

M E M O R A N D U M

RE

Date: April 13, 2000

To: Conference Call Participants and Other Interested Parties

From: Lisa R. Sattler, CSG-MW

Re: Conference Call **DRAFT** Summary – April 6, 2000

On Thursday, April 6, 2000, The Council of State Governments' Midwestern Office (CSG-MW) hosted a conference call to discuss the U.S. Department of Energy's (DOE) transuranic (TRU) waste shipments from facilities in Ohio. The call took place from 2-3:30 p.m. Central Standard Time.

PARTICIPANTS

State Representatives:

Arkansas:	David Baldwin (Department of Health)
Idaho:	Craig Halverson (INEEL Oversight Program) Duane Sammons (State Police)
Illinois:	Tim Runyon (Department of Nuclear Safety)
Indiana:	David Crose (State Emergency Management Agency)
Iowa:	Donald Flater (Department of Public Health)
Kentucky:	John Volpe (Radiation Control Program) Homer Druin (Department of Emergency Services)
Louisiana:	Mike Henry and Prosanta Chowdhury (Department of Environmental Quality)
Missouri:	Dan Trokey and Keith Heinke (Emergency Management Agency)
Nebraska:	Bryan Tuma (State Patrol) Jon Schwarz (Emergency Management Agency) Cheryl Rogers (Health and Human Services)
New Mexico:	Bill Mackie (Radioactive Waste Task Force)
North Carolina:	Billy Ray Cameron and Kerney Peoples (Department of Crime Control and Public Safety) Mark Dalton (State Highway Patrol)
Ohio:	Robert Owen (Department of Health) Carol O'Claire (Emergency Management Agency) Carlisle Smith (Public Utilities Commission)
Oklahoma:	Pamela Bishop (Department of Environmental Quality)
Oregon:	Ken Niles (Office of Energy)
Tennessee:	Elgan Usrey and Bob Caylor (Emergency Management Agency) Bill Childress
Texas:	Roger Mulder and Denise Brooks (State Energy Conservation Office) Bob Free and Mike Rutherford (Department of Health, Bureau of Radiation Control) Russ Lecklider and Scott Lamplight (Department of Public Safety, Division of Emergency Management)
Utah:	Bill Craig (Department of Environmental Quality)
Wyoming:	Scott Ramsay, Chuck Fraley, and Kelly Ruiz (Emergency Management Agency) Keith Rounds (Department of Transportation) Bob Beezak

DOE/contractors: Tom Baillieul (Columbus Environmental Management Project)
Oba Vincent and Rob Rothman (Miamisburg Environmental Management Project)
John Krueger and Bill Franz (Babcock and Wilcox)





Ralph Smith (Carlsbad Area Office)

Other: Kevin Blackwell (Federal Railroad Administration)
Lisa Sattler (CSG-MW)
Beth Fulmer (SSEB)

WELCOME AND INTRODUCTIONS

Ms. Sattler welcomed everyone and said the purpose of the call was to let the states hear directly from DOE about plans to ship TRU waste from the Mound and Battelle facilities in Ohio to facilities for repackaging, characterization, and/or interim storage. Just over one year ago, DOE stopped treating these shipments as "WIPP shipments" and instead began referring to them as "intersite transfers." The states considered these shipments to be identical to WIPP shipments and, therefore, subject to the same protocols and procedures. Ms. Sattler said some states have had more of a chance than others to discuss the shipments with DOE. The conference call was an attempt to provide information to all the potentially affected states.

BATTELLE UPDATE

Ms. Sattler turned the floor over to Mr. Baillieul. He said the situation with regard to the Battelle shipments had not changed significantly in the past few months. The Columbus Environmental Management Project (CEMP) is still interested in shipping a small volume of remote-handled (RH) waste to an interim facility until WIPP can be certified to receive RH waste. Hanford is still the preferred site for receiving the Battelle waste.

Mr. Baillieul's office submitted a proposal for technology deployment funding from EM-50 either to purchase or sign a long-term lease for Chem Nuclear Systems (CNS) 10-160 casks. CEMP will receive a small amount of funding this year to pursue these options. Mr. Baillieul said Chem Nuclear is constructing the first cask, and August will be the start date of the lease for that cask.

