

**U.S DEPARTMENT OF ENERGY (DOE)
TRANSPORTATION EXTERNAL COORDINATION (TEC)
WORKING GROUP MEETING**

**September 13-14, 2006
Green Bay, WI**

RAIL TOPIC GROUP

Mr. Jay Jones began the meeting with a welcome and introduction of the topic members, other participants, and support staff. A brief overview was given of the topic group's activities since the last TEC meeting. This meeting focused on the Topic Group's subgroup activities. Key comments and discussions are summarized below.

Status Update of the Rail Topic Group

Mr. Jones mentioned the planned creation of a new topic group to be called the Routing Topic Group. The Rail Topic Group would still exist as a topic group. However, since the emphasis would be in developing routing criteria and ultimately a national suite of routes over the next year or so, this separate Routing Topic Group would be created to address these areas. Mr. Jones stressed the importance that the new members of the Routing Topic Group should be prepared for a more intensive time commitment. Mr. Jones anticipates sending an e-mail in the next two weeks to all TEC members soliciting their interest and participation in this topic group. Membership may be limited to one or two representatives from each TEC member organization in order to have a manageable and productive topic group.

RADTRAN/TRAGIS Update

Dr. Ruth Weiner provided a brief summary of the major improvements RADTRAN has undergone over the past year. Most notably, Dr. Weiner stated that the inhalation dose of radiation in the event of an accident has been corrected. The RADTRAN VI model will be released this year and will be provided on a CD. This model introduces uncertainty parameters which will allow the user to input any variable, select any distribution method, and receive the output in any form.

Interested users can access the RADTRAN website at <https://radtran.sandia.gov/radcat>. Users must submit an online application, and upon approval, have access to the software. A user's guide is e-mailed to approved users to assist them in the downloading process.

For TRAGIS, Mr. Paul Johnson briefly stated that he is working on updates to the main software of TRAGIS. Interested users can access TRAGIS via the website at <https://tragis.ornl.gov>. Users will be prompted to register, and this will allow them to access the software. If a user has previously installed an older version of TRAGIS, it may be necessary to uninstall the older version prior to downloading the new version, he explained.

Subgroup Updates

Inspections Subgroup

As the subgroup lead, Mr. Tim Runyon of the Illinois Emergency Management Agency presented the results of this subgroup's activities. The purpose of this subgroup is to identify inspection standards and provide uniform criteria for use by the Federal Railroad Administration (FRA) and FRA-certified state inspectors involved in Motive Power & Equipment (MP&E) and hazardous materials inspections.

Currently, fifteen states have rules, regulations, or policies requiring truck inspections. Only six states have rules, regulations or policies requiring rail inspections. FRA conducts point-of-origin inspections in accordance with the Safety Compliance Oversight Plan (SCOP). A 1,000-mile air brake test is conducted as an en-route requirement. There appears to be no common inspection format for use along transportation corridors.

The subgroup produced three forms to provide guidance for staff involved in inspections regarding equipment acceptance, pre-departure condition, and en-route for rail movements of spent nuclear fuel to temporary storage or a repository. These forms are as follows:

- Locomotive Inspection List-includes all items that should be inspected before a locomotive is accepted for use to transport spent nuclear fuel and high level waste.
- Freight Car Point-of-Origin Inspection List-includes all items that should be inspected after a train has been assembled and loaded prior to departure from the shipping facility.
- Freight Car En Route Inspection List-includes all items that are potentially "wear items" that may merit re-inspection at 1,000 mile intervals. All items from the previous list are included even though the majority of them are extra-regulatory.

Discussion and Comments on Inspections

One topic group member commented that carriers are stricter in their inspections. In regards to the 1,000 mile inspections, another topic group member stated that FRA can grant a 1,500-mile inspection interval provided there are no route changes or detours.

FRA HAZMAT inspections include looking at the rail cars, markings and shipping papers. FRA has started to conduct radiological inspections.

New requirements that are being implemented include reflective sheeting and stenciling on the rail cars. These requirements are due in part to grade crossing accidents that have occurred.

One topic member asked if FRA checks tie downs to see if they are fastened and/or have the right tension. Another member responded that FRA does check to ensure that packaging is secure, and that there are no defects.

Another question was asked related to the securement of packaging; specifically, if the NRC covers securement of packaging in their requirements. The response from a topic group member was that HAZMAT inspectors look at securement, but it is really the shipper's responsibility. Railroads are more stringent on inspections than the FRA.

