

NRC FORM 540 (8-2010)		U.S. NUCLEAR REGULATORY COMMISSION UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST SHIPPING PAPER		5. SHIPPER - NAME AND FACILITY Philotechnics @ Milan Army Ammunition Plant 2280 Hwy 104 Milan, TN 38358		SHIPMENT ID NUMBER 2515-090121TX		7. FORM 540 AND 540A PAGE 1 OF 1 PAGE(S) FORM 541 AND 541A 1 PAGE(S) FORM 542 AND 542A 1 PAGE(S) ADDITIONAL INFORMATION NONE PAGE(S)		8. MANIFEST NUMBER (Use this number on all continuation pages) 2515-090121TX							
1. EMERGENCY TELEPHONE NUMBER (Include Area Code) 800-424-9300		USER PERMIT NUMBER T-TN024-L21		SHIPMENT NUMBER 2515-090121TX		PROCESSOR GENERATOR TYPE (Specify)		9. CONSIGNEE - Name and Facility Address ToxCo Material Management Operated By ToxCo Material Management 109 Flint Road Oak Ridge, TN 37830		CONTACT Rick Low TELEPHONE NUMBER (Include Area Code) (865) 482-5532 x22							
ORGANIZATION CHEMTREC #17253		CONTACT Charles McDowell		TELEPHONE NUMBER (Include Area Code) (731) 686-6828		EPA I.D. NUMBER TNR000030544		SIGNATURE - Authorized consignee acknowledging waste receipt		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 Philotechnics, Ltd 201 Renovare Blvd. Oak Ridge, TN 37830		Truck #: Trailer #:		SHIPPING DATE 09/01/2021		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							
4. DOES EPA REGULATED WASTE REQUIRING A MANIFEST ACCOMPANY THIS SHIPMENT? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO If "Yes", provide Manifest Number =====>		EPA MANIFEST NUMBER N/A		CONTACT Justin Button		TELEPHONE NUMBER (Include Area Code) (865) 466-4812		DATE 9/1/21		AUTHORIZED SIGNATURE Justin Button TITLE SHIPPER DATE 9/1/21							
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 MBq mCi		17. LSA/SCO CLASS		18. TOTAL WEIGHT OR VOLUME (Use appropriate units)		19. IDENTIFICATION NUMBER OF PACKAGE	
UN2911, RADIOACTIVE MATERIAL, EXCEPTED PACKAGE-INSTRUMENTS OR ARTICLES, 7 INSTRUMENTS OR ARTICLES 1 - WOOD CRATE		NA		NA		SOLID/OXIDES		U <20%; U-234 ; U-236 ; U-238		3513.89000000 (94.970000000)		NA		96.00 ft ³ 1940.00000 lb		21-001152 (MLAAP-001)	
FOR CONSIGNEE USE ONLY				20. Generator Certification Statement A) Radioactive Materials. Certification is hereby made that this shipment of low-level radioactive waste has been prepared in accordance with a radioactive waste management program which has been approved by the Nuclear Regulatory Commission or an Agreement State regulatory agency and with the current revision of the site Material Acceptance Criteria. B) Hazardous Materials. Generator hereby certifies that this material does (or) does not contain a hazardous waste as defined in 49 CFR 261. C) Data. Generator hereby 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, regulations and site Radioactive Material Licenses. D) INFECTIOUS SUBSTANCE: Generator hereby certifies that this material does not contain an infectious substance as defined in 49CFR 173.134 Scott Twilla Signature 9-1-21 Date													

NRC FORM 541 (8-2010)		U.S. NUCLEAR REGULATORY COMMISSION UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST CONTAINER AND WASTE DESCRIPTION Additional Nuclear Regulatory Commission (NRC) Requirements for Control, Transfer and Disposal of Radioactive Waste		1. MANIFEST TOTALS								2. MANIFEST NUMBER			
				NUMBER OF PACKAGES/ DISPOSAL CONTAINERS	NET WASTE VOLUME	NET WASTE WEIGHT	SPECIAL NUCLEAR MATERIAL (grams)				2515-090121TX				
							U-233	U-235	Pu	TOTAL	3. PAGE 1 OF 1 PAGE(S)				
				1	m ³ 2.71847 ft ³ 96.00000	kg 866.35696 lb 1910.00000	NP	NP	NP	NP	4. SHIPPER NAME Philolectronics @ Milan Army Ammunition Plant				
ACTIVITY (MBq/mCi) (LLD UNITS IN uCi/cc)								SOURCE		SHIPMENT ID NUMBER					
ALL NUCLIDES				TRITIUM	C-14	Tc-99	I-129	kg 135.1051013067		2515-090121TX					
MBq 3513.8900000000				NP	NP	NP	NP	lb 297.8572999142							
mCi 94.9700000000				NP	NP	NP	NP								
DISPOSAL CONTAINER DESCRIPTION						WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER						16. WASTE CLASSIFI- CATION AS - Class A Stable AU - Class A Unstable B - Class B C - Class C			
5. CONTAINER IDENTIFICATION NUMBER/ TRANSPORT PERMIT NUMBER	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME m ³ ft ³	8. WASTE AND CONTAINER WEIGHT kg lb	9. SURFACE RADIATION LEVEL mSv/hr mrem/hr	10. SURFACE CONTAMINATION MBq/100 cm ² dpm/100 cm ²		11. PHYSICAL DESCRIPTION		12. CHEMICAL DESCRIPTION		13. RADIOLOGICAL DESCRIPTION				
					ALPHA	BETA- GAMMA	11. WASTE DESCRIPTOR (See Note 2)	12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER m ³ ft ³	13. SOLIDIFICATION OR STABILIZATION MEDIA (See Note 3)	14. CHEMICAL FORM/ CHELATING AGENT	15. WEIGHT % CHELATING AGENT (F > 0.1%)		15. RADIOLOGICAL DESCRIPTION INDIVIDUAL RADIONUCLIDES AND ACTIVITY AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT		
# - Innerpack Container						RADIONUCLIDES		MBq		mCi					
21-001152 (MLAAP-001)	1	2.71847 96.00000	879.96466 1940.00000	< 0.002 < 0.2	< 0.000004008 < 240	< 0.000004008 < 2400	40	2.71847 96.00000	100	SOLID OXIDES / NP	NP	U <20%	77.3300000000 [<0.0000000001 g]	2.0900000000	AU
Origin: TN Milan Army Ammunition Plant 2280 Hwy 104 Milan, TN 38358												U-234	1749.7300000000 [0.0076039941 kg]	47.2900000000	
												U-236	8.1400000000 [0.0034048876 kg]	0.2200000000	
												U-238	1678.6900000000 [135.0940924250 kg]	45.3700000000	
												Sub Total	3513.8900000000 [<0.0000000001 g]	94.9700000000	
Package Total													3513.8900000000 [<0.0000000001 g]	94.9700000000	
													[135.1051013067 kg]		
Shipment Total		2.71847 96.00000	879.96466 1940.00000										3513.8900000000 [<0.0000000001 g]	94.9700000000	
													[135.1051013067 kg]		