He said his office is working with Chem Nuclear, DOE's Carlsbad Area Office (CAO), and the Nuclear Regulatory Commission (NRC) to amend the Certificate of Compliance (CoC) for the 10-160 cask. The plan is to amend the CoC for the RH TRU waste from Battelle. The second step is to expand the CoC to include TRU waste from other sites. In this way, DOE would have an alternative to the RH-72B cask for shipping RH waste.

Mr. Baillieul said January 2001 is the target date to begin shipments. He said that, although Hanford is the preferred location, DOE has not yet identified a destination for the waste.

Mr. Baillieul said the small quantity generator sites had met the previous week in Carlsbad. At that meeting, it became apparent that shipping RH waste directly to WIPP would not be an option for two or more years. He said doing so would require amending the RCRA Part B permit.

Nevertheless, he said it is possible that Battelle will be able to ship less than 20 drums of RH waste to WIPP using the pipe overpack. This waste was characterized at just over 200 mrem, and with the pipe overpack it could be treated as CH waste. Mr. Baillieul noted that, since Battelle is not certified to ship to WIPP, the shipment using the pipe overpack would have to be done through another site, such as Hanford. In other words, Battelle would ship these 20 drums to WIPP via the Hanford facility. If CEMP exercises this option, the shipment will take place as early as July or August 2000. This shipment will not occur until Hanford starts shipping its own waste to WIPP.

Mr. Niles asked Mr. Baillieul for clarification of the quantities. Mr. Baillieul said Battelle has 25 cubic meters of RH waste, or 100-120 drum equivalents. The shipment of CH material in the pipe overpack would amount to less than 20 drums.

Mr. Owen asked for clarification of the shipping dates. Mr. Baillieul said January 2001 is the target date for shipping RH waste, and July/August 2000 is the target for the CH shipment. He said Battelle would begin packaging the material into pipe overpacks in May. Mr. Baillieul added that the Battelle waste would arrive at Hanford and immediately be prepared for shipment to WIPP. The intent is not to store the material at Hanford.

Mr. Niles asked if DOE planned to adhere to the WIPP protocols for these shipments. Mr. Baillieul said CEMP would follow the protocols. He said his office will work with Mr. Ralph Smith and other DOE staff to make sure the protocols are implemented.

Mr. Halverson asked why CEMP had chosen Hanford as the preferred destination. Mr. Baillieul said the Battelle waste was very similar to material at Hanford. He said much of the research at Battelle had taken place in connection with Hanford. In addition, Battelle is already an approved Hanford generator of other radioactive waste streams, including low-level waste and mixed low-level waste.

Mr. Owen asked if DOE has prepared a draft transportation plan for the July/August shipment. Mr. Baillieul said his office is still working on the logic of the process. CEMP would work with CAO to develop the transportation plan.

In response to a question from Mr. Niles, Mr. Baillieul said the plan is to conduct one shipment of CH waste to WIPP through another site (Hanford being the preferred site). Additional CH shipments would not be feasible. He reiterated that the material would immediately be sent to the WRAP facility at Hanford for headspace sampling and other characterization. He expected the turnaround time to be around three weeks.

Mr. Niles said he did not like the idea of any shipping campaign starting in the middle of winter. He noted that the WIPP protocols do not address RH waste. He said some of the protocols might transfer well from CH to RH, but others would not. As an example, he cited the enhanced carrier standards. Mr. Niles said this is one of a number of issues that will need to be resolved. Mr. Baillieul acknowledged Mr. Niles' concern. He said his understanding is that Chem Nuclear will use carriers that have been used previously for TRU waste shipments.

Mr. Ramsay asked about the gross vehicle weight (GVW). Mr. Baillieul said, for the CH waste, the GVW will be no greater than the weight of the loaded TRUPACT IIs and trailer. The RH shipments using the CNS 10-160 will be overweight, using lowboy trailers with multiple axles. He estimated the loaded weight at 100,000 lbs. Mr. Ramsay seconded Mr. Niles' concern over the use of the WIPP protocols. He said he considered the Battelle shipments to be WIPP shipments. Mr. Baillieul said the CH shipment would certainly be "a WIPP shipment," but the RH shipments would be different. He added, though, that the assumption is all WIPP commitments — such as those for route selection, inspections, and notifications — will be followed for the RH shipments. DOE's contract with Chem Nuclear reflects this commitment.

