North American Standard Level VI Inspection Program Update: Ensuring Safe Transportation of Radioactive Material

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• 9 basic classes/year held in various states
• Prerequisites: CVSA Level I and HAZMAT certified
• Industry attends course
• To date 125 classes/2126 attendees
• Currently 769 certified Level VI inspectors in 42 states, Canada, and federal
Level VI Training

- National instructors are volunteer and certified Level VI inspectors
- Annual review of training curriculum
- Inspector maintains certification with 8 hours of refresher training every 2 years
- Train the trainer: state representatives trained to conduct their own refresher courses to meet certification requirements
Training Schedule

• Current Level VI Training Schedule
  – Salina, Kansas – July 11-14, 2011
  – Las Vegas, Nevada – August 22-25, 2011
  – Sacramento, California - October 17-20, 2011
  – Austin, TX – November 7-10, 2011
  – Phoenix, AZ – February 15-16, 2012 (Level VI “Train the Trainer” Course)
Level VI Inspection Results

• Reports on Level VI inspection results are published regularly. All reports are available on the CVSA website:

1. Go to CVSA homepage, www.cvsa.org
2. Select “Programs” at top of page
3. Select “North American Standard Level VI Inspection Program” link
4. Select “CVSA/WIPP Updates & Reports” link
## Level VI Inspection Results

### CVSA Level VI Inspection Data for WIPP Shipments
(January 1, 2009 – December 31, 2009)

<table>
<thead>
<tr>
<th>Inspection Activity</th>
<th>Number</th>
<th>Percent</th>
<th>Level I OOS Percent</th>
<th>Level VI OOS Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Inspections</td>
<td>2,166</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>With no Violations</td>
<td>2,066</td>
<td>95.38%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>With Violations</td>
<td>100</td>
<td>4.62%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Driver OOS* Rate</td>
<td>0</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Vehicle OOS Rate</td>
<td>19</td>
<td>0.88%</td>
<td>0.65%</td>
<td>0.23%</td>
</tr>
</tbody>
</table>

### CVSA Level VI Inspection Data for Non-WIPP Shipments
(January 1, 2009 – December 31, 2009)

<table>
<thead>
<tr>
<th>Inspection Activity</th>
<th>Number</th>
<th>Percent</th>
<th>Level I OOS Percent</th>
<th>Level VI OOS Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Inspections</td>
<td>227</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>With no Violations</td>
<td>202</td>
<td>88.99%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>With Violations</td>
<td>25</td>
<td>11.01%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Driver OOS Rate</td>
<td>0</td>
<td>0.00%</td>
<td>0.00%</td>
<td>0.00%</td>
</tr>
<tr>
<td>Vehicle OOS Rate</td>
<td>2</td>
<td>0.88%</td>
<td>0.88%</td>
<td>0.00%</td>
</tr>
</tbody>
</table>

### FMCSA Roadside Inspection Data for the Year 2009*

<table>
<thead>
<tr>
<th>Inspection Activity</th>
<th>Number</th>
<th>Percent</th>
<th>Inspection Activity</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Inspections</td>
<td>3,558,909</td>
<td>33.68%</td>
<td>Number of Inspections</td>
<td>223,012</td>
<td></td>
</tr>
<tr>
<td>With no Violations</td>
<td>1,198,692</td>
<td>33.68%</td>
<td>With no Violations</td>
<td>N/A***</td>
<td>N/A</td>
</tr>
<tr>
<td>With Violations</td>
<td>2,360,217</td>
<td>66.32%</td>
<td>With Violations</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Driver OOS** Rate</td>
<td>192,006</td>
<td>5.55%</td>
<td>OOS Rate</td>
<td>10,212</td>
<td>4.58%</td>
</tr>
<tr>
<td>Vehicle OOS Rate</td>
<td>507,867</td>
<td>1.41%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

† The number of inspections is a combination of some Driver, some Vehicle and some combination of both. The OOS Rates are for only those types of inspections.

*Data Source: FMCSA Motor Carrier Management Information System (MCMIS) August 27, 2010 data snapshot

**OOS = Out-of-Service

***N/A = Data not available
Level VI Program Peer Reviews

- Purpose is to identify and share best practices
- Peer Review Activities
  - Teams selected from CVSA Level VI Program Committee, Council of State Governments Northeast and Midwest, SSEB, WGA, DOE, and WIPP carriers
  - 7 states visited: South Carolina, Tennessee, Illinois, Colorado, New Mexico, Washington, Michigan
  - Report published in January 2007 (available on CVSA website)
  - Two additional visits scheduled
    - June 21-23, 2011 at New Mexico
    - August 16-18, 2011 at Idaho
Level VI Program Outreach

- **Goals**
  - Educate public on successful Level VI Program
  - Provide information on shipments of transuranic waste and HRCQ

- **Tools**
  - Display unit
  - Publications
  - Presentations

- **Since 2005 over 44 events (conferences, workshops, meetings) attended**
Public Outreach Program Schedule

- **DOE National Transportation Stakeholders Forum**
  May 11, 2011 – Denver, Colorado

- **Contractors Transportation Management Association (CTMA)**
  June 6-10, 2011 – Destin, Florida

- **National Association of County Officials (NACO)**
  July 16-20, 2011 – Reno, Nevada
ANSI N14.36 Standard Development

- CVSA staff among 33 experts from industry, NGOs, federal and state agencies participating on the four year project
- Standard for methods of radiation and contamination measurement in packaging and transportation of radioactive material
  - All transportation modes
  - All phases of transportation activities
  - Use of risk-informed graded approach in survey plan design
- Draft standard submitted for vote February 2011
Safety and Security Technologies Study

- CVSA Ad Hoc RAM/Security/ITS Committee examined current and emerging technologies for safety and security of radioactive material shipments
  - Site visits
  - Product reviews
  - HMCRP HM-04 report on emerging technologies
- 4 current and 9 emerging technology categories were evaluated in the 5 relevant application areas of
  - Inspection
  - Security
  - Electronic Shipping Papers
  - Shipping & Tracking
  - Dose Measurement & Isotope Quantification
Safety and Security Technologies Study

- **Recommendations**
  - RFID, GPS, biometrics, seals and locks are currently available, tested, and have good performance records.
  - For the future DOE should choose most reliable, promising technologies and in the process:
    - Address the 5 application areas, in particular shipment security and tracking of trailers and casks.
    - Involve the 4 regional state government groups.
    - Involve stakeholders from states which require en route inspections to potentially reduce these inspections due to new technologies used and accessibility by stakeholders.
    - Upgrade TRANSCOM to report dose rates in real time.
    - Follow progress of HMCRP Project HM-05 study on electronic shipping papers.
QUESTIONS?

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