

## IATA 55th DGR Significant Changes

Shippers of radioactive Class 7 material by air using the 2014 International Air Transport Association's Dangerous Goods Regulations (IATA DGR) 55th edition should be aware of a few changes. In Section 2, Federal Express operator variation FX-03 for radioactive shipments has been revised by removing the pre-alert or pre-approval requirement for FedEx International Airport to Airport (ATA) service and the toll free phone number has changed to (877) 398-5851. A new section 10.0.1.2.2 has been added to help explain how the radiological protection safety objectives of the DGR are satisfied. Clarification has been added on how to classify an empty Type B package with the external package surface dose rate exceeding 5 microsieverts per hour (0.5 mrem/hr) in a new Note 1 to Section 10.3.11.1.5 and how to list the nuclides on the shipper's declaration in a new note in Section 10.8.3.9.2. A new note in Section 10.7.1.3.5 "Type B Package Specification Markings" has been added to clarify how to mark an empty Type B package when shipped as an industrial packaging Type IP-1. The minimum dimensions for the Radioactive Material Excepted Package Label have been added to Figure 10.7.8.A. Clarification on the documentation requirements when shipping multiple overpacks containing radioactive material has been added in Section 10.8.3.9.2 under Step 8. The provisions in Section 9 for storage (9.2.1), loading (9.3.10) and inspection (9.4.3) of radioactive material have been moved to Section 10 in 10.9.2 (storage), 10.9.3 (loading) and 10.9.4 (inspection). The inclusion of a new Appendix H provides details of changes coming into effect as of January 1, 2015 based on the adoption of the changes arising from the 18th revised edition of the United Nations (UN) Model Regulations as well as the changes that have been agreed to date by the International Civil Aviation Organization (ICAO) Dangerous Goods Panel for inclusion into the 2015 – 2016 Technical Instructions.



## New FedEx Shipper's Declaration Requirement

There has been a lot of confusion about how to fill in a shipper's declaration for radioactive Class 7 material containing a mixture of radionuclides. To help prevent confusion and return packages, FedEx now requires the additional description of "mixture" to differentiate between shipping individual sources "all packed in one" package and a mixture of radionuclides. You have a choice to



where the word "mixture" may be in conjunction with the physical and generic chemical form; for example either: solid oxides *mixture*, or solid *mixture* oxides, or *mixture* solid oxides. (Italics and bold added for emphasis on placement only) Please update your FedEx shipper's declaration checklist and/or air shipping procedure to add this new undocumented requirement.



## Beautiful Sunny San Diego, California.

Please join us in June of 2014 for our comprehensive NRC/DOT Radioactive Waste Packaging, Transportation and Disposal Training in beautiful downtown San Diego, California at the Residence Inn Gaslamp Quarter. During the day, we will cover the complexity of the NRC & DOT regulations to ensure the safe and secure shipment of Class 7 radioactive materials with lively discussions and lessons learned across our diverse nuclear industry. In the evening, or the weekend before or after, you will be able to explore many world-renowned attractions in the San Diego area. We hope to see you there!

## Undeclared Hazardous Material Shipments

Have you ever been asked to ship something and wondered if there are any hidden hazardous materials as defined by DOT? There are many opportunities for your material to be a DOT hazardous material. Ask the question, "Will my shipment meet one or more of the following terms in 49 CFR: Hazardous Substance (Reportable Quantity), Marine Pollutant, Elevated Temperature Material, Hazardous Waste, listed in the Hazardous Material Table (49 CFR 172.101), and/or characteristic of any of the nine (9) hazard classes or divisions listed in 49 CFR 173.2. Hazardous and radioactive materials are being found more and more in commonly used equipment, like Tritium (H-3) in gun sights used by security personnel; Americium (Am-241) in smoke detectors for both home and industrial areas; Lithium (Li) batteries in hand-held airborne chemical monitoring equipment for firefighters and first responders; Uranyl Acetate or Nitrate reagents in chemistry labs; Americium-Beryllium (Am-Be) in a well logging device; and the list keeps growing. Are there any consequences for causing any hazardous or radioactive material to be transported without appropriate packaging or hazard communications? DOT just recently raised the minimum fines for undeclared shipments from \$5,000 to \$40,000 and up depending on the severity. Have a questioning attitude and research before shipping!