Mr. Ramsay asked about the curie level, and Mr. Baillieul said he did not have that information readily available.¹ Mr. Niles observed that the situation in Washington is "extraordinarily delicate" with regard to accepting off-site waste, and Mr. Baillieul agreed.

¹ Editor's note: According to Mr. Baillieul, the curie count for the CH shipment will be about 3.69 combined.



In response to a question, Mr. Baillieul said DOE does not plan to ship the Battelle waste by rail. He estimated 10-12 road shipments for the RH waste. He noted that this number of shipments is one-third of the projected number using the RH-72B container.

Mr. Crose asked when DOE would start providing the states with funding for training. Mr. Smith mentioned that DOE was once again providing funding to the Southern states for WIPP shipments.² He said the Midwestern states would address the funding matter at the upcoming meeting of the Midwestern High-Level Radioactive Waste Committee in Minneapolis. He thought Mr. Ron Ross of the Western Governors' Association (WGA) would be at the meeting and would report back to the Western states. Ms. Sattler added that Mr. Christopher Wells of the Southern States Energy Board would attend the meeting and would inform the Southern states of any new developments.

In response to a question from Mr. Runyon, Mr. Baillieul said the waste would be classified as TRU waste. Mr. Flater asked about notifications. Mr. Baillieul said the intent was to provide the states with notification beyond what would be required for a commercial shipment. Ms. Sattler asked if enough TRUPACT IIs would be available to accommodate the CH shipment. According to Mr. Smith, there will be enough containers. The contractor in New Mexico will deliver the first new TRUPACTs in May, and the South Carolina contractor will begin delivering its TRUPACTs in June.

Ms. Sattler noted the timing of the CH shipment, and asked if DOE will coordinate all its shipments so that the corridor states will not be affected by more than one shipping campaign at the same time. Mr. Baillieul said he would leave that to the DOE traffic managers, and Mr. Smith said he would note this sensitivity. Ms. O'Claire asked if the CH shipments would be treated like HRCQ shipments. Mr. Smith said they would.

Ms. Sattler asked what steps remained in deciding on the interim destination. Mr. Baillieul said the Ohio Environmental Protection Agency was working with the Washington Department of Ecology to try to make the transfer possible. He expected a final decision within a month. Ms. Sattler asked what the target date was for completing all TRU waste shipments from the Battelle site. Mr. Baillieul said he would like to be done at the West Jefferson facility by the end of FY 05. To meet this target date, all the RH waste and the high-activity LLW would have to be removed from the site by 2002.

Ms. Sattler asked if CEMP had a backup plan in the event Hanford did not agree to accept the transfer. Mr. Baillieul said his office would press for a certification audit, and would try to be the first site certified to ship RH waste to WIPP. Under this scenario, the target date for shipping would be January 2002. In addition, the number of shipments would increase from around 10 to 35 or so, due to the fact the CEMP would use the RH-72B container for shipping directly to WIPP.³ Ms. Sattler asked which DOE office is taking the lead on the transportation plan. Mr. Baillieul said the Waste Management group at Battelle is writing the plan in conjunction with Chem Nuclear. He said the plan will go through Carlsbad since the WIPP program has access to state contacts.

MOUND UPDATE

Ms. Sattler asked Mr. Vincent to provide an update on the Mound shipments. Mr. Vincent introduced several people who would help him answer questions during and after his presentation. He highlighted the final slide in his Power Point presentation, which he had distributed earlier. The slide addressed DOE's commitment to work with the states and other stakeholders and to insure that the shipments are conducted in "a safe and compliant manner."

² Editor's note: CAO is providing funding to the individual Southern states on the WIPP route from the Savannah River Site. The closeout of the SSEB/CAO cooperative agreement, however, is still in progress.

³ Editor's note: The current conceptual design for WIPP only permits the use of the RH-72B cask with the 3-drum welded sleeve. Shipping directly to WIPP in the CNS 10-160 is, therefore, not an option at this time.

Mr. Vincent said about 30 sites have small quantities of TRU waste. All the waste at Mound is CH waste. The Mound waste is a little different from the CH waste at other sites because it contains Pu-238. In all, Mound has 908 curies of PU-238 and 8 curies of Pu-239. This waste is contained in 33 boxes and 150 drums. Most of the waste will require repackaging and/or additional characterization prior to disposal at WIPP. Mr. Vincent said 80 drums could be shipped in TRUPACT II containers if a mobile characterization facility were located at WIPP or some other site.

