



## ***Nevada Site Specific Advisory Board (NSSAB)***

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### **Full Board Meeting**

**Bob Ruud Community Center  
150 N Highway 160, Pahrump, NV  
4:00 p.m. – July 15, 2015**

**Members Present:** Michael Anderson, Michael D'Alessio, Donna Hruska (Chair), Janice Keiserman (Vice-Chair), Donald Neill, Steve Rosenbaum, Edward Rosemark, Thomas Seley, Cecilia Flores Snyder, Jack Sypolt

**Members Absent:** Amina Anderson, Pennie Edmond, Michael Moore, William Sears, Francisca Vega

**Liaisons Present:** Phil Klevatorick (Clark County), Richard Arnold (Consolidated Group of Tribes and Organizations [CGTO]), Dan Schinhofen (Nye County Commission), John Klenke (Nye County Nuclear Waste Repository Project Office [NWRPO]), Jonathan Penman-Brotzman (U.S. National Park Service [NPS]) Chris Andres (State of Nevada Division of Environmental Protection [NDEP])

**Liaisons Absent:** Ralph Keyes (Esmeralda County Commission)

**Department of Energy (DOE):** Kelly Snyder (Deputy Designated Federal Officer [DDFO]), Scott Wade

**Facilitator:** Barb Ulmer (Navarro)

**Public Signed In:** RD Czechorosky (Pahrump, NV), Sydney and Judy Gordon (Las Vegas, NV), Darrell Lacy (NWRPO), Karen McKinlay-Jones, (Death Valley National Park), Dona Merritt (Navarro), D.C. Shuey (Pahrump, NV), George Tucker (Amargosa Valley, NV)

## **Open Meeting/Chair's Opening Remarks**

Chair Donna Hruska welcomed the public from the surrounding communities in attendance and encouraged comments either during the public comment period or informally during the breaks. Following the Chair's opening remarks, Vice-Chair Janice Keiserman moved to approve the agenda as presented. The motion was seconded and passed unanimously.

## **Public Comment**

The DOE welcomes and allows for public comment during each NSSAB Full Board meeting. Comments and questions made during the Public Comment period are considered by DOE and the NSSAB, but not responded to in real time during the meeting.

George Tucker: Back in November 2013, I attended a meeting just up the road. I think it was Department of Energy-sponsored regarding the transportation of high-level nuclear waste from the Oak Ridge facility to Nevada Test Site. It was stated then that the shipments would begin in early 2014, and it was stated that there were something like 50 – 100 loads of this high-level waste which I calculated was enough to build at least ten Hiroshima-sized bombs. That being the case, I guess I have a question. Has that proceeded? Has that ended by now? Why are we discussing things like basics of transportation packaging if we are having high-level waste trucked through Pahrump in the last eighteen months? Seems to me that it is a little late to be discussing how you are going to package the nuclear waste. Where are the minutes to the last NSSAB meeting and where is the website that I can get these minutes?

## **Nye County Perspectives on Low-Level Waste (LLW) Transportation** (*Darrell Lacy, Nye County*)

- **Why do we care about Transportation and Roads?**
  - Safety
  - Economic Development
  - Access to private land, mining claims, grazing and recreation
    - Nye County is 300 miles from one end to the other. Seven miles of 4-lane highway, but 2,746 miles of minor roads identified in the RS 2477 project.
- **Transportation Issues**
  - Lack of Infrastructure to support new projects and construction
    - Growth must pay for itself
    - Private companies pay impact fees, mitigation through Conditional Use Permits, Special Use Permits or Development Agreements, and sales and property taxes
    - How do government projects pay for their impacts?
  - Federal Government Impacts
    - Yucca Mountain – included plans for road improvements, a new rail line with access by commercial users and Payment Equal to Taxes payments
    - Nevada National Security Site (NNSS) – very little impact to Nye County for traffic onto Highway 95 back to Las Vegas
  - NNSS Transportation Issues
    - Waste and any other materials that avoid Las Vegas by default will come through Pahrump and/or rural Nye County on smaller two-lane roads

