

Br. 4

Shaw Environmental & Infrastructure, Inc.

100 Technology Center Drive  
Stoughton, MA  
614.589.5111  
FAX 617.589.2156



August 27, 2010

Licensing Assistance Team  
Division of Nuclear Materials Safety  
U.S. Nuclear Regulatory Commission, Region 1  
475 Allendale Road,  
King of Prussia, PA 19406-1415

RECEIVED  
AUG 27 11:12:14

Licensing Assistance Team,

03037850

This letter serves as notice that Shaw field activities with radioactive materials at El Toro Marine Corps Air Station, CA under our Materials License Number 20-31340-01 were completed July 29, 2010, and all radioactive materials generated at this temporary job site were transferred to licensed disposal facilities on or prior to July 14, 2010. (Copies of shipping papers attached).

Mr. Tom Peterson, 207-939-4886, is the License RSO; Mr. John Massey, 925-681-9209 was the Project RSO/Authorized User; and Mr. John Hamm, 505-259-1232, was the alternate Project RSO/Authorized User.

If additional information is required please contact Mr. Hamm or me directly at the listed numbers.

Sincerely,

Thomas A. Peterson  
Shaw Radiation Safety Officer

573426  
NMSS/RGN1 MATERIALS-002



US Ecology Nevada (Beatty) Fax (775) 553-2125  
 US Ecology Idaho (Grand View) Fax (208) 834-2919  
 US Ecology Texas (Robstown) Fax (361) 387-0794

Profile #: 24233

**A. CUSTOMER INFORMATION**

\*Waste as shipped will be:  Industrial  NON - Industrial \*(Texas customers only)

Generator: Former Marine Corps Air Station-El Toro  
 Facility Address: Site 3  
 (No PO Box )  
 Mailing Address  
 City/State/Zip: East Irvine, CA 92650  
 Technical Contact: Richard Thatcher (AWS Shipping Broker)  
 Phone: 803-507-1529 Fax: 803-279-7337  
 NAICS#  CESQG  SQG  LQG EPA ID \_\_\_\_\_ State ID# \_\_\_\_\_

Check if Billing is Same  
 Billing Company: Aleut World Solutions  
 Billing Address: 4300 B Street, Ste. 402  
 City/State/Zip: Anchorage, AK 99503  
 Billing Contact: Mike Taylor  
 Phone No.: 907-762-8520 Fax No.: 907-278-2316  
 Email: mtaylor@bseak.com

**B. SHIPPING INFORMATION**

1 US DOT Shipping Name Non-Hazardous, Non-Regulated DOT material (soil) 2 Hazard Class \_\_\_\_\_  
 3 UN/NA # \_\_\_\_\_ 4 Packaging Group \_\_\_\_\_ 5 RQ \_\_\_\_\_  
 6 Container Type:  Bulk  Totes  Pallet Size 20 yd3 7 Frequency:  Year  QTR  Month  
 Boxes  Bags  Drums  Other Roll-Off Bin Quantity 4  1 Time  Other \_\_\_\_\_

**C. GENERAL MATERIAL & REGULATORY INFORMATION**

1. Common name for this waste Contaminated soil  
 2. Process generating the material Former military base which did store radioactive materials. area is now under the Installation Restoration Program (IRP)  
 (include additional sheets as necessary)  
 3. Describe Physical Appearance of Waste \_\_\_\_\_  
 4. Describe odor of waste:  None  Slight  Strong Describe: \_\_\_\_\_  
 5. Knowledge is from:  Lab Analysis  MSDS  Process/Generator knowledge  Other (specify) \_\_\_\_\_  
 Yes  No Is the material <500 PPMW VOC as generated  Yes  No Is the waste restricted under EPA Land Disposal Restrictions  
 Yes  No Waste Subject to Benzene NESHAP regulations (40 CFR 268), if yes please complete LDR form  
 Yes  No State waste codes \_\_\_\_\_  Wastewater  Non-wastewater  Debris  
 Yes  No CERCLA Regulated (Superfund) Waste  Yes  No Exempt Waste: If yes, list ref. 40 CFR  
 Yes  No EPA Haz. Waste (list codes)  Yes  No Contains UHCs/Constituents of Concern: List in section D  
 Yes  No Has the waste been treated after the initial point of generation?  
 Yes  No Subpart XX  
 Yes  No Alternative standards for Soil?  
 Source Code G \_\_\_\_\_ Form Code W \_\_\_\_\_ Mgt. Method H \_\_\_\_\_