In the past, Mound shipped around 90 percent of its TRU waste via rail in ATMX railcars. The primary destination sites were the Idaho National Engineering and Environmental Laboratory (INEEL) and the Savannah River Site (SRS). Mr. Vincent noted that it would be very difficult to build a characterization facility on-site at Mound. He added that Pu-238 does not create a criticality issue, but it generates heat.

One option is to ship the Mound waste to another DOE site for repackaging and characterization. The top DOE site for receiving the waste is SRS. DOE is considering an accelerated schedule for shipping TRU waste from SRS in exchange for accepting the Mound waste. Mr. Vincent said the department is not pursuing discussions with INEEL at this time because of the sensitivities surrounding the receipt of off-site waste.

Another option is to ship the material to a commercial site. Mr. Vincent said the only site under consideration is Waste Control Specialists in Texas. The site license has a limit of 200 curies of plutonium, whereas Mound has a total of 900. DOE is looking primarily for a place to repackage the waste for shipment to WIPP, and it is possible that Waste Control Specialists could be that place.

Mr. Vincent said some of the waste at Mound had already been thoroughly evaluated and could be shipped directly to WIPP for final certification. It would take eight months to one year to change the WIPP RCRA permit, though, so this option is not preferred given the target date for cleaning up Mound.

Using the OHOX (formerly ATMX) rail car, it would take approximately six carloads to move the existing waste and two to move future waste. Currently, DOE is refurbishing two of these rail cars. Mr. Vincent estimated that it will take three to six shipments using just the two OHOX cars, plus one or two more shipments in the future. If DOE decides to ship some of the Mound waste via truck, the mix would be three truck shipments (two TRUPACTs in each) plus five rail carloads. The Department of Transportation is reviewing DOE's request for an exemption for the OHOX cars, which would likely be a campaign-specific exemption. Mr. Vincent expected to receive the exemption notification from DOT sometime in April.

Mr. Craig asked if the OHOX cars are being upgraded. Mr. Vincent said the refurbishment is taking place in two phases. First, DOE will rebuild the cars to the Association of American Railroads Standard 88. As part of this step, all the running gears and rail cars will be brought up to current industry standards. In addition, DOE will verify previous enhancements made to the cars accomplished in previous years.

Mr. Vincent said DOE hopes to identify the routes and start work on the transportation plan in the next few months. He said it might take longer to resolve the matter over sending waste to a commercial site. He added that the OHOX exemption will have a two-year window, so that will be the time frame for making all the rail shipments.

Mr. Craig asked what the exemption determination entails. Mr. Franz said DOT would grant the exemption for Mound waste only. He said the OHOX cars would be overpacking for new certified Type A boxes which overpack an older Type A container. The refurbished car would not be a Type B package, but it would provide an equivalent level of safety. Mr. Franz said the amount of TRU waste in each carload would be limited by the allowable number of curies per car (200). Any remaining volume would

be filled with dunnage. The cars were constructed in such a way that, in the event of an accident, other rail cars would ride up over the OHOX car rather than crush it.

Mr. Craig asked about the procedures for using the OHOX car. Some procedures would be more stringent than those required for WIPP shipments. Mr. Blackwell cautioned that the information on the specific safety enhancements to the rail cars and the procedures will not be spelled out in the exemption. Much of this information is contained in the original exemption request, though. Mr. Craig said he would like to see that request.

Mr. Mulder asked whether there is continuous rail service to the Waste Control Specialists facility. He said the railroad commission in Texas was not aware of the existence of rail access to the site. Mr. Vincent said his understanding is that the site is, indeed, served by rail. Mr. Mulder asked what kind of shipment notifications DOE would provide. Mr. Vincent said the plan for notifying the states will be developed once the exemption is approved.

Mr. Usrey asked if the Mound waste would be shipped by dedicated train or in general commerce. Mr. Vincent said DOE has not decided which type of rail service to use, but previous shipments had gone by regular service. DOE is not opposed to dedicated train, if that is what the states want. Mr. Vincent said it would be easier to keep track of shipments on a dedicated train.