- Recent years have had 1,200 to 1,500 trucks per year
  - This is contrary to US Department of Transportation (US DOT) guidelines
  - Safety?
- **Transportation Issues**
  - Nye County has commented at many forums
  - Site-Wide Environmental Impact Statement (SWEIS) comments in 2013-Nye County has little choice other than to accept the burden of radioactive waste transport along the Highway 160 corridor through Pahrump; however, DOE should take additional measures to ensure the burden and impacts of such transportation activities are minimized. This could be done with appropriate mitigation activities including road improvements and funding for a design study of a Pahrump bypass. This is particularly true in light of SWEIS findings that the risk associated with such transportation is slightly less for what DOE called the “unconstrained case” analyzed in the SWEIS. “Unconstrained” in this instance means allowing transport to go through Las Vegas. DOE has chosen to continue with its “constrained case” meaning no transportation through Las Vegas, but routing through Pahrump instead, even though overall risk is slightly higher for routing through Pahrump as noted in SWEIS Table 5-14. Nye County appreciates DOE’s willingness, as stated in the SWEIS, to discuss improvements that we consider necessary.
- **NNSS Transportation Issues**
  - Specific road projects – Nevada Department of Transportation (NDOT) 2015 to 2018 plan
  - State Route (SR) 160 -- Clark County Phase one
  - SR 372 Roundabouts Pahrump – Blagg Road and Pahrump Valley Blvd
  - SR 160 – five lane in Pahrump
  - SR 160 – Clark County Phase 2
  - SR 160 N. Pahrump to 95, Johnny Curve and Pahrump Bypass on the 2018 to 2024 plan
- **NNSS Transportation Summary**
  - Nye County supports the various missions at the NNSS including LLW and potential Greater-Than-Class-C and Yucca Mountain if safe and appropriate mitigation
  - Specific projects including Highway 160 to Pahrump to Highway 95 and planning for Pahrump Bypass are a high priority
  - Prior statements were that a Record of Decision on the SWEIS and inclusion in NDOT plan were needed

In response to Board questions, the following clarifications were provided by Mr. Lacy and Mr. Wade:

- The Pahrump Bypass would begin at the city limits on SR 160 and continue along the east side of town and end on the north side of Pahrump again on SR 160. The design and construction is divided into three phases.
- The NSSAB as a DOE advisory board may assist in moving the Pahrump Bypass project forward by providing a recommendation on the priorities for the appropriate mitigation activities for road improvements and funding for a design study.
- Nye County interacts with both the US DOT and NDOT. The US DOT provides funding for federal highways and NDOT for state highways. SR 160 is designated a federal highway just north of Pahrump; so the area beyond this point is not eligible for federal funding. At Nye County’s encouragement, NDOT has been conducting safety studies to identify the requirements to upgrade these roads. At this stage, NDOT has done a safety review on

the highway to the entrance to Pahrump to the north to Highway 95 by looking at intersections and more dangerous sections of the road. Without federal highway funding currently available, Nye County continues to pursue funding alternatives for the project.

- The Secretary of Energy and the Governor of Nevada formed a high-level working group in 2013 in response to State of Nevada concerns regarding shipments of LLW including the Consolidated Edison Uranium Solidification Project material. This Working Group signed a Memorandum of Understanding in December 2014 and meets approximately quarterly to discuss a range of issues from LLW to the SWEIS for the NNSS. Nye County has asked for input on transportation, but is not a part of the Working Group and not privy to any of its discussions.
- Nye County requests information on shipments to the NNSS-what kind of waste, when the material is coming, where it is going to be staged, and the policies in place to guide these decision processes. Nye County is open to discussions with DOE on the overnight staging of LLW, and from a local and county perspective that it is done safely and in a transparent manner.
- Based on concerns raised by local stakeholders in Pahrump regarding overnight staging, DOE has determined that the movement of LLW be done as expeditiously through the State of Nevada as possible and also to minimize the overnight staging while still prioritizing that safety prevails. Additional accommodations have been made available at the NNSS. A limitation is that the NNSS does not have the contracts with the shippers; so the only recourse is the Nevada Field Office (NFO) recommending to DOE HQs, and then DOE HQs intervening on a site by site basis to communicate these decisions. A continued dialogue on shipping routes and overnight staging in discussion groups on transportation may be beneficial.
- The NFO has had no recent initiatives in restarting a regional working group for transportation, but is interested in feedback from the NSSAB and other stakeholders regarding the timing and the best ways to involve stakeholders, communities, and the public.
- Interstate 11 is important to Nye County, and officials have provided comments on the plan. Although in regard to shipment of LLW to the NNSS, this interstate will not have a tremendous impact in Nye County unless other improved transportation corridors through Las Vegas are utilized.
- As the loss of business has affected the economy and decreased tax revenue, Nye County has offered to assist the DOE in identifying alternate locations or safe havens in Pahrump to overnight shipments of radioactive waste to the NNSS.
- The Transportation Emergency Preparedness Program training offered later in the meeting is to raise public knowledge of the transportation standards for packaging and shipment of radioactive waste.
- There are placarded shipments of radioactive waste on the road that are not bound for the NNSS. A regional transportation working group, including communities and stakeholders, may choose to develop location criteria that should be imposed on hazardous waste shipments that overnight in Nevada.