## Frequently Asked Questions

Our FAQ topic for this quarter covers how to display placards.

- Can the placards on multiple freight containers when loaded on the same conveyance meet the vehicle visibility requirements in 49 CFR 172.516?

**Reference # 05-0311, 09-0055 & 10-0032**

Yes, when one placard is visible on each side of the transport vehicle.

- Can the placards on bulk packaging be used to meet the vehicle placarding visibility requirements in 49 CFR 172.516?

**Reference # 10-0032 & letter dated April 19, 1993**

No, only placards visible from freight containers or portable tanks loaded on a transport vehicle may be used to meet the vehicle placarding visibility requirements.

- If a placard on a package is covered or obscured in any way, must I placard the vehicle too?

**Reference # 098-0055 & 10-0247**

Yes.

- Are the truck and trailer considered separate vehicles to determine which to placard?

**Reference # 09-0055**

Yes. A "transport vehicle" is a cargo-carrying vehicle such as an automobile, van, tractor, truck, semi-trailer, tank car or rail car used for the transportation of cargo by any mode.

- Can I placard the corrugated side of a freight container?

**Reference # 05-0276**

Only if the placard can still meet the visibility and display requirements listed in 49 CFR 172.516, which typically require a flatter surface to comply.

To access any DOT letters of interpretation, go to: <http://www.phmsa.dot.gov/hazmat> Then, click on: "Interpretations" Next, you can search by entering the reference number in the search box or search by the applicable regulatory section number, or search by the published date. Do not forget that you have these internet addresses (and many more) on our training class CD handout.



## Latest Happenings in the Federal Register



### Coast Guard Offers Bulk Liquid Tank Relief

On September 06, 2013 (78 FR 54775), the Department of Homeland Security Coast Guard (DHS CG) published a final ruling amending its regulations in 46 CFR 98.30 and 98.33 concerning the transfer of hazardous materials to and from bulk packaging on vessels. The Coast Guard is expanding the list of bulk packaging approved for hazardous material transfers to include International Maritime Organization (IMO) Type 1 and Type 2 portable tanks, United Nations (UN) portable tanks, and Intermediate Bulk Containers (IBCs). This final rule is effective December 5, 2013.

### Correction to Vehicle Inspection Reporting



On September 06, 2013 (78 FR 54861), the Federal Motor Carrier Safety Administration (FMCSA) published a notice of corrections for its notice of proposed rulemaking (NPRM) dated August 7, 2013 (78 FR

48125) concerning the inspection, repair, and maintenance of the Driver-Vehicle Inspection Report (DVIR). The corrections involve clerical corrections to references and update the point of contact in the "Assistance to Small Entities" section of the NPRM.

### No HazMat Operations until Fines Paid

On September 24, 2013 (78 FR 58501), the PHMSA published a Notice of Proposed Rulemaking (NPRM) to consider revisions to its Hazardous Material Regulations (HMR) in 49 CFR Parts 107 & 109 prohibiting a person who fails to pay a civil penalty or who fails to abide by a payment agreement, from performing activities regulated by the HMR until payment is made. Comments must be received by November 25, 2013.



### Request for Comments on Rail Safety

On September 06, 2013 (78 FR 54849), the Pipeline and Hazardous Materials Safety Administration (PHMSA) published an Advance Notice of Proposed Rulemaking (ANPRM) to consider revisions to its Hazardous Material Regulations (HMR) in 49 CFR Parts 173 – 180 improving the safety of hazardous materials transported by rail. The revisions are based on eight petitions received from the regulated community and four National Transportation Safety Board (NTSB) recommendations which are referenced by a petition. Comments must be received by November 5, 2013.

### Safe Clearance for Rail Crossing

On September 25, 2013 (78 FR 58915), both the PHMSA and the FMCSA jointly published a final rule to prohibit a driver of a commercial motor vehicle or of a motor vehicle transporting hazardous materials requiring placarding or certain agents or



toxins listed in 42 CFR Part 73 from entering onto a highway-rail grade crossing unless there is sufficient space to drive completely through the grade crossing without stopping in both 49 CFR Parts 177 and 392. The intent of this rulemaking is to reduce highway-rail grade crossing crashes. This final rule is effective October 25, 2013.

