

WGA meets TRB

Introduction

I am Bob Robison....

On behalf of the 10 Western states participating in the WIPP Transport Workgroup, I want to thank you for the invitation to meet with your board. We are both flattered and honored that our work has caught your attention.

Before proceeding with some short introductory comments, I want to introduce my colleagues:

Bob Halstead, the Co-chair of the Task force and representing the State of Nevada. Bob's work has lately focused on issues relating to transport of HLW to the proposed Yucca Mtn. repository. He is on your agenda later today to speak from that perspective. But he agreed to help us with this presentation by being available to answer any real difficult questions.

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Chris Wientz, with the state of New Mexico. Chris represents Governor's WIPP task force and is an active member of our Western state WIPP transport workgroup. Chris will describe our work, as outlined in the Report to Congress we submitted in 1989.

Ron Ross, with the WGA. Ron is a policy analyst and manages many of the multi-state regional aspects of our project. Ron will describe what lessons we have identified as having learned so far. He will also discuss the organization of our workgroup, as we believe it may be useful for other regions..

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I will take just a few minutes now to tell you generally of our workgroups mission and how we got to where we are today.

Western states and your Board share a common interest in the safe transport of nuclear wastes. If our national plan for nuclear waste continues on its present course, western states will bear the major effects of waste transport. Western states will see likely all the nations shipments. The west is where the majority of road miles will be logged-in.

For these reason, we appreciate your Board's interest in our work. We think that interest is appropriate.

Our Governors have given our workgroup a broad assignment. In a resolution passed in July, 1988 the Governors directed us to "...secure the commitments necessary to reach a high level of public confidence that nuclear waste can be transported in a safe and uneventful manner."

Our first step has been to develop complementary state-federal safety procedures for the shipments to WIPP. We recognize clearly that our Governors also expect us to pave the way for safe transport of HLW that will begin sometime later.

Our work will affect HLW shipments in at least three ways:

1. We are developing safety procedures that will be in place when HLW begins to move. We will continuously fine-tune those procedures during the WIPP shipping campaign. Some of these procedures are specific to transport by truck -- such as the exchange of information and the controls we have established with USDOE to keep trucks off the road in unsafe weather. But other procedures will be applicable to HLW even if it is hauled exclusively by rail -- such as the satellite and computer system to be used for advanced notice of shipments and to track the shipments.

2. We intend to document the lessons learned from the WIPP shipments to help design the HLW transport program. Again, our first job has been to get ready for WIPP. We will next evaluate our efforts and document the lessons to be learned. We look forward to working with other groups -- such as your Board -- in this area.
  
3. We recognize that elected officials and the general public will be looking carefully at the WIPP shipments. This is the nations first underground nuclear waste disposal site. And, these are the first shipments to such a site. Public confidence in the ability to safely move nuclear wastes will be affected by our work.

Western States began to work with USDOE on the WIPP shipments in about 1986. This early work was through the help of the WIEB. We had some success in those early discussions. As I recall, those early WIEB-sponsored meetings were the forum where USDOE agreed with the states to train emergency responders. This was also where we began to define the content of that training.

But we hit a major roadblock in our early meetings. Western states agreed that because these are federal shipments, and because the wastes result from national defense, that the financial costs to states for our safety work should be borne by the federal government. Said more simply, we asked for money. But we were told by USDOE managers that Congress had not given them the authority to provide us such help.

*Seven Hotfields  
 10/15/88  
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So, we States went to Congress. In 1989 the Senate appropriated \$1 million to the US DOT to help the seven states affected by shipments to WIPP from Hanford, INEL, and Rocky Flats. Those funds were channeled through the UGR.

These funds allowed the Western states to draw the blueprint for the states' role in safety. That blueprint became our "Report To Congress..." that Chris will describe in more detail. Our Governors handed that blueprint to Secretary of Energy Watkins in the summer of 1988. Secretary Watkins endorsed our report as "hitting the mark", and reversed his Department's position on state funding. He directed his staff to help us turn our blueprint into a real safety program.