**Transportation Emergency Preparedness Program (TEPP)** (*John Lund and Tom Clawson, Technical Resources Group*)

- **Module one - Introduction**
  - **Welcome**
    - Instructor introductions

- Facility overview
- Agenda
- Handouts
- Student introductions
- TEPP overview
- **TEPP Mission**
  - TEPP's mission is to ensure that federal, state, tribal, and local responders have access to the plans, training, and technical assistance necessary to safely, efficiently, and effectively respond to transportation accidents involving DOE-owned radioactive materials. To accomplish this mission, a suite of tools have been developed to aid the response jurisdictions in their readiness activities.
- **TEPP Training and Tools**
  - Modular Emergency Response Radiological Transportation Training Program (MERRTT)
    - 16 modules and supporting videos
    - Hands on exercises
    - Practical field exercise
    - Tabletop exercise
  - Technician Level MERRTT (TMERRTT)
    - Designed to meet NFPA 472 Agent Specific Competencies
  - Radiation Specialist
    - Designed to meet NFPA 472 Specialist Competencies
  - TEPP model procedures
    - First responder procedure
    - Hazardous materials team procedure
    - EMS responder procedure for handling a radiologically contaminated patient
    - Medical examiner/coroner guide for handling a radiologically contaminated body/human remains
    - Radioactive material or hazardous materials decontamination procedure
    - Recovery planning procedure
  - Transportation accident exercise scenarios
    - Spent nuclear fuel
    - Low specific activity material
    - Soil density gauge
    - Radiopharmaceuticals
    - Radiography device
      - <http://www.em.doe.gov/otem>
  - TEPP training in Nevada from 2014 to present
    - 50 classes
    - 19 different locations
    - 564 students
    - 74 different organizations in attendance
    - 43 different cities' first responders in attendance

- **Module two – Radiological Basics**

- Module Objectives
  - Identify the basic components of an atom
  - Identify four basic types of ionizing radiation
  - Define ionizing radiation, radioactivity, radioactive material, and radioactive contamination
  - Distinguish between radiation exposure and radioactive contamination.
- Historical Background
  - In 1895, X-rays discovered
  - State set for the use of radiation
  - Studies provide a detailed understanding of hazards and benefits of radiation
- Atomic Structure
  - All matter is made up of atoms
    - Protons
    - Neutrons
      - Isotopes
    - Electrons
  - Not all atoms are stable
  - Unstable atoms are known as radioactive atoms
- Ionizing Radiation
  - Non-ionizing radiation
    - Visible light/heat/radio waves/microwaves
    - Does not have sufficient energy to cause ionization
  - Ionizing radiation
    - Physical change in atoms by making them electrically charged-called ionization
- Four Basic Types of Ionizing Radiation
  - Alpha
  - Beta
  - Gamma
  - Neutron
- Alpha Radiation
- Beta Radiation
- Gamma Radiation
- Neutron Radiation
- Radioactive Material and Radioactivity
  - Radioactive material is any material that spontaneously emits ionizing radiation
  - Process of unstable atom emitting radiation is called radioactivity
  - When a radioactive atom goes through the process of radioactivity, also called radioactive decay, it changes to another type of atom
  - Radioactive decay is measured in half-lives
  - Half-life is the time it takes for  $\frac{1}{2}$  of the radioactive atoms present to decay to another form
  - Half-life is unique to each radioactive isotope and can vary greatly
  - Radioactive pharmaceutical products (called radiopharmaceuticals) typically have half-lives of a few hours or days
  - Regardless of the half-life, the radioactivity level of any given amount of radioactive material is constantly decreasing
- Radioactive Contamination