### Coast Guard Issues Misc. Changes

On September 30, 2013 (78 FR 60138), the Coast Guard (Department of Homeland Security) issued a final rule that makes non-substantive changes throughout titles 46 and 49 of the Code of Federal Regulations (CFR). This final rule is effective September 30, 2013.

## Latest Happenings in the Federal Register (cont.)

### Compressed Gas Cylinder Safety Advisory Notice



On September 24, 2013 (78 FR 58604), the PHMSA published two (2) safety notices. The first was about the unauthorized marking of high pressure compressed gas cylinders by Beauchesne Fire Equipment (BFE) located at 21 Freeman St. Attleboro Falls, MA. BFE

was found to have marked approximately 5,900 high pressure compressed gas cylinders with test dates and Requalifier Identification Number (RIN) H557 in 2011 and 2012 without conducting the prescribed hydrostatic testing of these cylinders. PHMSA has terminated the RIN Approval H557 issued to BFE. The second was about improperly filled and offered for transportation high pressure compressed gas cylinders (DOT Specification 3A, 3AA and 3AL) containing carbon dioxide for restaurants and other establishments by Komer Carbonic Corp. at 12120 Cloverdale Street, Detroit, MI 48021. Anyone who had their carbonated beverage service cylinders filled or provided by Komer Carbonic Corp. within the last 5 years is advised to remove these cylinders from service immediately and contact a cylinder filler to have the cylinders depressurized.

### Request for Tank Vehicle Definition Comments

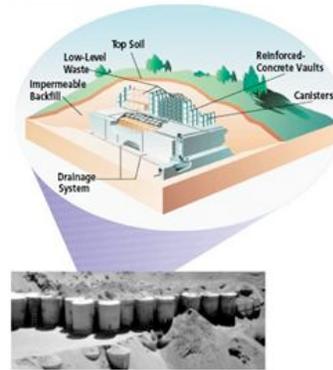


On September 26, 2013 (78 FR 59328), the FMCSA published a NPRM to revise its definition of "tank vehicle" in 49 CFR 383.5 to clarify the population required to secure a Commercial Driver's License

(CDL) tank vehicle endorsement. The revised definition makes changes to clarify two points: 1. that the quantity amounts apply regardless of the method of tank securement, and 2. that the transportation of tanks that are manifested as empty or as residue (and that are actually empty or contain only residue) does not require the driver to have a tank vehicle endorsement. Comments must be received on or before November 25, 2013.

### NRC Issues Blending Final Report

Low-Level Waste Disposal



On September 27, 2013 (78 FR 59729), the Nuclear Regulatory Commission (NRC) published a federal register issuing the Final Comparative Environmental Evaluation of Alternatives for Handling Low-Level Radioactive Waste Spent Ion Exchange Resins from Commercial Nuclear Power Re-

actors (Final Report). For more information please visit the NRC's Blending of Low-Level Radioactive Waste Web site: <http://www.nrc.gov/waste/llw-disposal/llw-pa/llw-blending.html>

### Recent Industry Issues



Who was so hungry to eat a portion of your placard during transportation? Is this considered normal conditions of transport that your placards must survive? What are you doing to ensure your placards will meet all the design, shape and size requirements in 49 CFR part 172 subpart F? Are cheaply made placards really worth the initial cost savings? Do you clean the surface before applying placards to ensure they adhere? Could tarps have been used to minimize environmental damage? Did you supply the driver with extra placards to apply over these non-compliant placards?

## Latest Happenings in the Federal Register (cont.)

### Federal Motor Carrier Adopts MAP-21



On October 01, 2013 (78 FR 60226), the FMCSA published a final ruling to adopt certain regulations required by the Moving Ahead for Progress in the 21st Century (MAP-21) surface transportation reauthorization legislation. These changes cover seventeen (17) diverse subject areas throughout 49 CFR located in parts 350, 381, 383, 384, 385, 386, 387 and 392. This final rule is effective Tuesday, October 1, 2013. Petitions for Reconsideration must be received by the FMCSA no later than December 2, 2013.

### EPA Adjusts Penalties for Inflation



On November 6th, 2013 (78 FR 66643) the Environmental Protection Agency (EPA) published a final rule that amends the Civil Monetary Penalty Inflation Adjustment Rule as specified in 40 CFR 19.4 Table 1. The regulations contain a list of all civil monetary penalty authorities under EPA-administered statutes and the applicable statutory amounts, as adjusted for inflation, since 1996. This final rule is effective December 6, 2013.