Mr. Owen asked about the timeline for the shipments via TRUPACT IIs. Mr. Vincent said DOE has not yet committed to the option of using TRUPACT IIs for the Mound waste. The main reason for hesitating is that the department would still need to make shipments by rail, since only 80 drums could go in TRUPACTs. It might be easier to ship all the material by rail. The earliest shipping date is eight months from now for any shipment directly to WIPP.

In response to a question from Ms. Rogers, Mr. Krueger said the waste is all CH. He reiterated that the waste contains Pu-238, which is a very weak gamma emitter. Mr. Volpe interjected that Pu-238 poses a high inhalation hazard. Mr. Krueger said the Mound waste contains only a few grams of Pu-238. He added that most of the waste is concrete, dirt, and glove box garbage (e.g., lead gloves).

When asked about the timeline for route selection, Mr. Vincent said June is the earliest date by which DOE will have a definite destination. DOE-OH has been in touch with Mr. Steve Hamp at DOE's National Transportation Program regarding the shipments. Ms. Sattler asked if DOE-OH is coordinating with the CAO on the transportation plan. Mr. Vincent said his office is working quite closely with the folks at WIPP, including Mr. Smith.

Mr. Ramsay voiced his concern that the Mound and Battelle shipments had not been discussed at the WGA meeting in Albuquerque. Mr. Smith clarified that other sensitivities had led to these shipments being left off the agenda. One of the action items from the WGA meeting was to organize working groups to develop a rail version of the WIPP PIG as well as one for RH waste. Representatives of the Midwest and the South would be invited to participate on the working groups. Ms. Fulmer asked if any meeting dates had been set for the groups, and Mr. Smith said they had not.

There were no further questions. Ms. Sattler thanked Mr. Baillieul, Mr. Vincent, Mr. Smith, and the other DOE representatives and contractors for presenting information on the upcoming shipping campaigns. She said she would distribute a draft meeting summary for review and would include the Mound presentation. She then thanked everyone for participating and adjourned the call.

ACTION ITEMS

CSG-MW Conference call summary
 Distribute Mound presentation



DOE Provide original exemption request/supporting documents (specific information on safety enhancements) (Mound)

If you have any questions or corrections, please contact Lisa Sattler at 920-803-9976 or lsattler@csq.org.

SHIPMENT SUMMARY TABLE

	Destination Site	Start Date	Type of Waste	Mode	Number of Shipments	Quantity/Type of Container	Next Steps	Comments	
Battelle	Hanford	January 2001	RH	Truck	10-12 (100-120 drums)	10-12 CNS 10-160 (Type B)	Finalize destination Purchase/lease containers Identify potential routes Develop transportation plan		<input type="checkbox"/> Preferred
	WIPP	January 2002	RH	Truck	~ 35 (100-120 drums)	~35 RH-72B (Type B)	Become certified to ship RH waste to WIPP	WIPP permit must be modified for RH waste receipt (2+ years). RH concept for WIPP only permits receipt in RH-72B cask at this time.	<input type="checkbox"/> Backup plan
	WIPP via Hanford	July/August 2000	CH (pipe overpack)	Truck	1 (<20 drums)	2 TRUPACT IIs (Type B)	Finalize interim destination Develop transportation plan	Shipment would not occur prior to the first shipment of Hanford TRU waste to WIPP.	<input type="checkbox"/> Possible modification to both plans
Mound	SRS	Mid- to late 2000	CH	Rail	3-6 now (6 rail carloads) 2 in future (2 rail carloads)	1 or 2 OHOX rail cars per shipment	Finalize destination Receive exemption from DOT Refurbish two cars Identify routes Develop transportation plan	DOT exemption expected in April. Accelerated shipments from SRS proposed. Dedicated trains are an option.	<input type="checkbox"/> Option 1
	Waste Control Specialists (Texas)	Mid- to late 2000	CH	Rail	3-6 now (6 rail carloads) 2 future (2 rail carloads)	1 or 2 OHOX rail cars per shipment	Finalize destination Receive exemption from DOT Refurbish two cars Identify routes Develop transportation plan	Material would be repackaged at WCS and certified for shipment to WIPP (site license limited to 200 curies of Pu). Dedicated trains are an option.	<input type="checkbox"/> Option 2
	WIPP	Early 2001	CH	Truck	3 (80 drums)	2 TRUPACT IIs per shipment	Amend WIPP permit to characterize waste on-site	Would still need to ship five rail carloads	<input type="checkbox"/> Possible modification to both plans