We like to think that part of Secretary Watkins decision to work with us may have been based on the straightforward nature of our Report. We spoke in plain-english about what we could do to enhance truck safety. We avoided the sometimes arcane language of risk assessment and public policy analysis.

But we also recognize that our request for federal funds was also quite reasonable. We estimated then that the first seven states could do the job for \$1.5 M/yr for the first years. We have lived within that budget. We are about to include 3 other states for a marginal increase in costs. \$1.5 M is not an extraordinary cost for seven states, especially when compared to the projected national costs of managing commercial and defense nuclear wastes.

*We also recognize that the report was received well by Congress*  
Secretary Watkins' decision was a major turning point. It addressed our concern about who pays. But just as importantly, it recognized the states as having an important role in safety. We appreciate the Secretary's decision to do so.

But we still do not have a clear message from Congress that USDOE must continue to recognize states' needs for ongoing funds. Our Governors' have recommended that Congress send this message to USDOE in a Congressional Land Withdrawal Bill, or other Legislation.

Perhaps this question of funding is a lesson from the HLW program to be applied to the WIPP shipments: States want clear recognition that they are to be partners to design and implement the safety program. States want clear assurance of ongoing funds that will enable them to remain partners for the full length of the shipping campaign.

Before turning the discussion over to Ron and then Chris, there is one "lesson to be learned" that I wish to speak to. That has to do with the constantly changing schedule and planned number of shipments.

Four years ago I told Oregonians that by today several TRU shipments would be on the road each month from Hanford, through our state, bound to New Mexico. That was the national plan. So Oregon began to get ready four years ago. I have had to revise that schedule constantly. Now Oregon is being told that shipments are still a few years away.

This constantly changing schedule and shipment plan creates a very difficult environment for state and local planning. In some states, emergency responders were trained too early. The time is near for retraining, but no shipments have yet occurred. Many of these responders will wonder if it is really worth their time to sit through more training, when all they see is constantly delayed shipping campaign.

Here is another example: last June I met with local safety officials to discuss parking areas. That very same week I learned that Hanford shipments were delayed by at least two years. Available parking areas will likely change a lot in two years, so in Oregon we have decided this level of detail will be addressed within the last year or 18 months before shipping.

Constantly changing the date and plan for shipments makes it difficult to schedule and plan work. It also undermines the credibility of the professionals responsible for that work.

I am not sure what can be done about fixing a date for WIPP shipments. I am also not pointing fingers at any person or group as responsible for the constant delays. Indeed, many of the delays have provided important new information and important time. Decisions about nuclear waste disposal should not be made in haste, or for the convenience of transportation safety planners. After all, these are decisions that will be around for the next 10,000 years.

But if there is some way the nation can fix a date certain for HLW shipments it would greatly help those of us responsible for state and local safety programs. I recommend fixing a date certain, and then allow states time for detailed operational readiness.

With that, I will turn the time over to Ron, and then Chris. When they are done I would like to comment on work being done in Oregon on public involvement, public information and confidence.

→ CUSA Study

\* Given Form 100

- Purpose -- develop and list inspection standards
- determine measurable frequency of inspection

• Equipment for first responders

# **OREGON HANFORD ADVISORY COMMITTEE**

Findings, Conclusions and  
Recommendations on the Transport of  
Plutonium-Contaminated Nuclear Weapons Wastes  
through Oregon

December 1988

OREGON'S HANFORD ADVISORY COMMITTEE  
FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS  
ON THE TRANSPORT OF NUCLEAR WEAPONS WASTES THROUGH OREGON

BACKGROUND

The U.S. Department of Energy (US DOE) Hanford facilities produce plutonium for nuclear weapons. In that process some industrial materials are tainted with small amounts of plutonium and other radioactive contaminants. This material is called transuranic wastes or TRU.

US DOE now is ready to begin cleanup of Hanford's nuclear weapons wastes. US DOE will truck some TRU wastes to a repository near Carlsbad, New Mexico. That transport campaign is now scheduled to start in March 1990. It will last 25 years or more.