### DOT Clarification on Fireworks Approvals

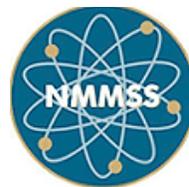
On October 02, 2013 (78 FR 60763), the PHMSA published a clarification notice on DOT's policy regarding applications for firework devices with identical hazardous properties to another firework device that is intended



to produce a similar result in a firework display. PHMSA believes that by issuing fireworks approvals or certifications to firework device series, the application backlog will be reduced, the current level of safety will be sustained, and firework series will reach the market faster. The PHMSA

also clarifies DOT's policy regarding applications for specialty fireworks devices (78 FR 60766). This notice clarifies what is considered a "Specialty Fireworks Device" enabling fireworks manufacturers or their U.S. designated agents to accurately apply for PHMSA approval or Fireworks Certification Agency (FCA) certification and minimize the delay in processing applications for these devices.

### SNM Control and Accounting Proposed Changes



On November 08, 2013 (78 FR 67225), the NRC published a proposed rule to amend its regulations for material control and accounting (MC&A) of special nuclear material (SNM) in 10 CFR Parts 40, 70, 72, 74, and 150. The proposed amendments add new requirements that would apply to NRC licensees who are authorized to possess SNM in a quantity greater than 350 grams. Concurrently with this proposed rule, the NRC published a document (NRC-2013-0195) requesting comments on several related draft NUREGs. Submit comments on this proposed rule by February 18, 2014. Submit comments specific to the information collections aspects of this rule by December 9, 2013.

### Recent Industry Issues (cont.)

I really appreciate you folks who share pictures with us! Thank you again for this picture. We all know that DOT allows placards in a placard holder, but what about labels



or markings? Are we allowed to cover the labels applied to the package with anything attached to the package? Is it best practice to apply labels on their side when there is adequate space on the package? Should we cover the specified black outer border on an orange panel? Is this orange panel holder authorized in the DOT regulations like the placard holder?

## Latest Happenings in the Federal Register (cont.)

### DOT Package Inspection Enforcement Policy



On October 02, 2013 (78 FR 60755), the PHMSA published a final rule addressing certain matters identified in the Hazardous Materials Transportation Safety Improvement Act of 2012 related to the Department's enhanced inspection, investigation, and enforcement authority. Specifically, DOT is amending the package opening provision to include procedures for an agent of the Secretary of Transportation to open packages of perishable hazardous materials and to provide notification to the responsible party that an agent has exercised a safety inspection or investigation authority. This final rule is effective November 1, 2013.

### More Miscellaneous Changes to the HMRs



On October 02, 2013 (78 FR 60745), the PHMSA published a final rule correcting editorial errors, making minor regulatory changes and, responding to requests for clarification, improving the clarity of certain provisions in the HMR contained in 49 CFR Parts 107 - 180. The amendments contained in this rule are non-substantive changes and do not impose new requirements. The effective date of this

final ruling is October 1, 2013. The incorporation by reference of certain publications listed in this final rule was approved by the Director of the Federal Register as of January 7, 2013.

### DOT Penalty Guidelines Updated

On October 02, 2013 (78 FR 60726), the PHMSA published a final rule to update its statement of policy, to revise the baseline assessments for frequently-cited violations of the HMR and to clarify additional factors that affect penalty amounts. This final rule is effective October 1, 2013.

### DOT United Registration Correction

On October 23, 2013 (78 FR 63100) the FMCSA published a final rule correcting its August 23, 2013 final rule (78 FR 52608) regarding the Unified Registration System (URS) in 49 CFR Part 390. This federal register makes four (4) minor revisions to the URS final rule. The effective date of this final rule is October 23, 2013.

### Recent Industry Issues (cont.)



Does your shipping procedure include the inspection of load securing equipment? Would you have found this crack before loading an intermodal? What training does your shipping personnel receive to prevent loading cargo on defective equipment? Do you use a detailed checklist as requested in NRC Information Notice 87-31? What kind of peer review and quality control program do you have to ensure compliance with load securing requirements?