**D. MATERIAL COMPOSITION (Physical/Chemical)**

(Range Total > or = 100%) Values are  TCLP  TOTALS  
 (include additional sheets as necessary) typical value unit range

Material	typical value	unit	range
soil	90%		
debris	10%		

**E. Does the waste exhibit or contain the following:**

Yes  No Oxidizer  Yes  No React. Sulfides \_\_\_\_\_ ppm  
 Yes  No Explosive  Yes  No React. Cyanides \_\_\_\_\_ ppm  
 Yes  No Organic Peroxide  Yes  No Water/Air (Pyrophoric) React  
 Yes  No Shock Sensitive  Yes  No Thermally Unstable  
 Yes  No Tires  Yes  No TSCA Regulated PCB Waste  
 Yes  No Pyrophoric  Yes  No Regulated Medical/Infectious Waste  
 Yes  No Radioactive\*\*  Yes  No Compressed Gasses  
 Yes  No Exempt RAD\*\* \*\*Additional Radiological info is provided in USEE's WAC Addendum  
 Yes  No Halogenated Organic Compounds? (per 40 CFR 268, Appendix III)

**F. PHYSICAL CHARACTERISTICS**

Flash Point: \_\_\_\_\_ °F (if <140°F) 2. Typical pH: 7.7 pH Range:  <2  
 Yes  No Possibility of incidental liquids from transportation?  >2, <12.50  
 Yes  No Does waste pass the EPA specified paint filter test?  ≥ 12.5

**G. GENERATOR'S CERTIFICATION:**  Yes  No I certify this material may be disposed of without further treatment.

Certification Statement: I certify under penalty of law that I am familiar with this waste stream through analysis and/or process knowledge, and that all information provided is true, accurate, representative and complete, and that all known or suspected hazards have been disclosed. Furthermore, I certify that this form was completed in accordance with the instructions provided.

Signature: Richard Thatcher Print Name: Richard Thatcher  
 Title: AWS Shipping Broker Date: 6/15/2010

Facility use only  
 First review \_\_\_\_\_ Second review \_\_\_\_\_ Final review: \_\_\_\_\_  
 Date approved: \_\_\_\_\_ Date Denied: \_\_\_\_\_

WASTE ACCEPTANCE CRITERIA ADDENDUM

Generator: MCAS-EL TORO EAST ERVINE, CA Date: 6/15/10  
Contact: RICHARD THATCHER Phone: 803-279-7337  
Common Name of Material: CONTAMINATED SOIL

Description: \_\_\_\_\_

Identify which table applies to the material (see below): TABLE 2

Comments: SOIL CONTAMINATED WITH Ra226 @ 145 pCi/g

Determine which table, from the USEI Waste Acceptance Criteria (WAC), applies to the waste you intend to ship to USEI (Tables 1 - 4).

1. If Table 1 applies, does the material only contain  $U_{238}$  or only  $Th_{232}$  or both?
- a.) If only  $U_{238}$  or only  $Th_{232}$ , is present, then use the value/concentration listed under Table 1 for Natural Uranium and Natural Thorium as the limit.
- b.) If both are present, then use the following formulas as appropriate:

*For natural uranium and natural thorium mixture:*  
 $\{Conc. U / 141 pCi/g + Conc. Th / 110 pCi/g\} \leq 1$  and  $\{(pCi/g U \times 14) + (pCi/g Th \times 10)\} = \leq 2000 pCi/g$

*For refined uranium and thorium mixture:*  
 $\{Conc. U / 333 pCi/g + Conc. Th / 110\} \leq 1$  and  $\{(pCi/g U \times 5) + (pCi/g Th \times 10)\} = \leq 2000 pCi/g$

*For depleted uranium and thorium mixture:*  
 $\{Conc. U / 169 pCi/g + Conc. Th / 110 pCi/g\} \leq 1$  and  $\{(pCi/g U \times 4) + (pCi/g Th \times 10)\} = \leq 2000 pCi/g$

Note: Absent strong evidence to the contrary, Th-232 will routinely be considered to be in 100% equilibrium with its progeny.

