

**The Council of State Governments
Midwestern High-Level Radioactive Waste Committee**

Proceedings of the 19th Meeting
Kansas City, Missouri
June 22-23, 1999

Project Update

Mr. Don Flater (Iowa) called the meeting to order. After general introductions, Mr. Flater turned the floor over to Ms. Lisa Sattler (CSG-MW), who reported on the status of the Midwestern Radioactive Materials Transportation Project.

Ms. Sattler referred the group to the written project update in the briefing materials. She said she would confine her comments to the funding situation. Ms. Sattler mentioned that, as of December 31, 1998, OCRWM had terminated its cooperative agreement with CSG-MW. As a result, DOE's National Transportation Program (NTP), through the department's Chicago Operations Office, was the sole source of funding for the project in the coming fiscal year. Ms. Sattler also noted that there was quite a bit of carry over left from the funding her office had received to assist with the cross-country shipments of foreign research reactor spent fuel. This funding, however, was earmarked specifically for that particular activity. Ms. Sattler said that, due to a lack of funding, the June 1999 meeting would likely be the only one in 1999 for which she would be able to reimburse committee members for their travel.

Ms. Sattler said she would try to choose an inexpensive location for the next meeting in the event that committee members would be asked to pay for their own travel. She mentioned that the committee had ranked Milwaukee just behind Kansas City in the list of cities for future meetings. She said she had checked airfare to Milwaukee and found it to be reasonable. Mr. Dave Crose (Indiana) volunteered to host the fall 1999 committee meeting in Indianapolis. Mr. Crose also asked if it would be possible to use some of the carry-over funding to pay for committee travel. Ms. Sattler said she hoped eventually to rebudget some of the carry over for other purposes, but that, at this time, DOE's Savannah River Operations Office had indicated its preference for spending the money on cross-country activities. Mr. Tim Runyon (Illinois) suggested holding the next committee meeting in conjunction with the cross-country lessons-learned meeting to reduce costs. Ms. Sattler said that was a possibility.

Committee Reports

Cross-Country Transportation Working Group (CCTWG)

Mr. Flater reported on the activities of the CCTWG. He mentioned that the next meeting would be June 29-30 in Salt Lake City, with the security points of contact having a separate meeting on June 28.

Ms. Sattler provided some background information for the benefit of the committee members not serving on the CCTWG. She said the CCTWG had been organized in late 1998 to work with DOE on planning the cross-country shipments of spent nuclear fuel from foreign research reactors. The 1999 shipment would pass through Illinois and Iowa on its way from South Carolina to Idaho. The group had met in December and again in March, with the final meeting set for June in Salt Lake City. The final meeting would involve a walk-through of the DOE transportation plan, which the states and tribes had reviewed during the previous two meetings. Ms. Sattler said she and several other CCTWG participants were hoping for another meeting following the shipment to discuss lessons learned. At this time, however, DOE had not committed to a fourth meeting of the group.

Ms. Sattler asked Mr. Runyon if he would like to add anything to the report on CCTWG activities. Mr. Runyon reviewed the route selection process DOE followed for the shipment. From an original slate of four potential routes, DOE had selected one route — called the “black route” from the color on the original map — as its preference. This route bypassed Missouri and Kansas, but was the route with the longest distance traveled through Illinois. Mr. Runyon noted that the truck accident risks were higher in Illinois than in any other state on the route for the cross-country shipments. He emphasized that his concern with the route had nothing to do with the radiological risk from the shipments, which was extremely low, but rather from the nonradiological risks and the inequities of the selection process itself.

Mr. Runyon reviewed some of the criteria that DOE cited for the basis of its decision, and pointed out some inconsistencies. For example, Mr. Runyon noted that the route analysis report on which the route selection had been based was dated one month *after* the time that states learned of the department’s decision. In addition, the State of Missouri had asked DOE to abide by very stringent time-of-day restrictions around St. Louis, but the state did not require those same standards to be followed for spent fuel shipments over the same route coming from the University of Missouri-Columbia.

Mr. Runyon suggested that, for future campaigns, all potentially affected parties should put their “wish lists” on the table, and then work together to select a reasonable route. He advised against using anything less than a completely transparent selection process.

Mr. Flater asked Mr. Runyon if he knew where the shipment would exit Illinois. Mr. Runyon said he did not, but he said the RSPA had on its web site a database of state-required bypasses and curfews that applied to hazardous materials shipments (<http://hazmat.fhwa.dot.gov/nhmrr/query.wc>). He noted that the requested time-of-day restrictions around St. Louis were not listed on this site. Mr. Kevin Blackwell (FRA) asked if the curfews were based on mode. Mr. Runyon said that the city of St. Louis had imposed a curfew on Three Mile Island shipments. Mr. Blackwell added that curfews would have a greater impact on rail than they would on highway shipments. Mr. Flater suggested that curfews tended to arise when it was convenient. He said he preferred talking to people who live along the route and addressing their concerns rather than opting for a curfew.

Mr. Flater then said that the State of Iowa’s preferred route as published was I-280. He noted that I-280 might work better for Iowa, since the affected area was mostly cornfields, but on the Illinois side the population living along the route was significant. He stressed the importance of states and federal agencies — e.g., DOE and the Nuclear Regulatory Commission (NRC) — communicating about such issues so that the safest, most efficient route would be used.

After Mr. Runyon reviewed some additional inconsistencies in the route-selection process, Mr. Crose added that Indiana had also been a participant early in the CCTWG effort. He suggested that curfews would become more important in the route-selection process as more states chose to adopt them. Mr. Crose commended DOE for doing a good job of bringing the states together to address transportation planning for these shipments. On the negative side, he noted that the U.S. had spent billions of dollars and over a decade trying to find a solution to the storage problem for spent fuel from domestic nuclear power plants, but in only 6-12 months DOE was ready to take back spent fuel from foreign countries and ship it across the country.

Mr. Crose asked if DOE had made a decision whether to use the protocols in the *WIPP Transportation Safety Program Implementation Guide* (PIG) for the cross-country shipments. Ms. Sattler said DOE had displayed a matrix at the March CCTWG meeting that identified the WIPP PIG protocols and the

department's plan for the cross-country shipments. She noted that DOE was not likely to follow the protocol regarding the placement of radiological monitoring equipment on at least one vehicle in each convoy. Mr. Ralph Smith (DOE-WIPP) noted that, for the WIPP program, DOE had the luxury of using dedicated drivers who were trained to use the equipment. Ms. Sattler agreed. She added, however, that all the states and tribes on the route had expressed a strong preference for following this particular protocol. She suggested that, if DOE were not prepared to take the unanimous advice of the affected governments, perhaps the department should not have asked for input on this particular subject.

Mr. Blackwell asked about the states' preferences for shipments to the private spent fuel storage facility under development in Utah. He asked whether the Midwestern states hoped to follow the same type of transportation planning process that had been established for DOE shipments. Ms. Sattler said that a representative of Northern States Power (NSP), at the December 1998 meeting, had indicated a willingness to work with the states on the transportation program. She said the speaker had said the states would at least have a chance to review the transportation plan. She said she had followed up that meeting with a letter reaffirming the committee's desire to work with the utilities to plan for shipments through the region.

Mr. Blackwell wondered when the utilities would approach the states about shipments to the facility, given the timeline for completing licensing and construction. Mr. John Kerr (Minnesota) said that, after its experiences with a previous private storage plan, NSP appeared to be moving more slowly and cautiously with the Private Fuel Storage venture. He said the earliest date of operation for the Utah facility would be 2003. Mr. Kerr said he had asked both NSP and Dairyland Power Cooperative about potential rail routes from the sites, but he had not yet received an answer.