- When radioactive material is where it is not wanted (e.g., on the ground, in water, or on you), we refer to it as “contamination”
- Radiation Versus Contamination
  - Radiation is a type of energy; contamination is material
  - Exposure to radiation will not contaminate you
  - Radioactive contamination emits radiation
- Exposure to Radioactive Material
  - At an incident scene, responders may be exposed to radiation
  - If the containers are intact, exposure levels should be safe
  - Exposure to radiation at controlled levels does not constitute a hazard
- Radioactive Contamination Types
  - If radioactive material is released, it is possible to become contaminated
  - Contamination continues to be an exposure hazard
  - Can be external or internal
    - External-secondary contamination
    - Internal-can be difficult to remove
- Avoid Radioactive Contamination
  - Do not:
    - Eat
    - Drink
    - Smoke
    - Chew
  - Use PPE while on the scene of an incident involving radioactive material
- Radiological Units
  - Traditional units of measure and International System of Units (SI) are used in measuring radiation and radioactivity
  - For radiation measurement:
 

	Exposure	Absorbed Dose	Dose Equivalent
Common Units	Roentgen (R)	rad	rem
SI Units	Coulomb/kilogram (C/kg)	Gray (Gy)	Sievert (Sv)
  - Radioactivity or the strength of a radioactive source is measure in:
    - Traditional units of curies (Ci)
      - 1 Ci = that quantity of radioactive material in which 37 billion atoms are transformed per second –  $3.7 \times 10^{10}$  disintegrations per second (dps)
    - SI units of becquerel (Bq)
      - 1 Bq = that quantity of radioactive material in which 1 atom is transformed per second – 1 disintegrations per second
  - Because the unit for measuring activity is so small, prefixes are often used

Symbol	Prefix	Prefix Value	Example
p	pico	1 trillionth, or $10^{-12}$	pCi = 1 trillionth of a curie
n	nano	1 billionth, or $10^{-9}$	nCi = 1 billionth of a curie
$\mu$	micro	1 millionth, or $10^{-6}$	$\mu$ Ci = 1 millionth of a curie
m	milli	1 thousandth, or $10^{-3}$	mCi = 1 thousandth of a curie
k	kilo	1 thousand, or $10^3$	kBq = 1 thousand becquerel
M	mega	1 million, or $10^6$	MBq = 1 million becquerel
G	giga	1 billion, or $10^9$	GBq = 1 billion becquerel
T	tera	1 trillion, or $10^{12}$	TBq = 1 trillion becquerel
P	peta	1 quadrillion, or $10^{15}$	PBq = 1 quadrillion becquerel

- Summary
  - Atoms are made up of protons, neutrons, and electrons
  - The four basic types of ionizing radiation are alpha, beta, gamma, and neutron
  - Radioactive material is any material that spontaneously emits ionizing radiation
  - The process of an unstable atom emitting radiation is called radioactivity
  - Radioactive material in an unwanted location is called contamination
  - Radiation can pass through the body; contamination can be deposited in or on the surface of the body
  - The SI unit for measuring radioactivity (activity) is the becquerel
- Radiological Basics Exercise
- **Module three – Radioactive Material Shipping Packages**
  - Module Objectives
    - Identify typical packages used to transport radioactive material
    - List examples of radioactive material that are shipped in various shipping packages
    - Identify the risks associated with the various shipping packages
    - Identify the testing methods for Type A and B packages
    - Identify some commonly transported sources of radioactive material
  - Transporting Radioactive Material
    - Radioactive material is a vital part of our modern society
    - It is used in hospitals, factories, laboratories and our homes
    - Radioactive material is transported according to very strict federal regulations designed to protect the public and the environment
    - Radioactive material is generally shipped in its most stable form
  - Hazard Evaluation
    - Two part philosophy of radioactive material transport is that:
      - Safety is primarily focused on the package

