

# 1<sup>st</sup> QUARTER TRANSPORTATION REPORT FY2016

**Waste Shipments To and From the Nevada National Security  
Site (NNS), Radioactive Waste Management Complex**

*This report was prepared for:*  
**U.S. Department of Energy  
National Nuclear Security Administration  
Nevada Field Office**

*By:*  
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## 1.0 INTRODUCTION

This report satisfies the U.S. Department of Energy (DOE), National Nuclear Security Administration Nevada Field Office (NNSA/NFO) commitment to prepare a quarterly summary report of waste shipments to and from the Nevada National Security Site (NNS) Radioactive Waste Management Complex (RWMC) at Area 5. This report summarizes the 1<sup>st</sup> quarter of Fiscal Year (FY) 2016 low-level radioactive waste (LLW), mixed low-level radioactive waste (MLLW) and classified non-radioactive (CNR) shipments. There were no shipments sent for offsite treatment and returned to the NNS this quarter of FY2016.

Tabular summaries are provided which include the following:

- Sources of and carriers for LLW, MLLW and CNR shipments to and from the NNS;
- Number and external volume of LLW, MLLW and CNR shipments;
- Highway routes used by carriers; and
- Incident/accident data applicable to LLW, MLLW and CNR shipments.

In this report shipments are accounted for upon arrival at the NNS, while disposal volumes are accounted for upon waste burial. Volume reports showing cubic feet (ft<sup>3</sup>) generated using the Low-Level Waste Information System may vary slightly due to rounding conventions for volumetric conversions from cubic meters to cubic feet.

## 2.0 SUMMARY OF WASTE SHIPMENTS AND VOLUMES DISPOSED

### Total LLW and MLLW Received from Offsite Generators

A total of 210,342.18 ft<sup>3</sup> of LLW and MLLW was disposed at the NNS by 15 approved radioactive waste generators in 241 shipments. These shipments were transported using 13 approved motor carriers (including government vehicles).

### Total NNS Onsite LLW/MLLW

One approved NNS onsite radioactive waste generator disposed 173 ft<sup>3</sup> of LLW in one onsite transfer. A government vehicle was used for this transfer.

### Total CNR Received from Offsite Generators

A total of 584 ft<sup>3</sup> of CNR was disposed at the NNS by two approved waste generators in three shipments. These shipments were transported using two approved motor carriers.

Table 1 provides a summary of inbound (offsite and onsite) and non-radioactive classified shipments. Table 2 provides a list of approved waste generators that shipped to/on the NNS in the 1st quarter of FY2016.

**Table 1**

**NNSS Inbound, Onsite, and Classified Non-Radioactive Shipment Summary for  
1st Quarter of FY2016**

<b>Inbound</b>	<b>Generators</b>	<b>NNSS Generators</b>	<b>Approved Carriers</b>	<b>Shipments</b>	<b>Volume ft<sup>3</sup></b>
LLW / MLLW (offsite)	14	0	13	241	210,342
LLW / MLLW (onsite)	0	1	1	1	173
Classified Non- Radioactive	2	0	2	3	584

**Table 2**

**Approved Generators Shipping To/On the NNSS in 1st Quarter of FY2016**

	<b>APPROVED GENERATOR</b>	<b>GENERATOR CODE</b>
1	Aberdeen Proving Ground	AP
2	Advanced Mixed Waste Treatment Project	AM
3	Consolidated Nuclear Security, LLC Y-12	BW
4	Duratek / Energy Solutions	DR
5	Idaho National Laboratory	IN
6	Lawrence Livermore National Laboratory	LL
7	Los Alamos National Laboratory	LA
8	National Security Technologies	DP
9	Nuclear Fuel Services	NF
10	Oak Ridge Reservation	OR
11	Perma-Fix (M&EC)	PF
12	Portsmouth Gaseous Diffusion Plant	PO
13	Sandia National Laboratory	SA
14	UT-Battelle / Oak Ridge National Laboratory	OL
15	Wastren Advantage Inc.	FW

## 2.1 Waste Transporters (Motor Carriers)

Motor carriers operate in compliance with Title 49 Code of Federal Regulations (CFR), "Transportation," and are selected by the waste generator. Generators often use multiple motor carriers during the year to facilitate their shipments. Table 3 provides a list of the approved carriers used to transport LLW, MLLW and CNR shipments to the NNSS. Government trucks were used for selected shipments from the Portsmouth and LLNL sites.

No shipments bound for the NNSS were transported via intermodal (rail/highway) conveyance, also referred to as transloading, in the 1st quarter of FY2016.