Ms. Elizabeth Helvey commented that the upcoming TEC/WG meeting would feature a panel discussion on possible private fuel storage facilities. She said Mr. John Vincent from GPU would be speaking on behalf of the utilities in the Private Fuel Storage venture. Ms. Sattler said she would obtain a list of utilities currently participating in the consortium.

Someone noted that the Western Governors' Association (WGA) had passed a resolution calling for private shipments to be treated in the same manner as DOE shipments. Ms. Sattler said the Midwestern states had passed a similar resolution several years earlier. She added that the Midwestern Legislative Conference was scheduled to meet in July, and asked if the committee would like to submit a resolution reaffirming that position. Several members of the committee agreed that a new resolution would be appropriate at this time.

Mr. Lew Steinhoff (DOE Defense Programs) offered a possible explanation for DOE choosing not to put radiological monitoring equipment on the vehicles. He said it was possible that the trucks were designated for "exclusive use" and, therefore, would not be permitted to carry anything besides the spent fuel. He described a situation in which the tritium program had to ship an adapter plate in a separate vehicle because the truck was considered exclusive use.

Regarding the route selection process, Mr. Steinhoff said it was possible that the decision had been made at the highest levels at DOE. He added that the spent fuel program staff in Washington had been meeting regularly with the NRC regarding the route selection.

Mr. Steinhoff also noted that DOE's decision to accept foreign research reactor spent fuel was driven largely by concerns over potential proliferation of nuclear weapons. He added that the commercial spent

fuel at domestic nuclear power plants was safely stored; however, much of the research reactor spent fuel in foreign countries was not. He agreed that it would be beneficial to have a lessons-learned meeting following the cross-country shipment, and added that he hoped to have such a meeting internally following the tritium shipments.

Mr. Flater said the NRC did not necessarily have the final say in matters related to routing. He cited the example of the State of Iowa taking a position against having a shipment of spent fuel pass through the Des Moines area. In that instance, the state contacted the NRC with information regarding an alternative route that avoided the Des Moines metropolitan area. The NRC eventually approved the modified route. Mr. Runyon suggested that the NRC's job was to protect the shipment from the people, not the people from the shipment. As a result, the radiological risk to the public was not necessarily a factor in the NRC's routing approvals.

Ms. Judith Holm (DOE-NTP) agreed, and said the U.S. Department of Transportation (DOT) was the routing authority, whereas the NRC had the safeguards authority. She said she was interested in the recent spate of curfews. She asked rhetorically if a large number of curfews would be tantamount to a ban on shipments. She said she thought a lessons-learned meeting would be a good idea. She suggested bringing in people who might not have been directly involved in the planning so that they would have a chance to see what really goes on during the process.

In closing the discussion, Mr. Flater asked Ms. Sattler to revise the committee's earlier resolution and circulate it to the committee for review. She agreed to do this, and said she would work with Senator Beverly Gard (Indiana) either to introduce the resolution at the Midwestern Legislative Conference meeting or to identify another legislator who would do so.

Transportation External Coordination Working Group (TEC/WG) and Topic Groups

Ms. Sattler reported on the activities of the **Communications Topic Group** of the TEC/WG. She said the group had reviewed a draft communications plan for DOE's NTP and would see a revised draft at the next meeting, scheduled for July 13-15, 1999, in Philadelphia. She also mentioned that she had included in the briefing materials some correspondence between the State of Nebraska and the NRC regarding the commission's opinion on the states' notification of local governments regarding impending spent fuel shipments. The state had written to the NRC following the publication of a paper by the Urban Energy and Transportation Corporation (UETC) on the subject. The paper had been prepared at the request of the Communications Topic Group.

Mr. Crose reported on the activities of the **Protocols Topic Group**. Mr. Crose explained that the purpose of the topic group was to assist DOE in developing department-wide transportation protocols. The department had decided to establish a set of standard protocols based largely on the recommendations it received from external parties. He said DOE had identified 17 areas where protocols would be beneficial. The department had also compiled a great deal of information on current practices and protocols, which had been distributed to TEC/WG members at the January meeting.

Ms. Sattler added that the protocols writing group was working on the draft protocol on routing. She said she had spoken with Mr. Runyon about the protocol and his concerns over the cross-country route selection. She said she would suggest to the writing group that they include guidance for handling a situation in which one state's preference would result in a greater impact on another state. Ms. Sattler asked Ms. Holm if she knew whether any draft protocols would be available at the July TEC/WG

meeting. Ms. Holm said the two protocols that addressed notification — general planning and advance notice — would be available. The writing group had almost finished the routing protocol, but the Senior Executive Transportation Forum had yet to approve the draft document for release.

Mr. Flater then asked Mr. Runyon to report on the **Rail Topic Group**. Mr. Runyon deferred to Mr. Blackwell, who had participated on the group's most recent conference call. Mr. Blackwell reported that the group had finalized the comparison between industry practice and the protocols contained in the WIPP PIG. This document would be available at the July meeting. Now that the group had completed the WIPP-PIG comparison, the group would go on hiatus and, therefore, not meet in Philadelphia.

TRANSCOM Steering Group

At this point, Mr. Flater said he would wait to give his report on the training topic group until after Mr. Runyon's report on the TRANSCOM Steering Group. Mr. Runyon said he had been appointed to represent the committee on the newly organized DOE TRANSCOM Steering Group. He had solicited input from the committee on current problems with and possible improvements to TRANSCOM, but had not received many responses. As a result, the recommendations he had made for making the system more user friendly were based on his own experiences with TRANSCOM.

Mr. Runyon said the Steering Group meeting was very helpful because it brought together many TRANSCOM users who had different purposes in using the software. He said DOE was working on TRANSCOM 2000, which entailed revamping TRANSCOM as a web site with a user I.D. and password. The new format should alleviate some of the login problems that users have had.

Mr. Runyon said he had suggested that TRANSCOM 2000 should change some of the features of the current system. For example, all the shipping information should be accessible in one document or screen rather than in several places. He also thought DOE should improve the messaging system to make it more like familiar systems such as Microsoft Outlook. The mapping portion of the software also should change to something more refined. Mr. Runyon thought links to other information, such as cask designs, would be useful on the web version.

Along with these changes, Mr. Runyon thought there should be administrative changes to the system. For example, individual states should have a TRANSCOM coordinator at each agency. A "superuser" should act as an administrator for user passwords for the whole state. Mr. Runyon said download times would improve with the web-based system, and he noted that upgrades would take place over the internet, as well.

Mr. Runyon concluded his presentation by saying that Mr. Bobby Sanchez, the new program manager for TRANSCOM, was doing a very good job, as was Mr. Gene Carnes. Mr. Runyon thought the first Steering Group meeting was a good one, with everyone willing to work together and negotiate, when necessary. He added that the goal was to have TRANSCOM 2000 up and running by mid-2000.

Mr. Crose asked about the timeframe for making changes to the current system. Mr. Runyon speculated that it would depend on the available funding. He added that it was surprising for DOE to allow such an important tool as TRANSCOM to have funding problems. Mr. Crose asked if the system was Y2K compliant, and Mr. Runyon said DOE was running a test to determine the system's status.