Calculations (add extra sheets as necessary)

- c.) If Th-230 is the only source material present, then choose the appropriate limit from the two available selections.

**2. If Table 2 applies then choose one of the following:**

a)

Is the material Radium 226 or 228?

Note: Ra-226 and Ra-228 will routinely be considered completely in equilibrium with their progeny.

If yes, use Table 2 directly

b) Is the material Lead 210?

Note: Lead-210 will routinely be considered completely in equilibrium with its progeny.

If yes, use Table 2 directly

c) Is the material anything other than NORM?

**3. If Table 3 applies, then**

Use Table 3 directly

To establish whether the material was a "non-production" accelerator and eligible under Table 3, the generator needs to establish what was the purpose of the accelerator that produced the waste; and whether the accelerator ever used to produce radioactive material for industrial use, medical use or academic research. If it was a "production" accelerator, the material may be accepted under the terms of Table 4b.

Note: You must provide an inventory estimate of the radioactive content of each container. (Please list by isotope.)

Radioactive Estimate by Container and Isotope: \_\_\_\_\_

Dose rate on exterior of package: \_\_\_\_\_

Note: You can add additional sheets, if necessary

**4. If Table 4a applies, then**

Use Table 4a directly

Note: You must provide an inventory estimate of the radioactive content of each container. (Please list by isotope.)

Radioactive Estimate by Container and Isotope: \_\_\_\_\_

➤ When using Table 4a or 4b please note the following:

1. Material must be transported in accordance with DOT rules and regulations
2. Individual packages can bear White I or Yellow II Labels as long as the maximum surface dose rate on any package does not exceed 10 mrem/hr. Contact a Customer Service Representative or Sales Representative if you need help with packaging requirements. Depending on the scope, USEI may charge for this service.
3. Provide specific reference for NRC exemption

Citation(s) for Exemption(s) from 10 CFR: \_\_\_\_\_

**If Table 4b applies then:**

- (a) Is the approved for disposal in accordance with 20.2008(b) or equivalent Agreement State regulation?  
➤ If so, provide a copy of the exemption.
- (b) Has the waste been approved by the NRC or an Agreement State for alternate disposal in accordance with 10 CFR 20.2002 (or equivalent)?  
➤ If so provide a copy of the approval request, exemption and/or FONSI.
- (c) Was the material approved for alternate disposal via a decommissioning plan or license amendment?  
➤ If so provide a copy of the license or plan
- (d) The material is similar to table 4b but is not regulated or licensed by the NRC or an Agreement State.  
➤ Provide documentation that the radioactive material is unlicensed. This could be a release of property for unrestricted use by the NRC or a transfer of regulatory authority from NRC to another federal agency, i.e., the EPA or USACE, etc. or a release for unrestricted use by an agreement state, etc.

Placarding Required? NO If yes, what type \_\_\_\_\_

*Certification Statement: I certify that the contents of the packages being shipped to US Ecology Idaho (USEI) are exempt from regulation by the US Nuclear Regulatory Commission in accordance with 10CFR (list each section of the NRC regulations that contains an exemption for each type of device or item in the shipment, or are not licensed by the NRC or an agreement state.)*

RICHARD TRATCHER , AWS SHIPPING BROKER  
Name/Title (Please Print)  
Richard Thatcher  
Signature  
6/15/10  
Date

Material Inventory

	Roll-off Number	Gross # pounds	Tare lbs	WT of material pounds	WT of material grams	Ra-226 145 pCi/g mCi	Total MBq
1	DB-405	33,460	4500	28960	13147840	1.91	70.54
2	DB-414	35,240	4500	30740	13955960	2.02	74.87
3	DB-923	35,920	4500	31420	14264680	2.07	76.53
<b>Totals</b>		<b>104620</b>		<b>91120</b>		<b>6</b>	<b>222</b>



**STRAIGHT BILL OF LADING**  
ORIGINAL - NOT NEGOTIABLE

SHIPMENT No: **USN 2010-001-A**

NAME OF CARRIER **Denbeste Transportation**

DATE: **6/23/2010**

WSID No: **24233**

TO:				FROM:			
CONSIGNEE: <b>USE Idaho</b>		STREET: <b>10.5 Miles NW on Hwy 78, Lemley Road</b>		CONSIGNOR: <b>AWS for Marine Corps Air Station-EI Toro</b>		STREET: <b>IRP Site Landfill Capping</b>	
CITY: <b>Grand View</b>		STATE: <b>ID</b>		CITY: <b>East Ervine</b>		STATE: <b>CA</b>	
ZIP CODE: <b>83624</b>		PHONE: <b>800-274-1516</b>		ZIP CODE: <b>92650</b>		PHONE: <b>803-507-1529</b>	