The route through Oregon will be Interstates 82 and 84 East. It crosses portions of the Umatilla Indian Reservation and Umatilla, Union, Baker, and Malheur Counties.

The 1987 Oregon Legislature created the Hanford Waste Board and the Hanford Advisory Committee (HAC). The Board is to recommend policy to the Governor and Legislature on Hanford waste issues. The HAC is to advise the Board on how these policies should evolve through active grassroots action.

Gov. Goldschmidt named 18 persons to the HAC. Twelve are from the four route counties and the Confederated Tribes of the Umatilla Indian Reservation (The Tribes). The other six represent special interests, industry, and environmental groups. The Governor charged HAC to "advise the Hanford Waste Board on grassroots opinions, attitudes, and ideas about nuclear weapons waste transport." He told HAC to give the Board "candid, credible, and straightforward transport safety recommendations."



In May 1988 the HAC toured Hanford. HAC met in Pendleton for a full-day public session on TRU waste and transport issues. In June, the HAC met again for a full day in LaGrande. Members dealt with transport and accident prevention issues.

In July local HAC members and staff from the Oregon Department of Energy (ODOE) and US DOE hosted eight meetings in route counties. The meetings were to gather public comments and concerns. Briefings for local officials were in the afternoons; information meetings with the public were in the evenings. These were in Pendleton, LaGrande, Baker, and Ontario. About 200 people took part. There was broad newspaper and broadcast media coverage before and after the meetings.

In August, the HAC worked on draft accident prevention recommendations at a day-long public meeting in Baker. In September, the HAC met in Ontario to discuss and draft emergency response recommendations. The HAC also adopted these findings, conclusions, and recommendations.

Nearly all of the HAC members took part in all of the HAC work sessions. Two dozen local persons spoke to the HAC about their concerns. The news media covered all of the HAC meetings.

### FINDINGS

The HAC finds:

1. Public support for Hanford cleanup is broad, although cleanup requires some waste transport through Oregon.
2. US DOE and Oregon agencies have taken reasonable actions to ensure the safe transport of radioactive waste. They intend to insure that future TRU waste transport will have a high level of safety and minimal risks. US DOE and Oregon agencies know the importance of public confidence in transport safety.

3. There is a good deal of skepticism in the route communities that the shipments are sufficiently safe.
4. Emergency coverage for critical first response functions is not complete in many parts of the transport route. In other areas, the coverage is inadequate.

### CONCLUSIONS

The HAC concludes:

1. The risks of TRU waste transport are far less severe than the risks of leaving these wastes in temporary storage at Hanford.
2. TRU waste transport through Oregon can be done with a high level of safety and at minimal risk. An accident-free program cannot be guaranteed.
3. Public perceptions about TRU waste transport safety are valid; some are realistic and some are not. Both types of concerns should be addressed by safety improvements or public education.
4. Funding is needed for a regional hazardous materials response team to complete emergency response coverage along the transport route.
5. US DOE and Oregon agencies should take further reasonable actions to enhance transport safety and public confidence in the safety of these shipments.

## GENERAL RECOMMENDATIONS

### Long-Term Safety and Public Confidence

TRU waste transport safety standards, systems, and programs must remain effective throughout the entire shipping campaign. The HAC recommends:

1. US DOE, Oregon agencies, the Tribes, and local governments should develop and maintain quality assurance programs for all aspects of accident prevention and emergency preparedness programs. Such actions will ensure these programs remain effective throughout the transport campaign.
2. US DOE, Oregon agencies, the Tribes, and local governments should continue aggressive education and public involvement programs throughout the transport campaign.

### Costs

The risks of TRU waste accidents are being imposed on local, state, and Tribal governments by US DOE. Therefore, the costs of accident prevention, emergency preparedness and response and public information must be borne by US DOE. The HAC recommends that Oregon request federal funding for all local, state, and Tribal costs related to these shipments. Where the costs are part of broader programs, US DOE should pay its fair share.