Mr. Crose also asked if a summary report of the first Steering Group meeting was available. Mr. Runyon said he did not know if DOE was preparing a report. Ms. Holm said she would check to find out. Ms. Sattler noted that DOE had distributed a list of needs and wants, and she speculated that DOE might consider the list to be the record of the meeting. She said she had included the list in the briefing materials. Mr. Runyon added that DOE would look at the costs of each item on the list to determine exactly how many of the suggested improvements the department could afford. In response to Mr. Runyon's earlier comment about funding, Ms. Holm said DOE had allocated new funding to TRANSCOM as part of the mid-year budget review process.

Ms. Sattler asked Mr. Runyon about the concept of the TRANSCOM "superuser." She said she had first heard about the idea at a WGA meeting. At the time, DOE described the concept as one person serving as a superuser for several states — e.g., the entire Midwestern region. She said she thought it might be difficult for an agency in the Midwest to devote a significant amount of staff time to assisting other states that were experiencing problems with TRANSCOM. She had noted that the Western states currently received funding from DOE for the WIPP shipments, therefore they would have financial assistance from DOE to pay for staff time spent on superuser activities. Mr. Runyon said it was possible that someone at his agency could serve as a technical support superuser for the Midwest.

Ms. Sattler also asked if DOE was planning to move the TRANSCOM Control Center from Oak Ridge to Albuquerque. Mr. Runyon said DOE had not yet made a decision on that matter.

After Mr. Runyon finished his report, Mr. Flater continued with the **TEC/WG Training Topic Group** report. He said the group had met in May, and the meeting went well. Mr. Flater had suggested testing the first four of the 16 Transportation Emergency Preparedness Program (TEPP) training modules at the upcoming meeting of the TEC/WG. He added that the committee would hear a presentation the next day on the new modules. Mr. Flater said he perceived a positive change in attitude among all the Training Topic Group participants, notably DOE and its contractors.

Mr. Flater then addressed medical training. He said this issue had come up much earlier, and that the group had divided the subject into pre-hospital and emergency room training. The training committee had questioned the appropriateness of covering training for doctors, on the grounds that any radiologist on staff at a hospital should know how to handle contaminated patients. As a result, the medical training issue had receded from the scope of the training group's activities and fell to the medical training group instead.

Mr. Flater said he had recently received a press release from the Pennsylvania Emergency Management Agency regarding the award by DOE of a \$1.2 million contract to a Pennsylvania firm to provide medical training for the states affected by the WIPP program. He said this type of training was just what the medical training topic group had been planning to address. He noted that some states already had developed such courses, often by making modifications to the existing FEMA course. Mr. Flater suggested that DOE had erred in issuing a fairly lucrative contract for something that already existed in many forms.

Mr. Smith said the hospital training for WIPP states was not a new idea. He said the original requirement for DOE to provide hospital training arose when the nurses in New Mexico had threatened to sue DOE if they did not receive proper training to handle patients contaminated as a result of WIPP activities. DOE had previously had a year-to-year contract with REAC/TS in Oak Ridge to provide the training, but the contract was not working out well. As a result, DOE decided to bid the contract commercially.

The new contract was for one year with four one-year options. Mr. Smith acknowledged that Mr. Flater had spoken with him about some negative feedback he had heard about the new contractor. He said the Western and Southern states had been involved in reviewing potential contractors because DOE was opening corridors in these regions. Mr. Smith had not thought to include the Midwestern and Northeastern states simply because there were no shipments scheduled through these regions in the short term. As a result, Mr. Smith did not hear until very recently that someone at the Pennsylvania Emergency Management Agency had personal knowledge of problems with the contractor. He said if DOE encountered any problems with the contract, the department would re-bid the contract after one year.

Mr. Smith added that the WIPP program would like to get out of the training business within five years. He said it did not make sense for all different DOE programs to conduct training when more general products — such as the new modules — would soon be available. Mr. Flater criticized the WIPP program for consulting representatives of other states in reviewing contractors while overlooking the expertise to be found in the home state of the company, namely Pennsylvania.

Mr. Kerr asked if there was any coordination between the training required for hospitals near nuclear power plants versus hospitals along transportation corridors. Mr. Smith said there was not, but he added that the company contracted by WIPP had done hospital training near power plants.

Roundtable of State Activities

Iowa: Mr. Flater said he had been relatively busy trying to close some sites, as well as active in training along the route for the cross-country shipments. In addition, Iowa had a new governor and Mr. Flater's boss retired after many years, so there were many changes taking place in administration in the state and in the Department of Public Health.

He said interest in shipments across the state was very low. The governor had been content to let the Department of Public Health and the Emergency Management Division oversee shipping activities. Regarding training, Mr. Flater said there were 256 fire departments along the interstates in Iowa, and the turnover rate was around 40 percent. As a result, the approach in Iowa was to train regional teams rather than all responders.

Mr. Flater mentioned that Ellen Gordon in the Emergency Management Division should be the point of contact for emergencies while a shipment was en route. Ms. Sattler asked if Mr. Flater would request additional access to TRANSCOM for the cross-country shipment, and he said he would. He hoped to be able to see the shipment from the time it entered Illinois.

Ohio: Mr. Robert Owen reminded the committee that a consortium of Ohio state agencies was working together to address routing. He said Ohio State University had applied to the Public Utilities Commission of Ohio (PUCO) for a grant to analyze routes in the state. Currently, the focus was on highway routes; the plan was to cover rail routes one year later.

The other issue in Ohio was a letter from Governor Dean of Vermont soliciting support from the other governors on the matter of the Secretary of Energy proposing to take title to commercial spent nuclear fuel and to leave the spent fuel on-site pending the opening of a national repository. Mr. Owen had reviewed the letter and prepared a recommended response to Governor Taft on the position of the Ohio Department of Health on how to approach the issue. Mr. Owen found that there was no states' rights

issue relative to the Secretary's proposal, because nuclear power plants had never fallen under the jurisdiction of the states. Nuclear power plants were traditionally associated with large bodies of water for obvious reasons. Dry storage was demonstrated to be safe. In fact, the PUCO conducted a study of the Davis-Besse storage facility and found it to be as safe as or even safer than pool storage. Based on these findings, Mr. Owen had recommended that the state not sign on to Governor Dean's letter. He added that the Department of Health would contact the PUCO and the Emergency Management Agency for their concurrence on this recommendation prior to going to Governor Taft.

Mr. Crose asked if the funding for the grant to Ohio State University was part of the state's Hazardous Materials Emergency Planning (HMEP) grant. Mr. Carlisle Smith said it was not.

Wisconsin: Ms. Christine Bacon reported that not much was happening with regard to transportation in the state. She said she would get in touch with Dairyland Power to find out what the company's plans were for shipping spent fuel from the site. Ms. Bacon said the state had convened a working group of state agencies last year, but decided to put the group on hold pending the receipt of more information on shipments that would have an impact on the state. She speculated that training would be an issue for the state — for example, whether to train along all routes or to establish regional teams. Escorting was likely to be another point of debate.

Mr. Flater asked if Ms. Bacon had heard from the health department regarding Wisconsin's status as an agreement state. Ms. Bacon said everything looked good and that the agency was currently working on rules. Mr. Owen added that Ohio had targeted August 30 as the effective date of its agreement state status.

Ms. O'Claire made a few comments on behalf of the Ohio Emergency Management Agency. She said her office was participating on the Training Topic Group conference calls and that Ohio was planning to pilot test the first four TEPP modules.