24 HOUR EMERGENCY RESPONSE TELEPHONE No:

**803-507-1529**

Truck No. **235**

Trailer No. **24**

NO OF UNITS & CONTAINER TYPE	HM	BASIC DESCRIPTION (PROPER SHIPPING NAME, HAZARD CLASS, IDENTIFICATION NO (UN OR NA), PACKING GROUP, PER 172.101, 172.202, 172.203)	TOTAL QUANTITY (cubic yard)	Gross WEIGHT (lbs)	NET WEIGHT (lbs)
<b>1 Roll-off DB-414</b>		<b>Non-regulated DOT material (Soil)</b>		<b>35240</b>	<b>30740</b>
		<b>Ra-226 2.02 mCi</b>			

PLACARDS TENDERED: <b>NO</b>	<p>I hereby certify that the above-named materials are properly classified, described, packaged, marked name and are classified, packed, marked and labeled, and are in proper condition for transportation according to applicable regulations of the Department of Transportation.</p> <p><i>[Signature]</i></p>	Remit C.O.D. to	<table border="1"> <tr> <td>C.O.D. Amt: \$</td> <td>C.O.D. type</td> </tr> <tr> <td>Prepaid</td> <td></td> </tr> <tr> <td>Collect</td> <td>\$</td> </tr> <tr> <td>Total Charges</td> <td>\$</td> </tr> <tr> <td>Freight charges</td> <td>Check box if charges</td> </tr> <tr> <td>Freight prepaid</td> <td>are to be checked</td> </tr> </table>	C.O.D. Amt: \$	C.O.D. type	Prepaid		Collect	\$	Total Charges	\$	Freight charges	Check box if charges	Freight prepaid	are to be checked
C.O.D. Amt: \$		C.O.D. type													
Prepaid															
Collect	\$														
Total Charges	\$														
Freight charges	Check box if charges														
Freight prepaid	are to be checked														
<p>Note: Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property.</p> <p>The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding</p> <p>\$ <b>0.00</b> per lb.</p>	<p>Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement: "The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges"</p>														

RECEIVED, subject to the classifications and lawfully fixed tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted hereon, and conditions of contents of packages unknown, marked, consigned and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of, said property over all or any portion of

said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment. Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

Shipper: <b>AWS for Marine Corps Air Station-EI Toro</b>	Received By: <b>USE Idaho</b>
Signature: <i>[Signature]</i>	Signature:
Title: <b>Broker, Agent for US Army JMC</b>	Title:
Date: <b>6/23/10</b>	Date:

Carrier No 1: <b>Denbeste Transportation</b>	Signature: <i>[Signature]</i>	Date: <b>6-23-10</b>
--	-------------------------------	----------------------



Material Inventory

Roll-off Number	Gross # pounds	Tare lbs	WT of material pounds	WT of material grams	Ra-226 145 pCi/g mCi	Total MBq
1 DB-428	30,700	4500	26200	11894800	1.72	63.82
	<b>30700</b>		<b>26200</b>		<b>2</b>	<b>64</b>

**STRAIGHT BILL OF LADING**  
ORIGINAL - NOT NEGOTIABLE

SHIPMENT No: **USN 2010-001-D**

NAME OF CARRIER: **Denbeste Transportation**

DATE: **7/14/2010**

WSID No: **24233**

TO:				FROM:			
CONSIGNEE: <b>USE Idaho</b>				CONSIGNOR: <b>AWS for Marine Corps Air Station-EI Toro</b>			
STREET: <b>10.5 Miles NW on Hwy 78, Lemley Road</b>				STREET: <b>IRP Site Landfill Capping, Site 3</b>			
CITY: <b>Grand View</b>		STATE: <b>ID</b>		CITY: <b>East Irvine</b>		STATE: <b>CA</b>	
ZIP CODE: <b>83624</b>		PHONE: <b>800-274-1516</b>		ZIP CODE: <b>92650</b>		PHONE: <b>803-507-1529</b>	