**Latest Happenings in the Federal Register (cont.)**

§ 172.101 HAZARDOUS MATERIALS TABLE—Continued

Sym- bols	Hazardous materials descriptions and proper shipping names	Hazard class or Division	Identifi- cation Numbers	PG	Label Codes	Special provisions (§ 172.102)	(8)			(9)		(10) Vessel stowage		
							Packaging (§ 173.***)			Quantity limitations (see §§ 173.27 and 175.75)		Loca- tion	Other	
							Excep- tions	Non- bulk	Bulk	Passenger aircraft/rail	Cargo air- craft only			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8A)	(8B)	(8C)	(9A)	(9B)	(10A)	(10B)	
242	G Oxidizing solid, water reactive, n.o.s.	5.1	UN3121		5.1, 4.3.	62	None ...	214 ...	214 ...	Forbidden	Forbidden	<p style="color: red; font-weight: bold;">Add the letter "A"</p> <p style="color: blue;">Stowage category "A" means the material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel.</p> 		
	Oxygen, compressed .....	2.2	UN1072		2.2, 5.1.	110, A14	306 .....	302 ...	314, 315.	75 kg	150 kg		A	
	Oxygen difluoride, compressed .....	2.3	UN2190		2.3, 5.1, 8.	1, N86	None ...	304 ...	None	Forbidden	Forbidden		D	13, 40, 89, 90

**49 CFR Correction**

On November 19, 2013 (78 FR 69310), the Pipeline and Hazardous Materials Safety Administration (PHMSA) published a correction to Title 49 of the Code of Federal Regulations, Parts 100 to 177, revised as of October 1, 2012, on page 242, in 49 CFR 172.101, in the Hazardous Materials Table, in the entry for "Oxygen, compressed", in column 10A, the letter "A" is added.

**Continuing Education Credits for 2014 thru 2017**

The American Academy of Health Physics Continuing Education Committee has reviewed the following EnergySolutions' training courses. The below credits will be for courses attended during 2014 - 2017.

Title	CEC
Advance Mixed Waste Shipper Certification Training	32
Advanced Radioactive Material Shipper Certification Training	24
Module 3 Basic Radioactive Material Transportation Training	12
Radioactive Material Packaging Training	8
IATA: Transport of Dangerous Goods and Radioactive Materials by Air	24
NRC/DOT Radioactive Waste Packaging, Transportation and Disposal	32
NRC/DOT Experienced Radioactive Waste Shipper Refresher Training	24
NRC/DOT/EPA Hazardous Waste/Mixed Waste Packaging, Transport, and Disposal	32
Air Transport for Radioactive Materials (IATA) Training	8
IMDG: International Water Transport of Radioactive Materials	16
Air Transport for Radioactive Materials (IATA) Computer Based Training	8
Radioactive Material Packaging and Transportation for Radioactive Sources	32

Please visit the AAHP website for more information: [http://www.hps1.org/aaahp/cec/wp\\_cepolicy.htm](http://www.hps1.org/aaahp/cec/wp_cepolicy.htm)