She added that two steam generators had been shipped by rail from the Cook plant in Michigan to Barnwell in South Carolina at the same time that *Atomic Train* was airing on network television. Mr. C. Smith said he had fielded some calls regarding the movie, but none from the public. He added that the PUCO had inspected the steam generator shipments and had found some violations on the first shipment. He said the violations mostly involved paperwork, although there was a problem with the brakes on one car — namely, the slack adjusters would not actuate.

Ms. O'Claire also said the first rail shipment of low-level waste from Fernald had departed on May 24. She said this was the first of 100 shipments planned through 2004. Each train would have 55 cars. Ms. O'Claire said the activity of the material was so low it was not even classified as LSA. She said there had also been some truck shipments from Fernald to Portsmouth and the site was also planning to resume truck shipments to the Nevada Test Site. She reminded the committee that these shipments had been halted in December 1997 as the result of an incident with liquid leaking while the shipment was in transit. Lastly, she said Ohio was expecting to see some research reactor shipments coming from Michigan on their way to South Carolina.

Illinois: Mr. Runyon said the Illinois Department of Nuclear Safety wound up rewriting some of its public information materials in connection with the airing of *Atomic Train*. He had received some good information from DOE on the mini-series, but said it would have been useful for the department to have

provided more. Ms. Sattler asked Mr. Runyon to send copies of the revised materials to her for distribution to the rest of the committee.

Mr. Runyon said his agency did not like the way DOE limited state access to TRANSCOM to two hours prior to the shipment entering the state. He said DOE staff had told him NRC safeguards requirements were the reason behind this two-hour limit. Mr. Runyon pointed out that the people with access to TRANSCOM already had clearance to receive safeguarded information and were well versed with the legally binding requirements attached to that information. He referred to the correspondence between the State of Nebraska and the NRC regarding prenotification of local government officials. He noted that the NRC position appeared to be that state personnel could pass safeguarded information to anyone as long as the requirements for receiving that information were spelled out.

Ms. Holm speculated that the two-hour limit could have been linked to the capacity of the TRANSCOM system rather than to NRC requirements. Mr. Runyon suggested that the two-hour limit might be derived from an old estimate for the amount of time it took for the Illinois state agencies to send staff from Springfield to meet a shipment at the border.

Ms. Holm said DOE was looking into the background of the two-hour benchmark. Mr. Runyon said it would be useful to see a shipment from the point of departure until it left the state. He objected to having to make a special request, for each shipping campaign, to have additional access to the shipment.

The committee discussed whether to send a letter to the NRC requesting clarification of the commission's position regarding access to shipments via TRANSCOM. Ms. Holm said she would take this issue back to the NTP for consideration. She said Mr. Sanchez at NTP was looking at the same issue.

Mr. Crose said he would like to see the committee take a position on the matter, perhaps in a letter to the NRC or DOE. Mr. Runyon mentioned that DOE had asked the TRANSCOM Steering Group to survey the states regarding superusers. Ms. Sattler suggested asking on the same survey how many hours in advance the states would like to see the shipment. Mr. Crose suggested obtaining a list of TRANSCOM users from Mr. Carnes.

Indiana: Sen. Beverly Gard reported that the legislation she sponsored had passed. A utility lobbyist had managed to change the fee from \$1,000 per cask to \$1,000 per shipment. During the committee debate, the house had eliminated the requirement for a public hearing. Mr. Blackwell asked for clarification of which parties would be considered "responsible for the shipment." Sen. Gard said the party would be the one responsible for overall coordination of the shipment. Sen. Gard added that she would like to expand the law to apply to other spent fuel and high-level waste shipments, perhaps even to WIPP shipments.

Mr. Thor Strong (Michigan) asked about the law's requirements for state agency coordination. Sen. Gard said the State Emergency Management Agency would take the lead, but must coordinate with other affected agencies.

Mr. Crose reported on the Fernald shipments. He said one of the communities on the western side of the state had sent the fire chief and other officials to visit Fernald prior to the first shipment. Mr. Crose was concerned that the unit trains bearing "radioactive" placards would raise attention. He said the state had

trained 100 people along the route and sent letters to all the local agencies. The state was also furnishing monitoring equipment to the hazardous materials response teams on the corridor.

Mr. Crose also mentioned that the state would be participating in a full-scale exercise to test emergency response capabilities in Highland, Indiana. The exercise would be Saturday, October 2. Mr. Crose mentioned that Mr. Jim Price from HAMMER would have more to say on the subject the next day. He offered to send information to anyone on the committee that might be interested in observing.

Michigan: Mr. Strong reported that Governor Engler had initially been in favor of co-signing Governor Dean's letter but had decided against doing so. Mr. Strong mentioned that the D.C. Cook shipment of the steam generators had taken place one month earlier. He said the generators were shrink-wrapped in blue plastic. The site still had two more steam generators to ship. The company had actually started to move the generators, but scheduling problems at Barnwell had caused a delay.

Mr. Strong also reported on the Paralex Project, in which the U.S. and Russia were jointly converting weapons-grade plutonium into mixed-oxide fuel for commercial power production. The U.S. part of the project would entail shipments of MOX fuel from Los Alamos to Chalk River in Canada. Originally, Port Huron had been on the list of routes for the shipment. Governor Engler had written to Secretary Richardson in late summer 1998 asking for a public hearing in the Port Huron area. The secretary later responded that I-69 and the Port Huron route had been removed from consideration.

Due to delays on the Russian side of things, DOE had revised the environmental assessment and was now looking at seven routes, including one across the Mackinaw Bridge. Mr. Strong said DOE appeared to be one month away from a decision on routing.

Regarding legislation, Mr. Strong reported that a bill resembling Sen. Gard's bill had been introduced one year earlier in Michigan. Several state agencies suggested revisions, including having the Department of Environmental Quality be the lead agency (instead of the State Police). In addition, the suggestion was made that the overall plan should deal with emergency response as well as safe routine transportation. The intent was to give the state authority to go ahead with a plan similar to the WIPP FIG.

Mr. Strong also reported that the University of Michigan would be making a shipment later this summer of research reactor spent fuel. The shipment had been scheduled for 1998 but had been delayed. The state had met with the University of Michigan staff. The last time the university had shipped, interstates were used. Now, however, the state was interested in using U.S. 23, which was a limited access, four-lane highway. The university was working with the U.S. Department of Transportation and with Mr. Strong's office to do a risk study. Mr. Strong said the state was on the verge of writing to DOT to request recognition of U.S. 23 as a state designated alternative route. Mr. Strong said he had been coordinating with Ohio on concurrence for this change.

Mr. Strong said it was possible the state would have the State Police and the Department of Environmental Quality escort the shipment. The distance between Ann Arbor and the state border was 35 miles. Mr. C. Smith said the PUCO was planning to do a joint inspection in Ann Arbor rather than stopping the shipment at the Ohio border for inspection. TRANSCOM would be used to track the shipment.

Ms. Sattler asked about the reason for the delay in the 1998 shipment. Mr. Strong said he assumed it was a DOE scheduling problem. Ms. Holm said it could have been a problem with availability of casks. Mr. Runyon asked how Mr. Strong's office had done the routing study. Mr. Strong said the study was following the DOT guidance document.

At this point, Mr. Runyon suggested that a future committee meeting include a presentation on DOE's transportation models, including RADTRAN and HIGHWAY.

Mr. Crose asked Mr. Strong whether the proposed legislation charged a fee for shipments. Mr. Strong said his office had a built-in funding mechanism and that the preference was to maintain that mechanism to meet the bill's purpose of ensuring emergency preparedness. He noted that the fee included in the original bill would only provide funding when shipments took place.