24 HOUR EMERGENCY RESPONSE TELEPHONE No: **803-507-1529**

Truck No. **208**

Trailer No. **51**

NO OF UNITS & CONTAINER TYPE	HM	BASIC DESCRIPTION (PROPER SHIPPING NAME, HAZARD CLASS, IDENTIFICATION NO (UN OR NA), PACKING GROUP, PER 172.101, 172.202, 172.203)	TOTAL QUANTITY (cubic yard)	Gross WEIGHT (lbs)	NET WEIGHT (lbs)
<b>1 Roll-off DB-428</b>		<b>Non-regulated DOT material (Soil)</b>		<b>30700</b>	<b>26,200</b>
		<b>Ra-226 64 MBq (1.72 mCi)</b>			

PLACARDS TENDERED: <b>NO</b>	<p>I hereby certify that the above-named materials are properly classified, described, packaged, marked name and are classified, packed, marked and labeled, and are in proper condition for transportation according to applicable regulations of the Department of Transportation.</p> <p><i>[Signature]</i></p>	Remit C.O.D. to:	<table border="1"> <tr> <td>C.O.D. Amt \$</td> <td>C.O.D. Fee</td> </tr> <tr> <td>Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignee shall sign the following statement: The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.</td> <td> <table border="1"> <tr> <td>Freight Collect</td> <td>\$</td> </tr> <tr> <td>Total Charges</td> <td>\$</td> </tr> <tr> <td>Freight Prepaid</td> <td>Check box if charges are to be collected</td> </tr> </table> </td> </tr> </table>	C.O.D. Amt \$	C.O.D. Fee	Subject to Section 7 of the conditions, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignee shall sign the following statement: The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.	<table border="1"> <tr> <td>Freight Collect</td> <td>\$</td> </tr> <tr> <td>Total Charges</td> <td>\$</td> </tr> <tr> <td>Freight Prepaid</td> <td>Check box if charges are to be collected</td> </tr> </table>	Freight Collect	\$	Total Charges	\$	Freight Prepaid	Check box if charges are to be collected
C.O.D. Amt \$		C.O.D. Fee											
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Freight Collect	\$												
Total Charges	\$												
Freight Prepaid	Check box if charges are to be collected												
Note-Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding \$ <b>40.40</b> per lb.													

RECEIVED: subject to the classifications and lawfully filed tariffs in effect on the date of the issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and conditions of contents of packages unknown), marked, consigned and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier of all or any of said property over all or any portion of

said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to as the bill of lading terms and conditions in the governing classification on the date of shipment.  
Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

Shipper: <b>AWS for Marine Corps Air Station EI Toro</b>	Received By: <b>USE Idaho</b>
Signature: <i>[Signature]</i>	Signature:
Title: <b>Broker, Agent for US Army JMC</b>	Title:
Date: <b>7/14/10</b>	Date:

Carrier No. 1: <b>Denbeste Transportation</b>	Date: <b>7/14/10</b>
Signature: <i>[Signature]</i>	

**SHIPPER'S DECLARATION FOR DANGEROUS GOODS**

(Provide at least three copies to the airline.)

Shipper Marine Corps Air Station-EI Toro IRP Site 3 East Irvine, CA 92650	Air Waybill No. <b>8689 1090 5802</b>  Page <b>1</b> of <b>1</b> Pages Shipper's Reference Number USN 2010-001
--	--

Consignee  
 EMC  
 3106 S.Faith Home Road  
 Turlock, CA 95380



Two completed and signed copies of this Declaration must be handed to the operator

**WARNING**  
  
 Failure to comply in all respects with the applicable Dangerous Goods Regulations may be in breach of the applicable law, subject to legal penalties.

