











Tony Law



DANGER!

**STOP
MAKING
IT!**

**HIGH-LEVEL
ATOMIC
WASTE**

WEST

**INTERSTATE
90**

**INDIANA
TOLL ROAD**

INDIANA
TOLL ROAD

5-88129







**Outrage factors
influence risk
acceptability.**



Outrage factors

- Is it fair?
- Who benefits?
- Is it voluntary?
- Is there any local/personal control over the risk?
- Is it a familiar risk?
- Do I understand the risk?



Outrage factors

- The public responds more to outrage than hazard.
- Outraged people don't pay much attention to hazard data.



Outrage factors

- Activists and the media amplify outrage, but don't create it.
- Outrage isn't just a distraction from hazard. Both are legitimate and important.



How outrage factors help determine whether a risk is judged high or low

No (higher risk) Yes (lower risk)

Fair?

Do I benefit?

Voluntary?

Familiar?

Well understood?

Detectable?

How outrage factors help determine whether a risk is judged high or low

No (higher risk) Yes (lower risk)

Fair?

X

Do I benefit?

Voluntary?

Familiar?

Well understood?

Detectable?

How outrage factors help determine whether a risk is judged high or low

No (higher risk) Yes (lower risk)

Fair?	X
Do I benefit?	X
Voluntary?	X
Familiar?	X
Well understood?	X
Detectable?	

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Well understood?



Detectable?



Perception of risks from:

Transport of radioactive materials

	Higher risk	Lower risk
Fair?	X	
Do I benefit?	X	
Voluntary?	X	
Familiar?	X	
Well understood?	X	
Detectable?	X	

Driving

	Higher risk	Lower risk
Fair?		★
Do I benefit?		★
Voluntary?		★
Familiar?		★
Well understood?		★
Detectable?		★

Outrage factors

- Whatever you can do to make the risk more fair, provide benefits, make it more voluntary, provide local control, make it familiar -- the more the risk will be accepted.



Outrage factors

- Focus on what you are doing to make the risk even smaller - don't focus on how small you believe the risk to be.



Credible sources

Good:

- Fire chiefs
- Other first responders
- Health professional
- University professors



Credible sources

Moderate:

- News media
- Environmental groups
- Local & state officials



Credible sources

Least:

- **Industry (but most knowledgeable)**
- **Federal government**



 Portland
Pendleton
↓ ↓

EXIT 1
 
Umatilla
Hermiston ↗







Ontario
Baker



GIVE 'EM A
BRAKE



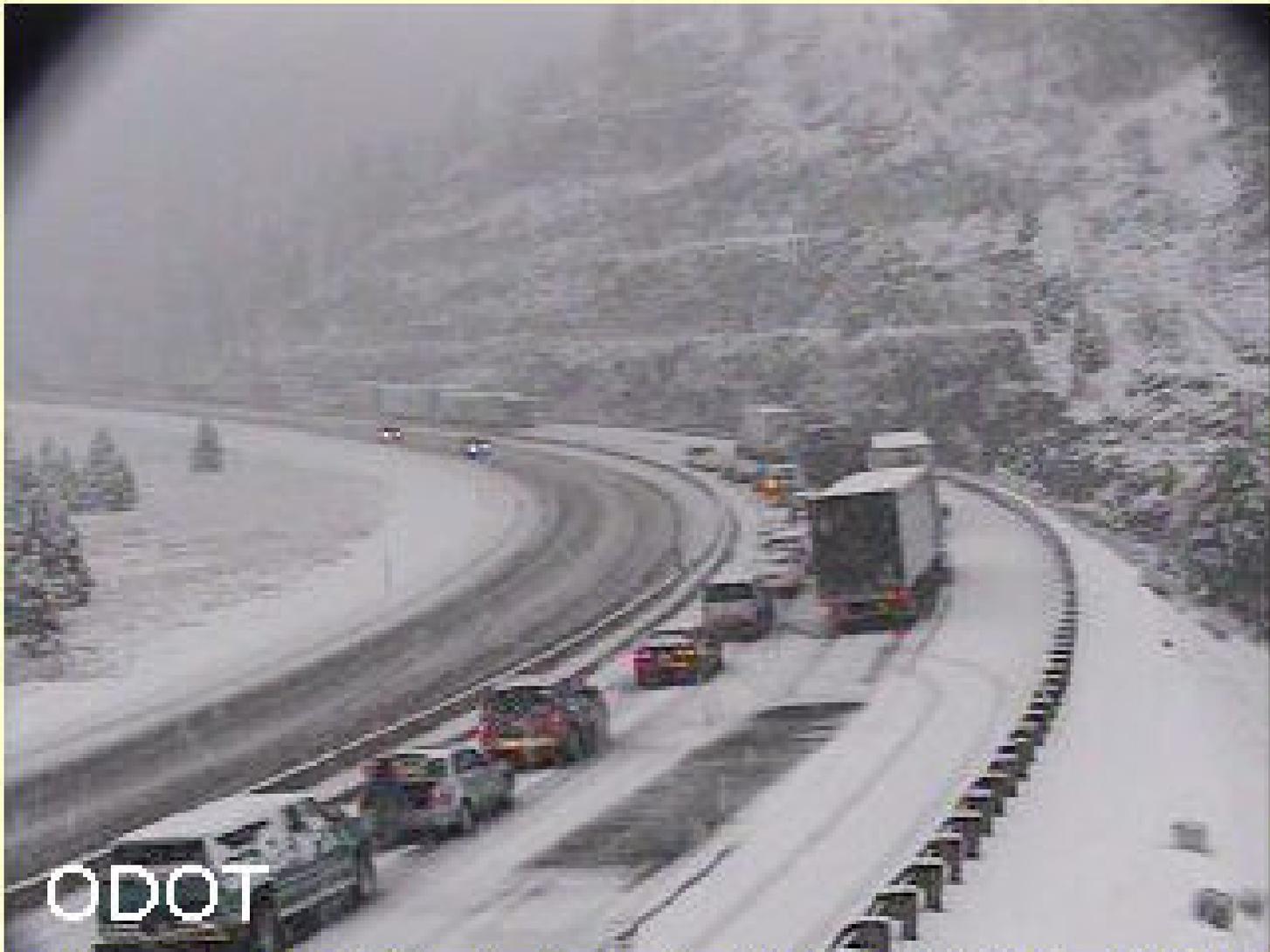


134

LI E-22838 LI

I-84 @ Ladd Creek

Elevation 3200



Milepost: 270.87 Updated: 4/04/2003 05:44 PM
Temperature: 33.2F Wind: SE 9 MPH

Key Public Input

- Support for cleanup is broad - even though it will result in some transport.
- DOE & Oregon taking reasonable precautions.
- Still some skepticism.
- ER capabilities lacking.



Transport Recommendations

- Developed with citizen input.
- Took to other Western states.
- Began discussions with DOE.
- Most became part of WGA transport safety program.



Responsive to Risk Concerns

- Community involved and involved early.
- We recognized a better product because of their involvement.
- Clear about public's level of influence.



Citizen group arguments

Waste transport has dire consequences.

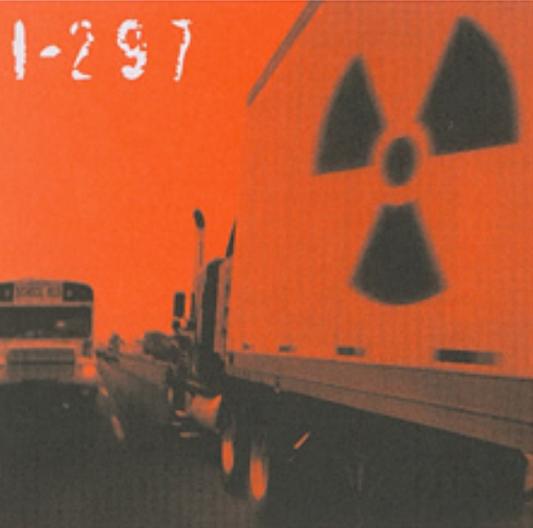






1-297

300 WSK



PROTECT WASHINGTON: STOP NUCLEAR WASTE DUMPING

- STOP** the U.S. Dept. of Energy from making Hanford the nation's radioactive waste dump!
- STOP** 70,000 truckloads of deadly radioactive waste from driving on Washington's roads!
- STOP** dumping radioactive waste in unlined soil ditches that leak into the Columbia River!

BALLOT TITLE "Initiative Measure No. 297 concerns 'mixed' radioactive and nonradioactive hazardous waste. This measure would add new provisions concerning 'mixed' radioactive and nonradioactive hazardous waste, requiring cleanup of contamination before additional waste is added, prioritizing cleanup, providing for public participation and enforcement through citizen lawsuits. Should this measure be enacted into law?"

This measure would establish additional requirements for regulating "mixed waste" (radioactive and nonradioactive hazardous substances) sites, such as the Hanford Nuclear Reservation. The measure would set standards for cleanup and granting permits, would prohibit waste disposal in unlined soil trenches, and require cleanup of tank leaks. Permits would not allow adding more wastes to facilities until existing contamination was cleaned up. Additional public participation would be provided and enforcement through citizen lawsuits would be authorized.

- ☛ More than one-third of the High-Level Nuclear Waste tanks at Hanford have already leaked radioactive waste.
- ☛ Contaminated groundwater is threatening the Columbia River.
- ☛ Clean up Hanford first, before dumping more waste!



PUT 1-297 ON THE BALLOT

INITIATIVE PETITION FOR SUBMISSION TO THE LEGISLATURE

I, the Honorable Sam Reed, Secretary of State of the State of Washington;
 we, the undersigned citizens and legal voters of the State of Washington, respectfully direct that this petition and the proposed measure known as Initiative Measure No. 297 and entitled, "Initiative Measure No. 297 concerns 'mixed' radioactive and nonradioactive hazardous waste. This measure would add new provisions concerning 'mixed' radioactive and nonradioactive hazardous waste, requiring cleanup of contamination before additional waste is added, prioritizing cleanup, providing for public participation and enforcement through citizen lawsuits. Should this measure be enacted into law?", a full, true, and correct copy of which is printed on the reverse side of this petition, be transmitted to the legislature of the State of Washington at its next regular session, and we respectfully petition the legislature to enact said proposed measure into law; and each of us for myself or herself says: I have personally signed this petition; I am a legal voter of the State of Washington in the city (or town) and county written after my name, my residence address is correctly stated, and I have knowingly signed this petition only once.

WARNING: Every person who signs this petition with any other than his or her true name, knowingly signs more than one of these petitions, signs this petition when he or she is not a legal voter or makes any false statement on this petition may be punished by fine or imprisonment or both.



signature (as registered)

print name

address

city / zip

county (required) phone / email

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“Urgent action is needed to protect our families from the risks of more than 70,000 truckloads of radioactive waste on our roads, 70,000 potentially deadly accidents, and 70,000 rolling ‘dirty bombs’ as terrorist targets.”

I-297 News Release, January 2, 2004

“These shipments are a terrorist target – like sending dirty bombs on Interstate 5 and 90 through our communities. Even a minor accident would cripple our region’s economy and put our families at risk. ...”

I-297 News Release, June 23, 2004