- Package integrity is directly related to the hazard of the material it contains
- Radioactive Material Packaging
  - Radioactive material, like other commodities, is transported every day in the U.S.
  - Four package types are used:
    - Excepted packaging
    - Industrial packaging
    - Type A packaging
    - Type B packaging
- Risks Associated with Shipping Packages
  - Package type can indicate level of risk
  - Excepted, Industrial, & Type A packages contain nonlife-endangering quantities
  - Type B packages are built to withstand severe accidents
  - No injuries or death resulting from the release of radioactive material in a transportation incident
- Package Testing
  - Two agencies regulate testing:
    - Department of Transportation (DOT)
    - Nuclear Regulatory Commission (NRC)
  - DOT and NRC regulations are based on international regulations issued by the International Atomic Energy Agency
  - Package designs are tested using computer simulations, scale model testing, and/or full-scale testing
- Type A Tests
  - Water – water spray for 1 hour to simulate rainfall of 2 inches per hour
  - Drop – free drop test onto a flat, hard surface. This test is conducted only on packages weighing 11,000 pounds or less.
  - Stacking – stacking test of at least 5 times the weight of the package. This test is conducted for at least 24 hours.
  - Penetration – penetration test by dropping a 13-pound, 1.25-inch diameter bar vertically onto the package from a height of 3.3 feet.
- Type B Tests
  - Free Drop – a 30-foot free drop onto a flat, essentially unyielding surface so that the package’s weakest point is struck
  - Puncture – a 40-inch free drop onto a 6-inch diameter steel rod at least 8 inches long, striking the package at its most vulnerable spot
  - Thermal – exposure of the entire package to 1475 degrees F for 30 minutes
  - Immersion – immersion of the package under 50 feet of water for at least 8 hours
- Common Sources
  - Consumer products
  - Radiopharmaceuticals
  - Industrial sources
  - Nuclear fuels
  - Radioactive waste
- Summary

- Type A packaging, along with its radioactive contents, must meet standard testing requirements designed to ensure that the package retains its containment integrity and shielding under normal transport conditions.
- Type B packaging must be able to withstand a series of tests that simulate severe or “worst case” accident conditions.
- Radiopharmaceuticals are typically shipped in Type A packages and spent nuclear fuel is typically shipped in Type B packages.
- Type A packages contain nonlife-endangering amounts of radioactive material.
- Radiopharmaceuticals are one commonly transported source of radioactive material.

In response to Board questions, the following clarification was provided:

- The TEPP teaches first responders about DOE waste materials, but also covers other radioactive materials that are transported on the roads from the private sector, i.e. radiography cameras and density gauges. Only radioactive material that has a DOE link is disposed at the Area 5 Radioactive Waste Management Complex at the NNSS.
- **Module four – Hazard Recognition**
  - Module Objectives
    - Identify terminology and acronyms associate with shipments of radioactive material
    - Identify markings on packages used to transport radioactive material
    - Identify labels on packages used to indicate the presence of radioactive material
    - Identify placards used on radioactive material shipments
    - Identify the information contained on shipping papers used for transporting radioactive material
    - Identify commonly used Proper Shipping Names for radioactive material
  - Terminology – Shipments
    - Fissile material
      - Material whose atoms are capable of nuclear fission
      - Includes Pu-239, Pu-241, U-233, and U-235
    - Special form radioactive material
      - Single solid piece or sealed capsule
      - Non-dispersible
      - Minimal risk of contamination
      - May pose significant radiation hazard
    - Low Specific Activity (LSA)
      - Limited amount of radioactivity in relationship to total amount of material present
    - Surface Contaminated Objects (SCO)
      - Object itself is not radioactive but has contamination deposited on its surfaces
    - Transport Index (TI)
      - Number assigned by shipper to provide control over the total number of packages in a shipment
      - Determined by taking maximum radiation level at one meter from the surface of the package

