUMBER AND TELEPHONE NUMBER		8. GENERATOR FACILITY ADDRESS		7. PREPROCESSED WASTE (OR MATERIAL) VOLUME (m3)		8. MANIFEST NUMBER UNDER WHICH WASTE (OR MATERIAL) RECEIVED AND DATE OF RECEIPT		9. WASTE CODE P-PROCESSED D-COLLECTED		10. ORIGINATING COMPACT OR STATE		11. AS PROCESSED/COLLECTED TOTAL			
														A. SOURCE MATERIAL (kg)	B. SNM (g)	C. ACTIVITY (MBq)	D. VOLUME (m3)
1826		Great Lakes Water Authority 313-964-9717		2727 Second Avenue Detroit, MI 48201		0.114		NA		C		MI		0.00E+00	NP	6.11E+03	0.114
TOTALS OF ALL PAGES (NRC FORMS 542 AND 542A)														0.00E+00	0.00E+00	6.11E+03	1.14E-01

Job Number 03-WM-010918-D

Request For Shipment of Sealed Sources to Alaron

WI-VE-1109-051.1

Source Details	Source 1	Source 2	Source 3	Source 4
1. Radionuclide	Ni-63			
2. Total activity Specify Units (TBq or Ci) to right	11 x 15 mCi			
3. Reference date for activity (date manufactured) mm/dd/yyyy	NA			
4. Decay corrected activity on shipment date	11 x 15 mCi			
5. Source manufacturer (if known)	Bruker			
6. Source Serial No. / Model No. / Device License No.				
7. Physical Dimensions of Source Specify Units (cm or in) to right	ECD			
8. Source mounted in equipment? If yes, attach drawings / photograph or manufacturer & model no.	NO			
9. Date of most recent leak test (attach copy of results) mm/dd/yyyy				
10. Source damaged, discolored, leaking, or contaminated? If yes, attach detail	NO			
11. Does source have special form approval? If yes, supply copy of certificate	NO			
12. Shipper name & address Chase Environmental Group 200 Sam Rayburn Parkway Lenoir City, TN 37771	13. Shipper contact person Janet Baker Telephone 865-250-4593	Delivering carrier SJ Transportation Co., Inc.		
	15. Shipment Date mm/dd/yyyy 01/11/2018	Estimated delivery date mm/dd/yyyy		
17. Source owner company name and address (at source location) Great Lakes Water Authority 2727 Second Avenue Detroit, MI 48201	18. Contact person (at source location) Kuriakose Cheeramvelil Telephone 313-964-9717	Number of packages 1 Total weight lbs		
Comments				
20. I attest that the above is complete and accurate				
 Printed name of Shipper or Source Owner		 Signature of Shipper or Source Owner		<u>1-11-18</u> Date
 Chase approval signature		<u>1-11-2018</u> Date	 Alaron approval signature	
Date				



GENERATOR AUTHORIZATION

DATE: 1-11-2018

NAME OF ORIGINAL GENERATOR: Great Lakes Water Authority

Authorizes

NAME OF BROKER/PROCESSOR: Alaron Corporation

to be our Broker and/or Processor for disposal of our radioactive material and/or sealed sources into the State of Texas Compact Disposal Facility in Andrews, Texas, operated by Waste Control Specialists, LLC. By signing this Generator Authorization, the Generator is also verifying that there is no waste of international origin contained in this shipment.

NAME OF AUTHORIZED ORIGINAL GENERATOR REPRESENTATIVE:

Rachel Thomas
(PRINT NAME)

TITLE:

Police Officer / RSO
(PRINT TITLE)

MAILING ADDRESS:

13331 Lyndon
Detroit mi 48226

SIGNATURE:

