



## Update of Office of Packaging and Transportation Activities

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Office of Environmental Management

National Transportation Stakeholders Forum

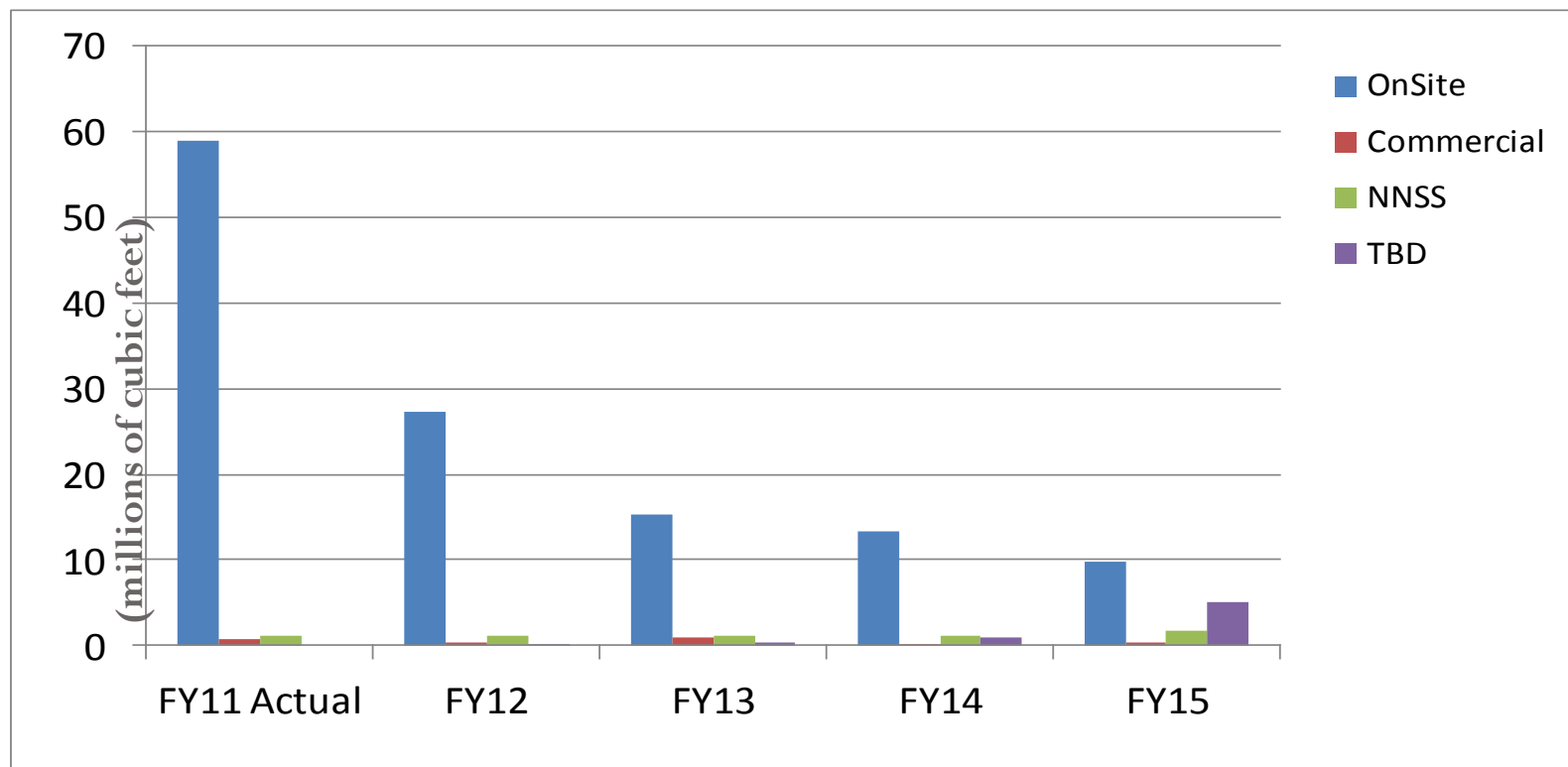
Knoxville, TN

May 2012

# Key Activities Underway

- Development of DOE O 460.3, *Physical Protection of Spent Nuclear Fuel and other Radioactive Material in Transport*
- Revision of DOE Manual 460.2-1A, *Radioactive Material Transportation Practices Manual*
- Prospective Shipment Report