One topic group member raised several issues relating to the legality of the inspection forms and the training needed for radiological inspections. Mr. Runyon responded that these inspection forms are a first draft and will most likely be revised and updated as regulations and requirements change. It was noted that there are still unanswered questions such as when will these forms be considered complete and how these forms will be certified. Mr. Runyon suggested that any additional specific questions be sent to him directly, and he will respond after the TEC meeting.

Tracking and Radiation Monitoring Subgroup

Ms. Sarah Wochos of the Midwestern Office of the Council of State Governments (MW-CSG) gave a brief overview of the tracking survey responses by the states. Many of the questions posed to the states concerned their use and experience of TRANSCOM. A complete set of survey responses from the states can be found on the TEC website.

Other results not related to TRANSCOM included the following:

- Only eight states have a law, regulation, rule, executive order or policy that requires shipment tracking, though many said they have an informal policy to track all shipments.
- Six states indicated that they will review and potentially revise the law, regulation, policy, etc. before spent fuel shipments begin.
- In regards to budgeting for tracking costs, six states charge a fee, one state charges a fee and uses DOE/WIPP agreement money, nine states use DOE/WIPP agreement money, and eight states have no budget for the tracking costs.

The next steps for the Tracking Subgroup will involve gathering the TEC participant surveys from the technology demonstrations. The responses from these surveys will be used to complete the basic recommendations by the subgroup. Additional avenues that the subgroup may pursue include:

- Whether TRANSCOM (or another system) can track shipments through an inter-modal system
- Whether a cask can be tracked or if it is sufficient to track the train only
- How to address locations without proper trajectory for signal transmission

The subgroup will continue to monitor new technologies, TRANSCOM and DOE integration work.

Discussion and Comments on Tracking

One topic group member asked which subgroup will be addressing radiation monitoring since this subgroup appears to be only concentrating on tracking. Ms. Wochos responded that radiation monitoring goes beyond what the Tracking subgroup can do at this time. Radiation Monitoring may be better addressed under the Inspections subgroup. The same topic group member emphasized that there is a need to address the radiological aspect as there are satellite systems capable of providing a dose rate which would help minimize the need for inspections.

Rail Planning Subgroup

Ms. Lisa Janairo (MW-CSG) briefly reviewed the Rail Planning Timeline document that this subgroup produced. The timeline had been sent to each Rail Topic Group member prior to the TEC meeting for review and comment. Comments were received from approximately six individuals. One comment suggested that an introduction be included. The subgroup reviewed each comment and made changes to the timeline as appropriate. The yellow highlights in the latest version of the timeline show the changes that were made based on the comments received by the subgroup.

At the end of the timeline, there is a separate page titled, "Issues for Further Discussion." This is a list of topics that came up in the subgroup's timeline discussions that the subgroup decided were not appropriate for the timeline. These issues include escorts, inspections and monitoring, equipment planning and accident data. The subgroup would like DOE to review this list and provide guidance on how to address these issues in the future.

Ms. Janairo stated that the subgroup is finished with their task and recommends that this timeline document be reviewed once every six months to incorporate any changes necessary.

Discussions and Comments on Rail Planning

There were no questions or comments from the topic group members.

Lessons Learned Subgroup

Ms. Jane Beetem of the Missouri Department of Natural Resources reviewed the subgroup's lessons learned document. Ms. Beetem explained that this document was a compilation of many existing documents and databases most applicable for rail transport of radioactive waste. During the document production process, comments from these documents were shortened to maintain conciseness and readability. She requested that editorial comments be e-mailed to her directly. The subgroup anticipates having a conference call in the next two weeks to address any additional comments.

Discussion and Comments on Lessons Learned

One topic group member asked if the subgroup was able to obtain any current information from utilities in regards to shipping spent nuclear fuel. Jane responded that the subgroup was unable to include any information from the utilities concerning their shipping of spent nuclear waste. One topic group member asked to be added as a member of the subgroup. One member suggested contacting Chandler van Orman of the Nuclear Energy Institute about lessons learned from utilities regarding shipping spent nuclear fuel.

Action Items

- Jay Jones will send an e-mail to TEC members soliciting their participation for the new Routing Topic Group
- Jay Jones will provide the routing process plan to TEC members in the next two weeks
- A conference call will be scheduled for the Routing Topic Group after the topic group membership has been decided