- Safe Packaging
  - Prior to transport, regulations require that radioactive material is:
    - Properly packaged
    - Sealed
    - Surveyed for external radiation and contamination
  - Packages are then marked and labeled as required
- Package Markings
  - Designed to inform transportation workers and emergency response personnel about a package's radioactive contents
  - Package markings will be clearly marked on the outside of the package
  - Some of the markings you may see include:
    - Proper shipping name and UN ID number
    - "Radioactive LSA" or "Radioactive SCO"
    - "Type IP-1, IP-2, or IP-3," "Type A" or "Type B"
    - Gross weight (if greater than 110 lbs.)
    - Orientation arrows – good indication for liquids
    - "RQ" if the package contains a reportable quantity of material
- Radiation-Warning Labels
  - Designed to inform personnel of package's radioactive contents
  - Not all packages require warning labels
  - When required, radiation-warning labels will:
    - Appear on opposite sides of package
    - Contain specific information on package contents and activity of radioactive material
  - Labels are applied based on external radiation level or in some cases the package contents
  - The following labels may be used on packages of radioactive material:
    - Radioactive White-I
      - Maximum of 0.5 mrem/hour on contact
    - Radioactive Yellow-II
      - >0.5 to 50 mrem/hour on contact
      - Maximum TI of 1
    - Radioactive Yellow-III
      - >50 to 200 mrem/hour on contact
      - Maximum TI of 10
    - Fissile
      - Applied to fissile material packages
      - Will appear next to the Radioactive I, II, or III label
      - Criticality Safety Index (CSI) used by shipper to control total number of fissile packages on a conveyance
    - EMPTY
      - Package emptied of contents as far as practical
      - May still have internal contamination
      - <0.5 mrem/hour on contact
      - Excepted from shipping paper and marking requirements (except UN ID number)
- Internal Air Transport Association Regulations (IATA) Label
  - IATA regulations label

- Label is required when shipping radioactive material in excepted packages by air
  - Dose rates on the surface of the shipping container must be less than 0.5 mrem/hour
- Placarding Requirements
  - Not all shipments of radioactive material require vehicle placarding
  - Vehicle placarding required for:
    - Packages with the Yellow-III label
    - Exclusive use LSA/SCO shipments in excepted packages
    - Highway route controlled quantities of material
  - When required, placards must appear on all four sides of transport vehicle
- Placard Placement
  - Placards on front of trailer or front of truck
  - Placards on back and on both sides of vehicle
- Placard Types
  - There are two type of placards used for radioactive material shipments
- International Shipments
  - Large format Yellow III and Fissile label used as placards
- UN Identification Number
  - US ID number may appear close to placard
  - Orange sign with black lettering or white diamond similar in size to placard
- Secondary Hazards
  - Look for secondary hazards at scene
  - Two possible sources:
    - Other hazardous material being transported (look for additional labels or placards)
    - Other external factors (spilled fuel, downed power lines, etc.)
  - Some radioactive material may have other hazardous properties (e.g., corrosive)
- Shipping Papers
  - Driver of vehicle, if available, can be of assistance in retrieving shipping papers
  - Shipping papers are a valuable source of information about material being transported
    - Contain name, address, and phone number of shipper
    - Staffed contact number for emergency response information
  - Shipping papers for radioactive material will list:
    - Identity of material
    - Physical and chemical form of material
    - Activity
    - Category of label (e.g., Yellow-II)
    - Transport index
    - Fissile controls information (if applicable)
  - Shipping papers may be located in:
    - The cab of the motor vehicle (bill of lading)
    - The possession of a train crew member (consist/waybill)
    - A holder on the bridge of a vessel (dangerous cargo manifest)
    - An aircraft pilot's possession (airbill)