Minnesota: Mr. Kerr said things had been relatively quiet in his state with regard to high-level waste. He said it was gratifying to see other Midwestern states passing or considering legislation on high-level waste transport, since the Minnesota statute provided the blueprint for the committee's model legislation. He said it was good to see that the shortcomings of the Minnesota statute had been corrected in the model legislation.

Mr. Kerr said his agency had tried for the last two years to correct one particular deficiency, namely the fact that the \$1,000 per cask fee was deposited directly into the general fund rather than being earmarked for agencies affected by shipments. Mr. Kerr's office had proposed a legislative initiative but had not received permission to go forward with it due largely to the ongoing transition to a new governor.

Regarding storage of spent fuel, Mr. Kerr said nine of the 17 approved casks would be loaded at the Prairie Island facility by the end of June. Mr. Kerr noted that the utilities working on the Private Fuel Storage project — including NSP — were focusing on licensing issues rather than giving much thought to transportation. The group submitted a license application in June 1997 and was still looking to 2001 for approval. Before the end of summer, the NRC was scheduled to complete its environmental impact statement for the proposed facility. During the fall, there would be public hearings in Utah on the subject. Shipments were expected to begin in the 2002-2003 timeframe.

Mr. Runyon said he wondered how quickly the consortium would be able to procure casks for storage and transport. Mr. Kerr said he thought the group was still planning to use multi-purpose canisters. Mr. Owen said that an official at the NRC had informed him there were five or six designs available for dry storage. Mr. Runyon noted that manufacturing the number of casks needed would take a significant amount of time.

DOE Updates: Commercial Light Water Reactor Project

Mr. Flater then turned the floor over to Mr. Steinhoff. Mr. Steinhoff said he would skip the overview and introductory material. He noted that the interaction he had had with groups such as the Midwestern High-Level Radioactive Waste Committee had been very helpful to him and his program. He added that Ms. Helvey's assistance had also been invaluable.

Mr. Steinhoff reminded the committee that, in October 1997, four lead test assemblies (LTAs) containing tritium-producing burnable absorber rods (TPBARs) were placed inside the Watts Bar Reactor in Tennessee for irradiation. The LTAs were removed in February 1999 and were currently cooling in the

spent fuel pool. DOE was now getting ready to ship these LTAs, using the NAC-LWT cask, to Idaho for examination. Mr. Steinhoff said 4-6 of the TPBARs would be trisected and shipped to Pacific Northwest National Laboratory in Washington for further examination.

The rest of the TPBARs would remain in interim storage at Idaho until the 2004-2006 timeframe. The Idaho Settlement Agreement called for all radioactive material imported into the State of Idaho to leave within five years. DOE has asked for a two-year extension of the five-year limit. Mr. Steinhoff said the program would like to ship the remaining rods to the Savannah River Site for further study.

Mr. Steinhoff said the first shipment would depart on July 6, and the last one was scheduled for September 7. There would be four shipments in all.

Mr. Steinhoff then explained a recent change in the plan for shipping the TPBARs. DOE's RFP had specified a legal-weight configuration for the trucks, which NAC — the contractor — had agreed to provide. During the dry run, however, the truck with an empty container weighed close to 84,000 lbs., which was over the legal weight limit. To complete the dry run, NAC removed the rear impact limiter to meet the legal weight restrictions.

Mr. Steinhoff said the issue was how to complete these four shipments. NAC was working to modify its Safety Analysis Report for Packaging and to change the trailer configuration to meet the legal-weight limit, but admitted that it might not be possible to do so in time to meet the July 6 date for shipping. DOE said this option was not acceptable. As a result, the first shipment would have to be overweight.

Mr. Steinhoff asked the state representatives about their preference for conducting the remaining shipments — either in an overweight configuration with an ISO container or at legal weight with a personnel barrier, which resembled a large cage. He said the ISO container had the advantage of keeping the cask clean while in transit. The suggestion was made that a tarp could be used to cover the personnel barrier, as was done for the shipments from Three Mile Island. Shielding was not an issue, because no credit had been taken for the ISO container with regard to shielding. One potential disadvantage to using the personnel barrier was that the container would be visible through the barrier.

The preference of most states was to use the ISO/overweight configuration. Tri-State, the carrier, would contact the states to get the necessary permits. Mr. Steinhoff said the shipments were HRCQ, but were not regulated by the NRC because they did not involve any licensed material. DOE requirements would apply to the shipments; DOE orders, however, did not require prenotification for anything besides spent fuel or high-level waste shipments. Nevertheless, Mr. Steinhoff said he would make sure that the states received a letter of notification for the first shipment, if they so requested. Mr. Flater and Mr. Runyon requested that their states receive such notification. Mr. Steinhoff added that the transportation implementation plan was undergoing some last-minute changes and would be distributed within a few days.

Mr. Steinhoff addressed the route for the shipments, which the states had reviewed. Mr. Patrick Patten (FRA) suggested changing the "Kansas City, Kansas" reference to "Kansas City, Missouri," since the shipment would not actually enter the State of Kansas. Mr. Steinhoff also reviewed the list of DOE contacts for the program and the shipping schedule. There being no further questions or comments, Mr. Steinhoff thanked the states for their input on the matter of the cask.

DOE's Transportation Safeguards Division

Mr. Flater turned the floor over to Mr. Michael Connor with DOE's Transportation Safeguards Division (TSD), located in Albuquerque. Mr. Connor said the TSD briefed federal, state, and local law enforcement officials, with about 90 percent of these presentations given to local officials.

The TSD was responsible for the management and operation of the Transportation Safeguards System. The mission of this system was the safe, secure transport of nuclear weapons between DOE sites and military installations. The TSD was established in 1975 when elements of several agencies were consolidated under a single office in the Albuquerque Operations Office. The three main elements of the new consolidated system were people, equipment, and communications. Mr. Connor noted that 95 percent of the TSD's activities involved nuclear weapons or strategic material. The division did conduct some non-weapons related activities, however.

TSD maintained a corps of couriers or special agents in Albuquerque; Amarillo, Texas; and Oak Ridge, Tennessee. The division also maintained modification and training facilities throughout the country, as well as a nation-wide communications system.

Mr. Connor displayed a picture of the equipment used by TSD, which included a highly-modified armored tractor with a built-in satellite tracking system. Because the trucks avoided stops during shipments, the ergonomic features of the tractors were important for the comfort of the special agents. Like the tractor, the safe, secure trailer (SGT) was crash resistant. It weighed 42,000 pounds when empty. Mr. Connor described the system as a "vault on wheels." There were no markings on the vehicles to identify them as being part of the TSD. The only way to distinguish the vehicles from regular commercial trucks was the government license plate.

Mr. Connor said the maximum number of vehicles in a convoy, excluding escorts, would be four. More than four vehicles would be difficult to manage. Each convoy included escorts, although Mr. Connor could not discuss the number of escorts that typically accompanied a shipment. He did say that the escort vehicles were modified Ford vans, and that they had federal license plates.

Mr. Connor said the convoys would go through weigh stations if requested. TSD made a point of briefing law enforcement agencies so that the officers would be able to recognize TSD vehicles and wave them on at the weigh stations.

The TSD maintenance program was very important. For every week of use, a vehicle must be down for two weeks for maintenance and inspection. Each tractor and trailer underwent the equivalent of a DOT annual inspection prior to each mission. Escort vehicles were road tested prior to each mission.