**Table 3**  
**Approved Motor Carriers Used in 1<sup>st</sup> Quarter of FY2016**

	<b>APPROVED MOTOR CARRIER</b>	<b>CARRIER CODE</b>
1	AJ METLER (dba SPECIALTY TRANSPORT, INC.)	MAJH
2	BOYLE TRANSPORTATION, INC.	BYLE
3	CAST TRANSPORTATION	COLO
4	FLUID TRANSPORTS, INC.	FLAI
5	GOVERNMENT VEHICLE	GT+
6	HITTMAN TRANSPORT	HITT
7	HUBBARD TRUCKING	HTAL
8	INTERSTATE VENTURES	ITSV
9	R&R TRUCKING, INC.	RRUK
10	SAVAGE LOGISTICS	SVGH
11	TLI FREIGHT SERVICES, LLC	TLVC
12	TNI, INC (DBA: AATCO)	AADD
13	TRI-STATE MOTOR TRANSIT	TSMT

## 2.2 Shipments

Table 4 provides a summary of all LLW and MLLW offsite shipments received at NNSS. Table 5 provides a summary of NNSS onsite transfers of LLW and MLLW. Table 6 provides a summary of all Classified Non-Radioactive shipments received at NNSS. The three tables include a summary for FY2016 in the “Total” column.

**Table 4**  
**Offsite Shipments of LLW and MLLW Transported to the NNSS**

Offsite Inbound Shipments	Shipments by Quarter				
Generator, State	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	Total
Aberdeen Proving Ground, MD	2				2
Advanced Mixed Waste Treatment Project, ID	9				9
Consolidated Nuclear Security, LLC – Y-12 Plant, TN	19				19
Duratek/Energy Solutions, TN	3				3
Idaho National Laboratory, ID	6				6
Lawrence Livermore National Laboratory, CA	3				3
Los Alamos National Laboratory, NM	1				1
Nuclear Fuel Services, TN	13				13
Oak Ridge Reservation, TN	18				18
Permafix (M&EC), TN, WA, CA	28				28
Portsmouth Gaseous Diffusion Plant, OH	128				128
Sandia National Laboratories, NM	4				4
UT-Battelle/Oak Ridge National Laboratory, TN	3				3
Wastren Advantage Inc., TN	4				4
<b>Total Shipments</b>	<b>241</b>				<b>241</b>

**Table 5**  
**NNSS Onsite Transfers of LLW and MLLW**

Onsite Transfers	Shipments by Quarter				
Generator, State	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	Total
National Security Technologies LLC, NV	1				1
<b>Total Transfers</b>	<b>1</b>				<b>1</b>



**Table 6**  
**Classified Non-Radioactive Shipments Transported to the NNSS**

<b>Onsite Transfers</b>	<b>Shipments by Quarter</b>				
<b>Generator, State</b>	<b>1<sup>st</sup></b>	<b>2<sup>nd</sup></b>	<b>3<sup>rd</sup></b>	<b>4<sup>th</sup></b>	<b>Total</b>
Permafrix (M&EC), TN, WA, CA	<b>1</b>				<b>1</b>
Sandia National Laboratories, NM	<b>2</b>				<b>2</b>
<b>Total Transfers</b>	<b>3</b>				<b>3</b>

### 2.3 Transportation Route Reporting

The NNSA/NFO continues to engage in discussions with waste generators regarding avoiding the Las Vegas Metropolitan Area. The NNSS Waste Acceptance Criteria includes wording requiring generators to notify their carriers to avoid this area and to select routes which minimize radiological risk.

Due to the events of September 11, 2001, tractor trailers continue to be restricted from travel near the Hoover Dam. The NNSS WAC states, "Waste transportation to the NNSS, regardless of DOT classification, shall avoid the Hoover Dam Bypass Bridge and Las Vegas".

Quarterly and annual transportation reports may be found on the Internet at <http://www.nv.energy.gov/emprograms/transportationreports.aspx>

The following two pages provide details and a graphic depiction of waste shipment routes traveled to the NNSS from October 1, 2015, to December 31, 2015.





### 3.0 INCIDENT/ACCIDENT DATA

For the purpose of this report, incidents and accidents are defined as:

- **Incident:** Any unintentional release of hazardous material from a package during transportation, load shift or any occurrence during transportation in which any of the circumstances identified in 49 CFR 171.15(b) occurs. (ANSI N14.27)
- **Accident:** An occurrence involving a commercial motor vehicle operating on a highway in interstate or intrastate commerce which results in a fatality; bodily injury to a person who, as a result of the injury, immediately receives medical treatment away from the scene of the accident; or one or more motor vehicles incurring disabling damage as a result of the accident, requiring the motor vehicles to be transported away from the scene by a tow truck or other motor vehicle. (49 CFR 390.5(1))

The Department of Energy's (DOE) Office of Environmental Management (EM), sites, and carriers are dedicated to ensuring an appropriate response to all offsite transportation events involving DOE radioactive materials. In a memo to EM sites on May 22, 2006, the Chief Operating Officer, EM-3, established a requirement to report any type of transportation accident/incident to EM-HQ. This reporting is consistent with DOE Manual 460.2-1, and will help to ensure:

- Receiving timely notification of all off-site transportation events to assure adequate response resources are assigned;
- Notifying appropriate field response personnel and/or resources (including field sites, RAP teams, and state and tribal contacts) if they have not already been engaged; and
- Having all potentially involved personnel prepared to respond to inquiries from the media, elected officials, or the public.