**TRANSPORT DETAILS**

This shipment is within the limitations prescribed for: (delete non applicable)  <input checked="" type="checkbox"/> PASSENGER AIRCRAFT <input type="checkbox"/> CARGO AIRCRAFT ONLY	Airport of Departure   Airport of Destination:
--	---

Shipment type: (delete non-applicable)  
 RADIOACTIVE  RADIOACTIVE

**NATURE AND QUANTITY OF DANGEROUS GOODS**

Dangerous Goods Identification				Quantity and type of packaging	Packing Inst.	Authorization
UN or ID No.	Proper Shipping Name	Class or Division (Subsidiary Risk)	Pack-ing Group			
UN 2915	Radioactive Material, Type A Package	7		Ra-226, solid, oxides 1.78 MBq  1 x USA DOT 7A Type A	Yellow II TI: 0.2  DIM 46 x 46 x 70 cm	

**Additional Handling Information**  
  
 Emergency Telephone Number 803-507-1529

I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable International and National Governmental Regulations. I declare that all of the applicable air transport requirements have been met.	Name/Title of Signatory Richard Thatcher, AWS Shipping Broker Place and Date East Irvine, CA 7/14/2010 Signature (see warning above)
---	---

FOR RADIOACTIVE MATERIAL SHIPMENT ACCEPTABLE FOR PASSENGER AIRCRAFT, THE SHIPMENT CONTAINS RADIOACTIVE MATERIAL INTENDED FOR USE IN OR INCIDENT TO RESEARCH, MEDICAL DIAGNOSIS, OR TREATMENT.

**Shipper Inventory, Inspection, and Survey Form**

Shipment No. USN 2010-001 Auth No. \_\_\_\_\_ Page 1 of 1

Facility Name. Former MCAS-EI Toro

Package No. E-1 WT. Lbs. 60

Radiation Level on container surface (mR/hr) 1.5 CuFt. 4.0

Radiation Level at one meter (mR/hr) 0.2 Drum size (gal) 30

Radioactive contamination Level on container surface (dpm/100cm2) NDA

Type of container, labels Steel Drum UN2915

Nomen	Stock No.	Isotope	Qty	Activity per item (mCi)	Total Activity per item (mCi)	Total Activity MBq
Assorted debris from soil excavation		Ra-226	1	4.80E-02	4.800E-02	1.78E+00
			<b>1</b>	<b>Total Drum</b>	<b>4.8000E-02</b>	<b>1.7760E+00</b>

**Instrument type**

Ludlum 19      268830      **Cal Due date** 3/31/2011

Inspected by Richard Thatcher      Date loaded 7/13/2010



<b>FORM 541</b>  <b>UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST</b>  <b>CONTAINER AND WASTE DESCRIPTION</b>  Additional Nuclear Regulatory Commission (NRC) Requirements for Control, Transfer and Disposal of Radioactive Waste	<b>1. MANIFEST TOTALS</b>							<b>2. MANIFEST NUMBER</b>							
	NUMBER OF PACKAGES/ DISPOSAL CONTAINERS		NET WASTE VOLUME		NET WASTE WEIGHT		SPECIAL NUCLEAR MATERIAL, (grams)				USN 2010-001				
							U-233		U-235		Pu		Total		
	1		m3 4		kg lb		27.2 60.0		NP		NP		NP		
													NP		
						ACTIVITY				SOURCE (kg)					
						ALL NUCLIDES		TRITIUM		C-14		Tc-99		I-129	
Mgq		1.7760E+00		NP		NP		NP		NP		(kg)		NA	
mCi		4.8000E-02		NP		NP		NP		NP		(lbs)		NA	
							<b>3. PAGE 1 OF 1 PAGE(S)</b>			<b>4. SHIPPER NAME</b>					
										Former EI Toro MCAS					
							<b>SHIPMENT ID NUMBER</b>								
										USN 2010-001					

DISPOSAL CONTAINER DESCRIPTION				WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER										16. WASTE CLASSIFICATION AS-Class A Stable AU-Class A Unstable B-Class B C-Class C			
5 CONTAINER IDENTIFICATION NUMBER, S.C. TRANSPORT PERMIT NUMBER	6 CONTAINER DESCRIPTION  (See Note 1 & Note 1A)	7 VOLUME  (m3) (ft3)	8 WASTE AND CONTAINER WEIGHT  (kg) (lb)	9 SURFACE RADIATION LEVEL (mSv/hr) (mrem/hr)	10 SURFACE CONTAMINATION (MBq/100 cm2) (dpm/100cm2)		11. PHYSICAL DESCRIPTION				12. CHEMICAL DESCRIPTION		13. RADIOLOGICAL DESCRIPTION				
					ALPHA	BETA-GAMMA	11. WASTE DESCRIPTOR  (See Note 2 & Note 2A)	12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER (m3) (FT3)	13. SOLIDIFICATION OR STABILIZATION MEDIA  (See Note 3 & Note 3A)	14. CHEMICAL FORM/ CHELATING AGENT	15. WEIGHT % CHELATING AGENT IF > 0.1%	INDIVIDUAL RADIONUCLIDES AND ACTIVITY (MBq AND CONTAINER TOTAL OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT)					
										RADIONUCLIDES		MBq	mCi				
E-1/USN 2010-001	19 30 gallon metal drum	0	27.2	1.5000E-02	<3.6740E-07	<1.6700E-08	59-Ra-226 debris from soil excavations-H				NA	NONE/NP	NP	Ra-226	1.7760E+00	4.8000E-02	AU
		4	60.0	1.5000E+00	<2.2000E+01	<1.0000E+03								Subtotal	1.7760E+00	4.8000E-02	
		4	60.0											Total	1.7760E+00	4.8000E-02	
Shipment Totals		0	27.2												1.7760E+00	4.8000E-02	
		4	60.0														