# Waste Information Management Forecasts & Trends



Source: 2012 WIMS preliminary data

<http://www.emwims.org/>

# Nevada National Security Site Shipment Information

<http://www.nv.energy.gov/emprograms/transportationreports.aspx>

| LOW-LEVEL & MIXED LOW-LEVEL RADIOACTIVE WASTE SHIPMENTS TO THE NEVADA NATIONAL SECURITY SITE |  |              |                          |  |                         |                           |                                    |                             |                                 |                            |                                |                                |                                    |                                    |                          |  |  |                        |                         |                      |  |
|--|--|--------------|--------------------------|--|-------------------------|---------------------------|------------------------------------|-----------------------------|---------------------------------|----------------------------|--------------------------------|--------------------------------|------------------------------------|------------------------------------|--------------------------|--|--|------------------------|-------------------------|----------------------|--|
| FIRST QUARTER REPORT, FY 2012 (OCTOBER, NOVEMBER, DECEMBER 2011)                             |  |              |                          |  |                         |                           |                                    |                             |                                 |                            |                                |                                |                                    |                                    |                          |  |  |                        |                         |                      |  |
| RouteType  | Route Description  | Route Legend | Total Shipments by Route | Origin State-->                        |                         |                           |                                    |                             |                                 |                            |                                |                                |                                    |                                    |                          |  |  |                        |                         |                      |  |
|  |  |              |                          | CA                                     | ID                      | ID                        | IL                                 | IL                          | KY                              | NM                         | NM                             | NV                             | NY                                 | OH                                 | TN                       | TN   | TN, WA, CA                                     | TN                     | TN                      | TN                   | TN   |
|  |  |              |                          | Lawrence Livermore National Laboratory | Batelle Energy Alliance | Idaho National Laboratory | Energx Argonne National Laboratory | Argonne National Laboratory | Paducah Gaseous Diffusion Plant | Sandia National Laboratory | Los Alamos National Laboratory | National Security Technologies | West Valley Environmental Services | Portsmouth Gaseous Diffusion Plant | Duratek/Energy Solutions | Babcock & Wilcox Technical Services Y-12 Plant | Materials & Energy Corporation (M&E) Perma-Fix | Nuclear Fuels Services | Wastren Advantage, Inc. | Oakridge Reservation | UT-Battelle/ Oak Ridge National Laboratory |
| CALIFORNIA   | I-15, CA-127, NV-373, US-95                                      |              | 3                        | 2                                      |                         |                           |                                    |                             |                                 |                            |                                |                                |                                    |                                    |                          | 1  |  |                        |                         |                      |  |
| CALIFORNIA   | I-15, CA-127, CA-178, NV-372, NV-160, US-95                      |              | 40                       | 1                                      |                         |                           |                                    |                             |                                 |                            |                                |                                |                                    |                                    |                          | 39   |  |                        |                         |                      |  |
| CALIFORNIA   | I-15, NV-160, US-95  |              | 1                        |  |                         |                           |                                    |                             |                                 |                            |                                |                                |                                    |                                    |                          | 1  |  |                        |                         |                      |  |
| SOUTHERN   | I-40, US-95, NV-164, I-15, CA-127, CA-178, NV-372, NV-160, US-95 |              | 1                        |  |                         |                           | 1                                  |                             |                                 |                            |                                |                                |                                    |                                    |                          |  |  |                        |                         |                      |  |
| SOUTHERN   | I-40, US-95, NV-164, I-15, CA-127, NV-373, US-95                 |              | 1                        |  |                         |                           |                                    |                             |                                 |                            |                                |                                |                                    | 1                                  |                          |  |  |                        |                         |                      |  |
| SOUTHERN   | I-40, US-93, AZ-68, NV-163, US-95, NV-164, I-15, NV-160, US-95   |              | 3                        |  |                         |                           |                                    |                             | 3                               |                            |                                |                                |                                    |                                    |                          |  |  |                        |                         |                      |  |
| SOUTHERN   | I-40, US-95, NV-164, I-15, NV-160, US-95                         |              | 174                      | 1                                      | 4                       |                           | 10                                 |                             | 3                               | 3                          | 13                             | 2                              |                                    | 2                                  | 8                        | 38   | 19   | 13                     | 5                       | 52                   | 1  |
| CENTRAL  | US-50, US-6/50, US-6, US-95                                      |              | 2                        |  |                         |                           | 1                                  | 1                           |                                 |                            |                                |                                |                                    |                                    |                          |  |  |                        |                         |                      |  |
| NORTHERN   | I-80, US-93-ALT, US-6, US-95                                     |              | 19                       |  |                         | 2                         |                                    | 3                           |                                 |                            |                                |                                |                                    | 12                                 |                          |  | 2  |                        |                         |                      |  |
| NORTHERN   | US-93, US-6, US-95   |              | 8                        |  |                         | 8                         |                                    |                             |                                 |                            |                                |                                |                                    |                                    |                          |  |  |                        |                         |                      |  |
| Total Shipments by Generator-->>>  |  |              | 252                      | 4                                      | 4                       | 10                        | 12                                 | 4                           | 6                               | 3                          | 13                             | 2                              | 12                                 | 3                                  | 49                       | 38   | 21   | 13                     | 5                       | 52                   | 1  |
| Total Volume (ft³) by Generator-->>>   |  |              | 187,611                  | 8,078                                  | 1,422                   | 4,491                     | 5,831                              | 4,486                       | 6,041                           | 701                        | 8,990                          | 1,046                          | 15,194                             | 2,805                              | 32,311                   | 39,982   | 10,503   | 10,695                 | 6,536                   | 26,794               | 1,805                                      |

# Information from NNSS

- Annual Report provides:
  - List of approved generators
  - List of carriers
  - Shipment volumes by each site and type (LLW/MLLW)

**Table 1. FY 2010 NNSS Inbound, Outbound and On-site Summary Information**

| Inbound         | Off-site Generators | NNSS Generators | Approved Carriers | Shipments    | Volume ft <sup>3</sup> |
|-----------------|---------------------|-----------------|-------------------|--------------|------------------------|
| LLW (off-site)  | 21                  | 0               | 16                | 2,763        | 2,067,731              |
| MLLW (off-site) | 7                   | 0               | 10                | 104          | 71,036                 |
| LLW (on-site)   | 0                   | 2               | 1                 | 537          | 205,949                |
| MLLW (on-site)  | 0                   | 1               | 1                 | 5            | 2,336                  |
| <b>Totals</b>   |                     |                 |                   | <b>3,409</b> | <b>2,347,052</b>       |

# Annual Report also Provides Route Map

**Figure 1 - FY 2010 National Low-Level and Mixed Low-Level Waste General Transportation Routes to/from the Nevada National Security Site**