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. Demineralizer
2. Metal Box	10. Gas Cylinder
3. Plastic Drum or Pail	11. Bulk, Unpacked Waste
4. Metal Drum or Pail	12. Unpackaged Components
5. Metal Tank or Liner	13. High Integrity Container
6. Concrete Tank or Liner	19. Other. Describe in item 6, or additional page
7. Polyethylene Tank or Liner	
8. Fiberglass Tank or Liner	

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

20. Charcoal	29. Demolition Rubble	38. Evaporator Bottoms/Sludges/ Concentrates
21. Incinerator Ash	30. Cation Ion-exchange Media	39. Compactible Trash
22. Soil	31. Anion Ion-exchange Media	40. Noncompactible Trash
23. Gas	32. Mixed Bed Ion-exchange Media	41. Animal Carcass
24. Oil	33. Contaminated Equipment	42. Biological Material (except animal carcass)
25. Aqueous Liquid	34. Organic Liquid (except oil)	43. Activated Material
26. Filter Media	35. Glassware or Labware	59. Other. Describe in item 11, or additional page
27. Mechanical Filter	36. Sealed Source/Device	
28. EPA or State Hazardous	37. Paint or Plating	

NOTE 3: Sorption, 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". For all solidification media, the vendor and brand name must also be identified in item 13. Code 100=None Required

Sorption	Solidification	94. Vinyl Ester Styrene
60. Speedi Dri	64. Safe T Sorb	99. Other. Describe in item 13, or additional page
61. Coleton	65. Safe N Dri	100. None Required
62. Floor Dry/Supertino	66. Florco	
63. Hi Dri	67. Florco X	
	68. Solid A Sorb	
	69. Chemsil 30	
	70. Chemsil 50	
	71. Chemsil 3030	
	72. Dicapri HP 200	
	73. Dicapri HP500	
	74. Petroset	
	75. Petroset II	
	76. Aquaset	
	77. Aquaset II	
	78. Other. Describe in item 13 or additional page.	
	79. Other. Describe in item 13 or additional page.	
	80. Cement	
	81. Concrete (encapsulation)	
	82. Bitumen	
	83. Vinyl Chloride	

NRC FORM 542 (8-2010)		U.S. NUCLEAR REGULATORY COMMISSION			1. WASTE COLLECTOR/PROCESSOR					2. MANIFEST NUMBER 2515-090121TX									
UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST					SHIPPER USE ONLY					3. PAGE 1 OF 1 PAGE(S)									
MANIFEST INDEX AND REGIONAL COMPACT TABULATION					NAME Philotechnics @ Milan Army Ammunition Plant														
List all original "PROCESSED WASTE" generators (if any) before "COLLECTED WASTE" generators					IDENTIFICATION NUMBER T-TN024-L21														
					SHIPPING DATE 09/01/2021														
4. S.C. TRANSPORT PERMIT NUMBER	5. GENERATOR NAME AND TELEPHONE NUMBER	6. GENERATOR FACILITY ADDRESS	6A. WASTE DESCRIPTION (NOMENCLATURE)	7. PREPROCESSED WASTE (OR MATERIAL) VOLUME		8. MANIFEST NUMBER(S) UNDER WHICH WASTE (OR MATERIAL) RECEIVED AND DATE OF RECEIPT	9. WASTE CODE P=PROCESSED C=COLLECTED	10. ORIGINATING COMPACT REGION OR STATE	11. AS PROCESSED/COLLECTED TOTAL										
				m ³	ft ³				A. SOURCE MATERIAL		B. SNM	C. ACTIVITY		D. VOLUME		E. WEIGHT	F. MAXIMUM PACKAGE RADIATION LEVEL		
	Milan Army Ammunition Plant (731) 686-6828	2280 Hwy 104 Milan, TN 38358	INSTRUMENTS OR ARTICLES	2.71847	96.00000	Onsite Generation 08/23/2021	C	TN	135.1051013297.8572999	<0.0000000001		3513.89	94.97	2.71847	96.00000	1910.00000	<0.2		
TOTALS OF ALL PAGES (FORMS 542 AND 542A)									135.105101 297.857299	<0.0000000001	3513.8900000000	94.9700000000	2.71847	96.00000	1910.00000	N/A			