RECOMMENDATIONS  
ON ACCIDENT PREVENTION

Shipping Casks

The shipping casks for TRU wastes must withstand realistic transport accidents without releasing their contents. The HAC believes that a design certified by the Nuclear Regulatory Commission (NRC) can achieve this objective. However, the HAC recommends:

1. If flaws are found in the cask design, the design should be changed and tested again or analyzed again.
2. The results of the full-scale tests should be extrapolated to the failure points to determine the margin to failure.
3. The public must be confident that casks will withstand potential transport accidents. The design standards, tests, and test results should be told in terms that are easy to understand.
4. All TRU waste casks should be built under NRC's stringent quality assurance program for spent nuclear fuel casks. This will ensure that TRU casks meet design requirements.
5. Before each shipment, US DOE should use all appropriate non-destructive testing techniques to inspect cask features that prevent releases (such as the seals). Casks should be inspected for compliance with design requirements. Features that do not comply should be replaced.

Placarding

These shipments must be placarded to meet U.S. Department of Transportation (USDOT) requirements. Further, the HAC recommends:

1. The placards should be retro-reflective.

2. The placards and the printing on them should be fire resistant.

### Truck Safety/Inspections

The trucks that carry the wastes must be in good running order to enhance safety. The HAC recommends:

1. All shipments should be thoroughly inspected before leaving Hanford. These inspections should cover all safety features and aspects of the truck, driver, and the cargo. The HAC endorses the Pacific States Agreement to work toward a thorough inspection program.
2. Oregon agencies should monitor the inspection program to ensure it is thorough and aggressive.
3. There should be periodic and thorough safety audits of the carrier's waste transport operation.
4. The carrier should have a "satisfactory" safety fitness rating from USDOT.

### Drivers

Drivers must have a proven record of safe driving. Further, they must show a strong commitment to transporting these wastes safely. The HAC recommends:

1. Drivers should have not less than 300,000 miles of preventable accident-free commercial driving on their records. This experience should be with large trucks (Class A or equivalent). Some experience should be on mountain roads and in bad weather.
2. The drivers' personal and professional records should show commitments to obey motor vehicle traffic laws. Further, special efforts should be taken to ensure the speed limit is obeyed. This may include paying the drivers by the hour to remove any incentive for speeding. It may include speed governors or electronic monitors in the trucks. If the latter are used, the results should be evaluated after each trip. Records should be kept for several years.

3. The drivers should be tested for substance use that would impair their driving abilities. Testing should be before hiring and randomly during employment. Evaluations of drivers for drug or alcohol impairment should be made before each shipment.
4. Drivers should be thoroughly acquainted with the route before their first run. Oregon agencies should identify hazardous areas along the route.

### Weather and Road Restrictions

These shipments must not be made when severe weather or road conditions threaten a safe trip. The HAC recommends:

1. Shipments should not leave Hanford when weather or road conditions are severe or are expected to be hazardous.
2. Shipments should stop or turn back when local weather or road conditions are severe or are expected to be hazardous.
3. Safe parking areas should be designated for use if weather or road conditions have made or will make waste transport unsafe.
4. Criteria should be developed for safe parking elsewhere along the route if designated areas cannot be used.

### Schedules

Shipment schedules must be set with safety as the prime concern. The HAC recommends:

1. Winter travel poses the greatest travel hazards. US DOE should evaluate whether the shipping schedules can be adjusted to avoid likely times of severe winter weather.
2. US DOE should evaluate whether shipments can be made in tandem or in small convoys to increase safety. This also would reduce the burden on state, Tribal and local governments.