- Handling Potentially Contaminated Papers
  - Separate pages and remove loose material
  - Bag each page
  - Place into a second bag
  - Control documents until surveyed
  - Make photocopies if possible
- Proper Shipping Names
  - Proper shipping name for material being transported can be located:
    - On shipping papers
    - On package markings
    - In blue pages of the Emergency Response Guidebook (ERG)
- Summary
  - Radioactive material which is either a single solid piece or a sealed capsule that can be opened only by destroying the capsule is called special form radioactive material.
  - Package markings and labels are designed to inform transportation workers and emergency response personnel about a package's radioactive contents.
  - Orientation arrows on the outside of a package are a good indication that the package contains liquids.
  - Not all packages of radioactive material require radiation-warning labels.
  - The EMPTY label is applied to packages that, after being emptied of their contents, still may contain a regulated amount of internal contamination.
  - Placarding is not required on all shipments of radioactive material.
  - The standard placard for radioactive material is yellow on top and white on the bottom, with black lettering and a black radiation symbol. In the bottom corner, the DOT hazard class number 7 denotes radioactive material.
  - The following can be found on the shipping papers for radioactive material: a. category of label applied to each package, b. emergency contact telephone number, c. transport index for each package

In response to Board questions, the following clarification was provided:

- Exclusive Use vehicles are required to have placards.

The TEPP provided hands-on activities for the NSSAB and the public to demonstrate radiological survey instruments and dosimetry devices, to understand radiation labels, and to conduct a personnel survey.

### **U.S. DOE Update** (*Scott Wade, DOE*)

Scott Wade stated that the NFO does not have the final budget numbers for fiscal year (FY) 2016 as Congress is still working the process. Congress will continue work on the budget with a likely continuing resolution (CR) approved in September 2015. Mr. Wade will provide updated information at the September NSSAB meeting.

Mr. Wade noted that the Underground Test Area (UGTA) activity will be drilling a deep well, ER-20-12, in Pahute Mesa the end of August 2015 with an estimated 30-day campaign depending on conditions and also three wells in Yucca Flat. These wells are important to UGTA as the information will substantively augment the current models and characterization studies. An update on drilling will be provided at the September NSSAB meeting.

Mr. Wade reported that historically more LLW is shipped to the NNSS at the end of fiscal years due to CRs and budgetary concerns. The NNSS anticipates that it will receive and dispose 1.3 to 1.5 million cubic feet of LLW in FY 2015, but it will be dependent on the shipments in the next 60 days.

The planning for another tabletop exercise has commenced with the TEPP. Another planning session is scheduled for July 28, 2015 to finalize the accident scenario and the date, which will probably be in early November 2015. Mr. Wade reminded that this is an ongoing commitment of the Department and activities started about a year ago with an emergency preparedness tabletop exercise held in Las Vegas and in Pahrump. The NSSAB will be informed of the schedule and the Board may send representatives to observe.

### **Other NSSAB Business** (*Donna Hruska, Chair*)

Chair Hruska informed the Board that she and Vice-Chair Keiserman will be attending the Environmental Management Site-Specific Advisory Board (EM SSAB) National Chairs' Meeting in Santa Fe, New Mexico on September 1-3, 2015. Chair Hruska added that since the last national meeting in April 2015, the NSSAB's focus has been transportation and suggested that the Board consider it as a topic for the NSSAB's round robin session with EM-1, EM Headquarters (HQs) staff, and the Chairs and Vice-Chairs from the other seven SSABs. Members did not have additional suggestions for topics; so the Board had a lengthy dialogue on the talking points and visual aspects to be included in the round robin presentation.

The Board discussed transportation items to include in a formal recommendation to DOE, as follows:

- DOE HQ and the NFO should pursue partnering with local governments in Nevada to create safe havens in Nevada communities along LLW transportation routes to the NNSS, in particular Pahrump, for carriers who transport LLW shipments to the NNSS.
- DOE HQ and the NFO should review the existing Nevada transportation routes in regard to road conditions and explore ways to help obtain additional funding for safeguards and improvements to ensure the ultimate safety for shipping of LLW to the NNSS.
- DOE HQ should continue to support/fund TEPP training for emergency responders from communities near and/or on LLW transportation routes throughout the country.
- DOE HQ and the NFO should explore ways to increase funding for rural emergency preparedness support, in addition to the \$0.50 a cubic foot grant.
- The NFO should reestablish the Transportation Working Group, or similar forum for Nevada stakeholders, which was an avenue that allowed for multiple entities, organizations, and others to address local concerns regarding necessary improvements to transportation infrastructure along LLW shipment routes.