Waste generators are instructed to notify the NNSA/NFO Assistant Manager of Environmental Management whenever a discrepancy, non-compliance, or inadequate performance is identified; or if a transportation incident or emergency situation occurs.

NSTec, a contractor to the NNSA/NFO, controls NNSS waste receipt and disposal activities and is responsible for notifying appropriate personnel regarding any non-compliant or refused shipments. NSTec personnel also immediately notify generators of any shipping discrepancies.

There were no incidents in the 1<sup>st</sup> quarter of FY2016.

## **4.0 EVALUATION OF SHIPPING CAMPAIGNS**

This section contains an evaluation summary of the annual shipping campaigns with respect to the significance of the packaging or transportation incidents reported in Section 3.0. Waste generators must ensure that waste is packaged and transported in a safe and compliant manner as detailed in the NNSWAC and U.S. Department of Transportation regulations. Generators and their contracted shipping carriers must be diligent with regard to all requirements including packaging, routing, and shipping documentation.

The NNSWAC provides oversight of NNSWAC waste generators for compliance with Department of Transportation regulations and the NNSWAC including Section 6.0, Waste Transportation and Receipt Information. All generator performance anomalies are tracked and trended for deficient conditions.

Corrective Action Requests (CARs) are issued by RWAP personnel to identify, track, and resolve deficiencies that violate the NNSWAC — including failure to follow Department of Transportation requirements. Observations are also issued by RWAP personnel for conditions that represent a weakness in a waste generator's quality assurance or waste certification program that if left uncorrected could result in a condition adverse to quality.

There were two transportation associated CAR's issued in this reporting period.

- On October 1, 2015, CAR RWAP-C-16-02 was issued to Los Alamos National Laboratory due to a foreign national transporting a shipment to the NNSWAC. Section 6.2.1 of the NNSWAC mandates that waste shipment drivers must be U.S. Citizens.
- On December 14, 2015, CAR RWAP-C-16-03 was issued to URS CH2M Oak Ridge, LLC (UCOR) due to UCOR not being able to provide objective evidence that drivers transporting shipments to the NNSWAC are U.S. Citizens.

## **5.0 REFERENCES**

Shipment information is recorded at the NNSWAC Area 5 Radioactive Waste Management Site by NSTec Waste Management Program personnel. These records provide detailed information on each LLW, MLLW and CNR shipment, including the date received, generator, package number and type, volume, weight, carrier, and final disposition. In addition, incident and accident information is collected from NSTec and NNSA/NFO correspondence and personal communications with NNSA/NFO managers, NSTec personnel, waste generators, and carrier personnel. Route information is collected from the NNSA/NFO quarterly routing reports published by NNSA/NFO.

The following source documents are incorporated by reference:

- U.S. Department of Energy, Nevada Operations Office, "Final Site-Wide Environmental Impact Statement for the Continued Operation of the Department of Energy/National Nuclear Security Administration Nevada National Security Site and Offsite Locations in the State of Nevada," DOE/EIS-0426, Las Vegas, Nevada, February 2013.
- U.S. Department of Energy, Nevada Operations Office, "Record of Decision (ROD) for the Continued Management, Operations, and Activities of the Nevada National Security Site (NNSS) and Offsite Locations in the State of Nevada," EIS-0426 Record of Decision, Las Vegas, Nevada, December 2014.
- U.S. Department of Transportation Regulations, 49 CFR, "Transportation," *Code of Federal Regulations*, Office of the Federal Register, National Archives and Records Administration, U.S. Government Printing Office, Washington, DC, 2012.

## 6.0 POINTS OF CONTACT

Please contact the following person with questions regarding waste transportation, waste management, or NNSA/NFO operations.

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## 7.0 ACRONYM LIST

<b>ft<sup>3</sup></b>	Cubic Feet
<b>CFR</b>	Code of Federal Regulations
<b>DOE</b>	U.S. Department of Energy
<b>FY</b>	Fiscal Year
<b>LLW</b>	Low-Level Radioactive Waste
<b>MLLW</b>	Mixed Low-Level Radioactive Waste
<b>NNSA/NFO</b>	National Nuclear Security Administration, Nevada Field Office
<b>NSTec</b>	National Security Technologies, LLC
<b>NNSS</b>	Nevada National Security Site
<b>RWMS</b>	Radioactive Waste Management Site

## **8.0 DISTRIBUTION LIST**

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