Mr. Connor noted that the TSD had been downsizing over the past few years. It was possible the size of the program would increase in the coming years as a result of the need to dispose of surplus material.

The dispatch and notification center, located in Albuquerque, operated 24 hours per day. All shipments were tracked using a 15-second real time satellite tracking system capable of 50-meter mean accuracy. The screens at the center were all touch based and were capable of a resolution of one mile by one mile. Emergency response was handled through this office, as well.

Special agents were federal law enforcement officers. Under the Atomic Energy Act, the special agents had jurisdiction over "national security areas," which included inside the walls of the trailer during normal transport and expanded to past the trailer in the event of an incident. The agents were authorized to use deadly force within the national security area. Mr. Connor mentioned that, if there were a hold-up at a truck stop when the convoy happened to be there, the special agents were not supposed to assist in apprehending the perpetrators. Their only role was to protect the shipment and its cargo.

Mr. Connor reviewed the skills and training requirements for the special agents. He emphasized that all agents must be willing to use deadly force to protect the nuclear weapons, which is different from the requirement that other law enforcement officers be willing to use deadly force if lives were threatened.

Mr. Connor said the TSD conducted in-service training for its special agents six weeks out of every year. He said state and local law enforcement agencies were often invited to participate. Every two years, the division conducted a joint training exercise with state agencies. In April 1999, TSD conducted this exercise in Texas. Mr. Connor added that the TSD was considering inviting state representatives to Albuquerque for a briefing on the division's activities.

Next year, the TSD would reach its 2 million mile marker. The division to date had not had a fatality or a release associated with any of its shipments. Mr. Connor commented that DOE's RAP teams handled emergency response to accidents. In an emergency, the goal was to establish three cordons. The first was for security, with the establishment of a national security zone in which agents must be able to see the trucks and their cargo. The second cordon was a 2,000-foot zone for safety in the event of an explosion. Usually TSD would ask local law enforcement to set up this zone. The third zone was for radiological protection in the event of an explosion accompanied by possible contamination.

In the event of an emergency, the convoy would contact the control center, which then would notify the state police dispatch center. After that, the line would remain open until local law enforcement arrived at the scene. Other calls would go out to the state-designated contact and the Federal Bureau of Investigation.

In response to a question, Mr. Connor said the TSD had sent letters regarding the division to the governors of the 48 lower states, since these were the ones through which TSD might have shipments. He would not comment on which states were affected by shipments, although he did acknowledge that not all of the Midwestern states experienced shipments.

Mr. C. Smith asked if the drivers worked in teams. Mr. Connor said they did and added that they drove for three- to four-hour shifts and went off duty after 36 hours.

Ms. Sattler asked Mr. Connor if the TSD had conducted any exercises recently in the Midwest. He noted that the division usually selected exercise locations in states that experienced a number of shipments. He noted that the TSD was planning to do another exercise in 2001. The division looked for states that had a four-lane highway they would be willing to shut down. As part of his presentation, Mr. Connor showed a brief video on the TSD program.

DOE Updates: Waste Isolation Pilot Plant (WIPP)

Mr. R. Smith presented the update on WIPP. He reported that there had been 14 shipments as of the time of the meeting. He did not know when the State of New Mexico would issue its RCRA Part B permit for

the site, which would allow DOE to begin disposing of mixed TRU waste. He speculated that February might be the date for receiving the permit. He mentioned that the department had signed an agreement with the state regarding shipments of non-mixed waste to the site.

On the subject of opening shipping corridors, Mr. Smith said the Savannah River Site would not ship until the year 2000. Open corridors included Rocky Flats, Los Alamos National Laboratory, and Idaho National Engineering and Environmental Laboratory (INEEL). Mr. Smith expected to see the Hanford corridor open in October, with the likelihood of escorts for the early shipments due to the responders along much of that corridor not having been trained.

Mr. Smith commented that DOE owned only 15 TRUPACTs, which was enough to have 12 in operation at any given time. He said DOE had terminated its effort to privatize the entire transportation system — including the procurement of packages. When questioned about the sufficiency of the number of TRUPACTs, Mr. Smith said the program would ultimately need 65-70 containers to achieve its target acceptance rate. He added that DOE had not purchased any new TRUPACTs since 1989. At that time, the containers had cost around \$250,000 apiece. Today, the estimated price was \$400,000.

Mr. Smith mentioned that the department was working with the State of Texas on a possible route change through that state. The purpose was to save time and money and to reduce the population exposed in both Texas and New Mexico. Mr. Smith was not sure how the discussions would go regarding the route change.

Mr. Christopher Wells (SSEB) asked Mr. Smith whether DOE and the State of New Mexico would have to come to agreement regarding documentation for each shipment of non-mixed waste. Mr. Smith said each agreement would apply to an individual waste stream.

Mr. Smith also announced that Dr. Ines Triay had been named the new manager of the WIPP site.

Mr. Runyon asked about the timeline for shipping waste to WIPP. Mr. Smith said that, when DOE opened the corridors for Mound, Argonne National Laboratory-East (ANL-E), Lawrence Livermore National Laboratory, and the Nevada Test Site, the plan was to remove almost everything from those sites within six months. ANL-E was one site that would continue to produce TRU waste, so some additional shipments would be necessary at a later date. Mr. Smith added that the WIPP site would not be able to accept waste from any site that was not ready to ship. As a result, the timeline for shipping was dependent upon the sites that were planning to ship. He said 2004 was the current timeframe for shipping from ANL-E.

DOE Updates: National Transportation Program (NTP)

Ms. Holm focused her presentation on DOE's proposal to develop umbrella grants for transportation. She noted that WIPP currently provided 75 percent of the \$4 million in DOE funding related to transportation. She said throughout the department, transportation funding was inequitably divided among the states. The Western and Southern states received a sizable portion of the funding due to their involvement with the WIPP program. In contrast, the share of funding received by the Midwestern corridor states (including Iowa, Nebraska, and Illinois) was not commensurate with the impact that DOE's radioactive materials shipments had on these states. One of the goals of the proposed umbrella grant was to arrive at a more equitable distribution of funding.

In addition to the equity issue, expected outcomes of the umbrella grant included greater administrative efficiency within DOE, with all programs contributing to a single composite grant rather than having several separate grants. DOE also hoped to see emergency response resources at the state and local level improve as a result of the new funding proposal. Another advantage would be that programs would be able to concentrate on their core missions rather than tending to cooperative agreements or grants.

Ms. Holm presented some very preliminary information regarding a formula proposal for calculating grant amounts. She said a list of questions and an overview paper on the proposal would be available soon in connection with the upcoming TEC/WG meeting. Mr. R. Smith said his office was in favor of the umbrella grant concept. Ms. Linda Desell said OCRWM was very interested in hearing what the states had to say about the matter, since the grant could have an impact on how OCRWM would administer Section 180(c) assistance when it became available.

Ms. Sattler asked several clarifying questions regarding the status of the proposal and the decisions to be made by the Senior Executive Transportation Forum in the coming weeks. Ms. Holm said the forum would meet in two weeks and would decide on the concept itself, not on any of the specifics. Ms. O'Claire asked if DOE were planning to replace Section 180(c) funding with the consolidated grant funding. Ms. Desell said OCRWM wanted to know if the states thought the umbrella grant would be an appropriate vehicle for distributing Section 180(c) funding. Ms. Holm said DOE would solicit feedback on any umbrella grant proposals from the TEC/WG, the National Governors' Association, the regional groups, and through the *Federal Register*.