<p><b>Note 1: Container Description Codes.</b> For containers/waste requiring disposal in approved structural overpacks the numerical code must be followed by "OP."</p> <p>1. Wooden Box or Crate 2. Metal Box 3. Plastic Drum or Pail 4. Metal Drum or Pail 5. Metal Tank or Liner 6. Concrete Tank or Liner 7. Polyethylene Tank or Liner 8. Fiberglass Tank or Liner</p> <p>9. Damineralizer 10. Gas Cylinder 11. Bulk, Unpackaged Waste 12. Unpackaged Components 13. High Integrity Container 19. Other. Describe in Item 6, or additional page</p>	<p><b>Note 1A: Barnwell Specific Container Description Codes.</b> (Choose one code as may be applicable.)</p> <p>A. High Integrity Container - Poly B. High Integrity Container - Poly with Steel Shell C. High Integrity Drum Overpack - Poly D. High Integrity Container - Stainless Steel E. High Integrity Container - Fiberglass F. Liner - Steel</p>	<p><b>NOTE 2: Waste Descriptor Codes.</b> (Choose up to three which predominate by volume.)</p> <p>20. Charcoal 21. Incinerator Ash 22. Soil 23. Gas 24. Oil 25. Aqueous Liquid 26. Filter Media 27. Mechanical Filter 28. EPA or State Hazardous</p> <p>29. Demolition Rubble 30. Cation Ion-exchange Media 31. Anion Ion-exchange Media 32. Mixed Bed Ion-exchange Media 33. Contaminated Equipment 34. Organic Liquid (except oil) 35. Glassware or Labware 36. Sealed Source/Device 37. Paint or Plating</p> <p>38. Evaporator Bottoms/Sludges/Concentrates 39. Compactible Trash 40. Noncompactible Trash 41. Animal Carcass 42. Biological Material (except animal carcasses) 43. Activated Material 44. Other. Describe in item 11, or additional page</p>	<p><b>NOTE 2A: Barnwell Specific Waste Descriptor Codes.</b> (Choose all applicable codes.)</p> <p>G. Dewatered H. Solid I. Combustible J. Non-combustible K. Air Filtration Filters L. Asbestos</p>	<p><b>Note 3: Solidification and Stabilization Media Codes.</b> (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.</p> <p><b>Solidification</b></p> <p>90. Cement 91. Concrete (encapsulation) 92. Bitumen 93. Vinyl Chloride</p> <p>94. Vinyl Ester Styrene 99. Other. Describe in item 13, or additional page 100. None Required</p>	<p><b>Note 3A: Barnwell Specific Solidification and Stabilization Media Codes.</b> (Choose this code if applicable)</p> <p style="text-align: center;">M. Wax Binder</p>
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This is to acknowledge the receipt of your letter/application dated

8/27/10, and to inform you that the initial processing which includes an administrative review has been performed.

Notification (20-31340-01)  
There were no administrative omissions. Your application was assigned to a technical reviewer. Please note that the technical review may identify additional omissions or require additional information.

Please provide to this office within 30 days of your receipt of this card

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A copy of your action has been forwarded to our License Fee & Accounts Receivable Branch, who will contact you separately if there is a fee issue involved.

Your action has been assigned **Mail Control Number** 573426.  
When calling to inquire about this action, please refer to this control number.  
You may call us on (610) 337-5398, or 337-5260.