**December 2013 - February 2014 Training Schedule**

Course	Date	Location
Hazardous Material General Awareness Transportation Training	December 3, 2013	Richland, WA
Federal Motor Carrier Safety Regulations for Managers and Supervisors	December 3-4, 2013	Richland, WA
IATA: Transportation of Dangerous Goods by Air Shipper Certification Training	December 3-5, 2013	Albuquerque, NM
Reasonable Suspicion Training for Supervisors	December 5, 2013	Richland, WA
Load Securement for Drivers and Traffic Personnel	December 5, 2013	Richland, WA
DOT/NRC Radioactive Waste Packaging, Transportation and Disposal Training	December 9-12, 2013	Las Vegas, NV
Air Transport of Radioactive Materials (IATA)	December 13, 2013	Las Vegas, NV
Load Securing of Radioactive Materials	December 13, 2013	Las Vegas, NV
Advanced Radioactive Material Shipper Certification Training	December 10-12, 2013	Las Vegas, NV
Federal Motor Carrier Safety Regulations for Drivers	December 11, 2013	Richland, WA
Load Securement for Drivers and Traffic Personnel	December 12, 2013	Richland, WA
Advanced Mixed Waste Shipper Certification Training	December 9-12, 2013	Richland, WA
<b>Basic Level Transportation Training – Module 1 – Basic Hazardous Material</b>		
	January 6-8, 2014	Albuquerque, NM
<b>Basic Level Transportation Training – Module 2 – Basic Hazardous Waste</b>		
	January 8, 2014	Albuquerque, NM
<b>Basic Level Transportation Training – Module 3 – Basic Radioactive Material</b>		
	January 9-10, 2014	Albuquerque, NM
<b>*Attend all three modules consecutively for \$1,385.00 (savings of \$500.00)</b>		
Hazardous Material General Awareness Transportation Training	January 7, 2014	Richland, WA
Federal Motor Carrier Safety Regulations for Drivers	January 8, 2014	Richland, WA
Load Securement for Drivers and Traffic Personnel	January 9, 2014	Richland, WA
Basic Level Transportation Training – Module 1 – Basic Hazardous Material	January 13-15, 2014	Las Vegas, NV
Basic Level Transportation Training – Module 2 – Basic Hazardous Waste	January 15, 2014	Las Vegas, NV
Basic Level Transportation Training – Module 3 – Basic Radioactive Material	January 16-17, 2014	Las Vegas, NV
<b>*Attend all three modules consecutively for \$1,385.00 (savings of \$500.00)</b>		
Hazardous Materials Drivers Training	January 16, 2014	Richland, WA
IATA: Transportation of Dangerous Goods by Air Shipper Certification Training	January 21-23, 2014	Richland, WA
DOT/NRC Hazardous Waste/Mixed Waste Packaging, Transportation and Disposal	January 27-30, 2014	Salt Lake City, UT
Air Transport of Radioactive Materials (IATA)	January 31, 2014	Salt Lake City, UT
Load Securing of Radioactive Materials	January 31, 2014	Salt Lake City, UT
<b>*Attend all three NRC/DOT courses consecutively for \$2,795.00 (savings of \$235.00)</b>		
Advanced Hazardous Waste Shipper Certification Training	January 28-30, 2014	Richland, WA
Hazardous Material General Awareness Transportation Training	January 29, 2014	Richland, WA
<b>Basic Level Transportation Training – Module 1 – Basic Hazardous Material</b>		
	February 3-5, 2014	Richland, WA
<b>Basic Level Transportation Training – Module 2 – Basic Hazardous Waste</b>		
	February 5, 2014	Richland, WA
<b>Basic Level Transportation Training – Module 3 – Basic Radioactive Material</b>		
	February 6-7, 2014	Richland, WA
<b>*Attend all three modules consecutively for \$1,385.00 (savings of \$500.00)</b>		
Advanced Hazardous Material Shipper Certification Training	February 4-5, 2014	Las Vegas, NV
Federal Motor Carrier Safety Regulations for Drivers	February 4, 2014	Albuquerque, NM
Federal Motor Carrier Safety Regulations for Managers & Supervisors	February 5-6, 2014	Albuquerque, NM
Reasonable Suspicion Training for Supervisors	February 6, 2014	Albuquerque, NM
Explosives Training for Shippers	February 6, 2014	Las Vegas, NV
DOT/NRC Radioactive Waste Packaging, Transportation and Disposal Training	February 10-13, 2014	Myrtle Beach, SC
Air Transport of Radioactive Materials (IATA)	February 14, 2014	Myrtle Beach, SC
Load Securing of Radioactive Materials	February 14, 2014	Myrtle Beach, SC
<b>*Attend all three NRC/DOT courses consecutively for \$2,895.00 (savings of \$235.00)</b>		
Advanced Hazardous Material Shipper Certification Training	February 11-12, 2014	Albuquerque, NM
Highway Route Control Quantity (HRCQ)	February 11, 2014	Richland, WA
Hazardous Materials Drivers Training	February 12, 2014	Richland, WA
Explosives Training for Shippers	February 13, 2014	Albuquerque, NM
Federal Motor Carrier Safety Regulations for Drivers	February 13, 2014	Richland, WA
Advanced Hazardous Material Shipper Certification Training	February 18-19, 2014	Richland, WA
Explosives Training for Shippers	February 20, 2014	Richland, WA
Load Securement for Drivers and Traffic Personnel	February 20, 2014	Richland, WA
IATA: Transportation of Dangerous Goods by Air Shipper Certification Training	February 25-27, 2014	Las Vegas, NV