### Shipment Notice/Information

Oregon State Police (OSP) and other appropriate state agencies, and local officials must have ready access to advance notice or status information on shipments. Such notice should be required to arrange inspections, impose weather or road restrictions, or heighten emergency preparedness. The HAC recommends:

1. US DOE should set up an advance notice and current information system with the State (OSP and other appropriate state agencies).
2. When shipments are infrequent, the State should notify the counties and the Tribes of each shipment.
3. When shipments become routine, the State should provide the counties and the Tribes with six month updates of shipping schedules.
4. The counties and the Tribes should relay this information to their local emergency response groups.
5. The State should provide current information on shipments to the counties and the Tribes upon request.

### Security

These shipments are not likely to be a target for terrorists. But, US DOE must ensure that prudent security measures are taken.

The HAC recommends that US DOE consider ways to avoid or limit the threat of criminal disruptions. These may include management systems or physical protective features. Measures also could include driver training or law enforcement monitoring or escort of early shipments.

RECOMMENDATIONS  
FOR EMERGENCY PREPAREDNESS AND RESPONSE

Plans and Procedures

An emergency plan for handling TRU waste accidents must be in place before the shipments begin. The plan must show that accident response can reduce public risks without undue risks for emergency responders.

The HAC finds that emergency coverage for critical first response functions is not complete in many parts of the transport route. In other areas, the coverage is not adequate.

The HAC recommends:

1. The Governor should propose legislation to provide for Regional Response Teams for all hazardous materials to ensure complete coverage.

The legislation should address: (1) special training and equipment needs for response to TRU waste transport mishaps; (2) the need for at least one centrally located team along the route of TRU waste shipments; (3) at least two members of that team are to be fully funded positions in addition to those already funded by local government; and (4) the funding for training and maintaining the team and the two positions shall be provided for the full term of the transport program.

The Hanford Waste Board should support the legislation.

2. The roles and duties of all parties should be clearly defined in the emergency plan and coordinated for each segment of the route. This should include statements of responsibility for and to all individual participants. At any point along the route, the plan should provide for access control, rescue, emergency medical treatment, fire suppression, initial stabilization, and public information.



State agencies, local governments, and the Tribes shall work with US DOE to ensure complete coverage of the route before transport begins. US DOE should state its commitment, or its contractors' commitment, to assume all liability for emergency response. Also, US DOE should state its commitment, or its contractors' commitment, to reimburse emergency response groups that respond to an accident.

3. The plan should provide for rapid and ongoing technical aid to the incident commander. At the outset, the state advisors should be able to talk with the commander. Within about one hour, local technical experts should reach the scene. Within a few hours, state or federal experts should be on scene.
4. Clear procedures should be written for every key response position. The procedures should explain what each position must achieve. Procedures should provide guidance on how tasks should be performed.

#### Equipment

All emergency response groups must have access to gear needed to respond to a TRU waste accident. The HAC recommends:

1. Rugged radiation detection gear that is easy to use should be on the waste transport trucks. First response groups should have access to similar gear.
2. Local, state, Tribal, and federal technical response groups should have access to more sensitive radiation detection gear.
3. All radiation detection gear should be kept in good working order; all gear should be easy for responders to obtain.

4. Waste transport trucks should carry gear that can be used to control spilled wastes (for example, tarps).
5. Other needed gear should be provided to emergency response groups.

### Training

Key local, state, Tribal, and federal responders must be trained to handle TRU waste mishaps. The HAC recommends:

1. Training should be offered to all local, state, Tribal, and federal groups that may respond to a mishap. Training should be specific to the roles and duties of each trainee group. It should be offered at times and places and in a format that will enhance participation.
2. Training should be offered again when any group no longer has enough trained responders.
3. Re-training should be offered from time to time.
4. Ongoing training of first responders along the route should be given by the hazardous materials response team when it is operational.
5. Funds for training shall be provided for the full term of the transport program.

### Drills

Short of an accident, drills are the best way to evaluate and improve readiness. Drills that involve all likely response groups must be conducted. The HAC recommends:

1. Before the shipments begin, a drill that involves all likely response groups (as participants or observers) should be done in each county.

2. Each year, at least one drill for a TRU waste mishap should be conducted along the route in Oregon. Key emergency responders in the other countries should be asked to observe and critique the drill.

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