DOE Updates: Civilian Radioactive Waste Management System (CRWMS)

Ms. Linda Desell reviewed the decision process for reaching major milestones related to the repository. In 1998, OCRWM released the Viability Assessment, which summed up the research to date and identified critical issues that would need to be addressed prior to making a decision to recommend the site for the repository. Critical issues included testing the performance of possible waste package materials and evaluating alternative repository designs.

Based on the generally positive conclusions of the Viability Assessment, OCRWM was proceeding to the next step in the process — namely, developing the environmental impact statement. Following the completion of the EIS in August 2000, OCRWM hoped to submit a site recommendation in July 2001. If the site recommendation were to be accepted, OCRWM would submit the license application to the NRC in March 2002.

Ms. Desell mentioned that OCRWM would hold 13 public hearings across the country on the draft EIS, which was scheduled to be published in July 1999. She said the draft EIS would cover, among other issues, the impacts of transporting materials both nationally and within the State of Nevada. The national transportation scenarios would include “mostly rail” and “mostly legal-weight truck.” The public hearings would be moderated. Ms. Desell said comments would be accepted via all possible media. She said OCRWM would prepare a comment response document.

Ms. Sattler asked how the sites for the public hearings had been chosen, and noted that there were not any locations in the Midwest. Ms. Desell said Ms. Wendy Dixon or Ms. Jozette Booth would be able to answer questions regarding the site-selection process for public hearings. She speculated that the choice of Boise for one location might be related to shipments of high-level waste from Hanford ultimately destined for the repository.

Ms. Desell then reviewed the site recommendation report, the requirements for which were found in Section 114 of the Nuclear Waste Policy Act, as amended. In addition to a summary of the technical information from the site, the report must also include OCRWM's analysis of its compliance with the siting guidelines; information from the Governor and legislature of Nevada; and the NRC's preliminary comments on the sufficiency of the report. Ms. Desell said OCRWM was on target for completing the EIS and the site recommendation report.

Ms. Desell noted that there were several lawsuits pending against the department in federal court. One case — in the District of Minnesota — was in the discovery phase. DOE had been asked to produce all its financial documents dating back to 1983.

Ms. Desell next summarized the Secretary's proposal to the utilities to take title to the spent fuel while still on-site. Utilities that decided to accept this proposal would, in return, drop all lawsuits against the department related to interim storage. Ms. Desell commented that negotiations were ongoing at very high levels with some utilities that had expressed interest in the proposal. Ms. Desell could not comment, however, on the status of those negotiations.

Ms. Desell concluded her presentation with a brief review of the status of legislation pending in Congress. She said the latest development was the introduction in the Senate of a substitute bill for S. 608. This bill would require early receipt of spent fuel as soon as practicable following the receipt of the construction authorization from the NRC. The legislation would not require OCRWM to develop an interim storage facility. At the time of the meeting, Ms. Desell said the bill had not yet been assigned a number.

Federal Railroad Administration Update

Mr. Blackwell reported that he had been focusing mainly on low-level waste shipments, plus the merger between CSX and Conrail. Mr. Blackwell mentioned there would be another merger coming up in July, namely between Illinois Central and Canadian National.

Mr. Blackwell said the FRA planned to look at the Safety Compliance Oversight Plan (SCOP) every year in late summer or early fall. The SCOP described what the FRA would do for high-level radioactive materials shipments. He said the FRA had not yet figured out how to involve states in the revision, and speculated that comments could be channeled through the regional groups.

Mr. Blackwell also reported that the FRA was working on its response to a letter from OCRWM, dated June 1995, asking for the FRA's opinion on the legal right of states and tribes to stop and inspect trains carrying radioactive material. The answer was still in draft form, but Mr. Blackwell indicated that it was heavily steeped in pre-emption issues. He hoped the letter would be available at the July TEC/WG meeting. Once the letter to OCRWM was complete, it would be up to that office to decide how to disseminate it. Mr. Flater suggested that states could obtain the memo through the Freedom of Information Act.

Mr. Crose asked why it was taking four years to reply to the original letter. Mr. Blackwell said the letter addressed four separate issues, some of which were harder to answer than others:

1. The right of states to inspect.
2. The right of tribes to inspect.
3. The right of states to stop shipments.
4. The right of tribes to stop shipments.

Mr. Blackwell said one answer to the question about stopping a train was that no one had a right to stop a train just anywhere — doing so would pose an unacceptable safety issue. If arrangements could be made ahead of time to conduct an inspection in a specific location, then stopping the train should not be a problem.

HAMMER, TEPP, TEMPER, and POPEYE

Mr. Flater then turned the floor over to Mr. Jim Price from DOE's HAMMER training facility in Hanford, Washington. Mr. Price reviewed the status of the department's new Modular Emergency Response Radiological Transportation Training (MERRTT) program. In July, the modules would be finalized and presented to the TEC/WG at its meeting in Philadelphia. Four of the modules would be pilot tested at the meeting.

Mr. Price said the self-study modules were designed to be 30 minutes in length. At the request of the Training Topic Group of the TEC/WG, the modules corresponded to the accepted hazmat responder levels. He said the department was not planning to "take ownership" of the modules. Instead, the states would have the opportunity to use these modules as they saw fit, incorporating them to the extent desired into their own training curricula.

After reviewing the blocks of modules and their application, Mr. Price said the issues remaining to be resolved included how to distribute the modules and the learning/evaluation process. In terms of evaluation, DOE was interested in knowing whether the modules were effective, and whether the department could improve delivery. In response to a question from Ms. Holm, Mr. Price said the plan was not necessarily to select one delivery option. He hoped the state points of contact would provide feedback on this matter.

Mr. Price then discussed HAMMER's experiences in working with states on emergency response exercises. In addition to the ROUNDUP and TEMPER exercises, HAMMER was now working on Exercise POPEYE with the Lake County Local Emergency Planning Commission in Indiana. He said POPEYE would take a "bottoms-up" approach, with the local personnel driving most of the work. This format was in contrast to the recent TEMPER exercise, in which DOE did much of the planning. He mentioned that the scenario involved a stolen truck carrying DOE radioisotopes. Mr. Price concluded his presentation with two brief videos of the ROUNDUP and TEMPER exercises.

Transuranic Waste Shipments Through the Midwestern Region

Mr. Thomas Baillieul with the Columbus Environmental Management Project presented information on an initiative within DOE's Office of Environmental Management. Mr. Baillieul explained that, in 1991, the Ohio Field Office had planned to move TRU waste to the Hanford site in Washington. At the time, the WIPP program was developing its final waste acceptance criteria. The affected states requested that DOE not move the waste until WIPP was more likely to open. The Ohio Field Office therefore put higher-level waste on a low priority and focused instead on other waste streams.

Now the office had completed much of the cleanup involving other waste streams. As a result, TRU waste had once again become an issue, and not just for the Ohio Field Office. The department had several sites that stored TRU waste. These sites could not shut down until they located a suitable site to store their TRU waste — which included contact-handled and remote-handled waste. DOE proposed consolidating TRU waste from these “small quantity sites” at larger sites that had the ability to treat or otherwise prepare the waste for disposal at WIPP. Mound and Battelle in Ohio were two of the sites; the others were ETEC in California and the Missouri University Research Reactor (MURR).