Chair Hruska was asked by the Board to determine at the upcoming EM SSAB National Chairs' Meeting if there is interest from the other Chairs and Vice-Chairs to initiate a national recommendation on transportation. One potential item that the Board discussed is whether there is support among the SSABs to review all DOE shipping routes to determine if they are designated Federal Aid Highways; if there are any sections that are not, develop a recommendation that DOE work with the U.S. DOT to designate all sections of shipping routes as

Federal Aid Highways with the overall potential benefit of additional funding for safety improvements. If the majority of the Chairs and Vice-Chairs are in support of a national transportation resolution, the NSSAB's recommendation to DOE's NFO can be utilized and expanded upon.

Chair Hruska made a motion that the NSSAB Office draft a PowerPoint slide for the round robin session for the EM SSAB National Chairs' meeting and also draft a recommendation letter regarding transportation utilizing the Board's discussion points. Final discussion and action on the draft recommendation will occur at the September 16, 2015 Full Board meeting. The motion was seconded and passed unanimously.

Chair Hruska noted that elections would be held for the Chair and Vice-Chair positions at the September 16, 2015 Full Board meeting. A list outlining the responsibilities for both positions was provided to the Board. Interested Members are asked to contact the NSSAB Office by August 30, 2015.

Vice-Chair Keiserman provided a Membership Committee update regarding the recruitment for the student liaison position vacancy. Vice-Chair Keiserman contacted the Clark County School District regarding its Community Partnership Program (CPP). The CPP requires a signed agreement between the organization and the student. When DDFO Snyder contacted EM HQs, she was informed that local SSABs cannot enter into legal agreements. Since student participation has been an interest to the eight local SSABs, EM HQs is currently developing guidance that would apply to all the local boards and plans to have a draft concept available for discussion at the next EM SSAB National Chairs' meeting. Vice-Chair Keiserman reported that she has contacted a professor at the University of Nevada, Las Vegas, and is awaiting his response regarding a university student as a student liaison. The Membership Committee is also researching the feasibility of recruiting a student liaison from local community colleges.

Two letters were provided to Board members for informational purposes:

- NSSAB Recommendation for Potential New RCRA Part B Permitted Mixed Waste Disposal Unit (Work Plan Item #9) – dated January 21, 2015
- DOE Response to Recommendation for Potential New RCRA Part B Permitted Mixed Waste Disposal Unit (Work Plan Item #9) – dated July 6, 2015

### **Communication Improvement Opportunities (Work Plan #10)**

In response to providing recommendations on ways that DOE can improve/enhance communication to the public, Member Michael D'Alessio noted that there were a couple of media in attendance and suggested that DOE continue to do news releases before each NSSAB meeting to increase community awareness and involvement. Chair Hruska remarked that there were more public at this meeting than those held in Las Vegas and proposed that more NSSAB meetings be held in rural communities who seem to have a more vested interest in the activities at the NNSS. Chair Hruska advised that business cards with NSSAB contact information and fact sheets pertinent to the meeting's agenda be available at the meetings as an immediate source to answer public questions. Chair Hruska suggested that the Members introduce themselves and the community that they represent at the beginning of each meeting; so the public can contact them during the breaks or in their communities. These recommendations will be combined with other communication improvements throughout the FY and will be presented to the DOE for consideration at the end of FY 2015.

**Meeting Wrap-Up/Adjournment** (*Barb Ulmer*)

It was announced that James Manner resigned his position on the NSSAB as he is moving to Idaho. The next Membership Committee meeting is Monday, August 17, 2015, at 3 p.m. at the Sahara Business Center, Las Vegas, Nevada. The next Board meeting will be held on Wednesday, September 16, 2015, at 4 p.m. at the Clark County Government Center's Pueblo Room, Las Vegas, Nevada.

Member D'Alessio moved that the meeting be adjourned. The motion was seconded and passed unanimously.

Meeting adjourned at 9 p.m.