Mr. Baillieul said that, because of the low volumes of waste at these sites, constructing characterization facilities would not be cost effective. Even mobile characterization would be more costly than sending the waste to larger DOE sites. DOE had been working for seven years to identify suitable receiver sites. The current proposal was to ship remote-handled waste to Oak Ridge National Laboratory (ORNL) in Tennessee and contact-handled waste to INEEL. All shipments would move via truck except the Mound shipments, which would go by rail in ATMX rail cars. Because the TRUPACT-II container had not been certified for remote-handled waste, DOE was proposing to use a pipe overpack configuration for the remote-handled waste shipments from ETEC to Oak Ridge.

Mr. Baillieul said discussions were taking place between the Secretary of Energy’s office and the governors of Tennessee and Idaho. He said none of the transportation details had been finalized. He then discussed some of the proposed containers. The ATMX rail car was not an NRC-certified container. It used to be certified by DOE and DOT, however that certification had lapsed. The CNS 10-160 was an NRC-certified, type B container. The certificate of compliance would require amending, however, since there would be some isotopes in the waste that were not covered by the current certificate.

In response to some questions, Mr. Baillieul said DOE had only recently started discussions with ORNL about how to make these shipments happen. The exact volumes were all speculative at this point. Mr. Ron Ross (WGA) said the Western governors supported the use of the TRUPACT II container for all shipments of TRU waste. He said the use of ATMX cars would not be acceptable.

Mr. Baillieul said the goal was to start shipping from Battelle in January 2001. Mound would ship by 2002, with ETEC following by the end of 2003. The TRU waste at MURR was already packaged, so that shipment might actually occur first. Mr. R. Smith mentioned that the MURR shipment might go directly to WIPP if DOE received the RCRA Part B permit in a timely manner.

Ms. Sattler brought up the subject of the memoranda of agreement between DOE and the Western Governors’ Association and the Southern States Energy Board (SSEB). She read an excerpt from the SSEB memorandum of agreement that indicated the established WIPP protocols would apply to all TRU waste shipments, even those to interim facilities for “consolidation and characterization.” Mr. Baillieul acknowledged her concern.

Ms. O’Claire asked why mobile characterization was not an option. Mr. Baillieul said the contract for mobile characterization was written in such a way that it applied only to characterization, not packaging. Some of the TRU waste was currently stored in boxes that would not fit inside a TRUPACT II container. Moreover, these boxes could not be shown to be “strong, tight containers,” therefore there was no way to prove that the material inside would meet the waste acceptance criteria established for WIPP.

Mr. C. Smith asked who would propose the routes for the shipments. Mr. Baillieul said route selection would have to be a coordinated effort involving DOE and the affected states. He said Battelle would

likely start the process, since the company had experience with shipments. Mr. Baillieul said he would coordinate with Mr. C. Smith, Mr. Owen, and Ms. O'Claire to arrange a meeting between DOE and the Ohio agencies. In response to a question from Mr. Owen, Mr. Baillieul said Mr. Rick Provencher was the contact for information on the Mound shipments. After some discussion about the proposal to change the current route from Mound, Mr. R. Smith said the decision to change the route was driven by both the opening of the ORNL route and the need to ship from Eastern sites. Ms. Sattler pointed out that the former route from Mound passed through Illinois and met up with the route from ANL-E, which would also be opening.

Mr. Owen asked Mr. Ross if recertification of the ATMX rail car would alleviate the concerns of the WGA. Mr. Ross said it would not, because the certification would be by DOE, not the NRC.

Mr. Runyon asked if DOE would try to classify the material as anything other than TRU waste. Mr. Baillieul said he did not think so. Mr. Ross expressed concern about setting precedents for TRU waste shipments, noting that the Nevada Test Site had potential problems with packaging its material.

Mr. R. Smith said he would like to see DOE live up to the commitments his office had made to the states. He speculated that the press coverage of a major change in plans would be unfavorable.

Committee Discussion

The group discussed the inclusion of TRU waste shipments on the agenda for the WGA/SSEB meeting planned for October in San Diego. All the corridor states for TRU waste shipments would be invited to the meeting. Mr. Runyon raised his concern about the redundancy of meetings, since Illinois was a member of both the CSG-MW and SSEB committees. He said he would prefer to see the Midwestern High-Level Radioactive Waste Committee address all transportation issues, including WIPP. He mentioned the budget cuts CSG-MW's transportation project had suffered in recent years, and suggested that covering WIPP issues would improve the financial situation. He also suggested that planning activities such as those for the cross-country shipments could be handled at the regional meetings. Several committee members agreed.

Mr. Flater asked about the timeline for conducting TRU waste shipments. Mr. R. Smith said shipments in the Midwest were planned to start in 2001. Mr. Flater said that, given the timeframe and the financial situation, he, too, would like to see CSG-MW placed on an equal footing with SSEB and WGA. He said he appreciated all the work SSEB had done, but thought it was time for the Midwestern region to stop being a "stepchild." He cited the situation with the WIPP contract for hospital training, and suggested that Iowa and Pennsylvania might have been aware of the pending contract if CSG-MW had been covering WIPP issues.

After much discussion, Mr. R. Smith agreed to consider establishing a cooperative agreement with CSG-MW in the next fiscal year. Ms. Holm said she would discuss this subject with Mr. Smith and with the other staff at the NTP. Mr. Smith said he and Ms. Holm had already agreed to provide funding for travel to the Midwestern committee meeting in the fall.

Mr. Flater raised some concerns about the administration of the umbrella grant. He asked if the administration of the grant through the Carlsbad Area Office (CAO) would be dependent upon Mr. Smith's continued presence at the CAO. He said if the grant were administered through NTP, at least the connection to the program's mission would be a logical one.

Mr. Smith said the CAO had expertise in working with cooperative agreements. He worried about the proposed approach of having three of DOE's regional offices handle the agreements. He suggested that the CAO could opt out of the umbrella grant idea, but would prefer to help institutionalize the system so that it would not be dependent upon current staff.

Mr. Owen said he thought the NTP would be the logical place to house the umbrella grant. He pointed out that the mission of the CAO was not truly national in scope. Mr. R. Smith said his office already worked with 23 states through SSEB and WGA. Mr. Flater again expressed his desire to see CSG-MW receive funding to coordinate the Midwestern states. Mr. Smith agreed that the current arrangement was inequitable. He said he would try to convince his bosses to start a new agreement, but cautioned that doing so would mean finding more money for the agreements. Ms. Sattler pointed out that starting a cooperative agreement with CSG-MW would entail a transfer of some funding from SSEB rather than the use of new funding. Mr. Smith agreed.

Mr. Crose said he thought Mr. Smith was doing a good job with the WIPP program. He suggested that the umbrella grant should be administered in the same manner as the HMEP grants. Mr. Smith said he would need a statement of work from each of the states with which he had agreements. The states would propose what they would need and how they would spend the money, then Mr. Smith would negotiate with them over the amount of funding.

Mr. Ross said he thought the Senior Executive Transportation Forum should give NTP permission to discuss the particulars of the grants with stakeholders. He agreed with the concept of providing funding directly to CSG-MW rather than through SSEB. He said WGA supported the concept of the umbrella grants, but that the development of the proposal was moving too fast. He suggested that the October meeting would be a good time to discuss the proposal in more detail.

The group decided to defer discussion of the DOE protocols pending the distribution of draft protocols. Ms. Sattler read through the list of action items from the meeting. She said she would distribute a calendar to all committee members to assist in scheduling the next committee meeting. Mr. Crose suggested Indianapolis as the location for the next meeting, and the other members agreed. Mr. Flater then adjourned the meeting.

Prepared by Lisa R. Sattler