WESTERN GOVERNORS' ASSOCIATION
Serving the Governors of 19 States and 3 US-Flag Pacific Islands
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Western States Committed to Radioactive Waste Transport Safety

In March 1999, the federal government began shipping radioactive waste by truck to a deep geologic disposal site in southeastern New Mexico called the Waste Isolation Pilot Project (WIPP). The waste comes from environmental cleanups at former nuclear weapons production sites throughout the country. Transporting this waste to WIPP and disposing of it 2,150 feet under ground helps protect people and the environment.

The DOE and its contract carriers bear primary responsibility for the safety of shipments of radioactive waste, but Western States also play a critical role in protecting their residents and the environment from potential hazards associated with the transportation of the waste. In 1989, the Western Governors' Association established a Technical Advisory Group, consisting of representatives from Western States located along the transportation corridor, to address issues that would help ensure the "safe and uneventful" movement of the waste. To achieve this objective, the Technical Advisory Group worked cooperatively with the DOE to develop a comprehensive transportation safety program, which contains stringent protocols, principles and procedures. This program has been fully implemented by both the DOE and each of the 12 states represented on the Technical Advisory Group (Arizona, California, Colorado, Idaho, Oregon, Nebraska, Nevada, New Mexico, Texas, Utah, Washington and Wyoming). Since the WIPP opened, each element of the transportation safety program is reviewed annually and updated and changed as necessary, to reflect best practices and ongoing needs.

In following the safety protocols, principles and procedures as developed, the DOE and Western States have ensured that extraordinary attention to detail is part of each shipment.

Transportation Routes

Approved routes to WIPP as of April 2008

The Waste

The waste disposed of at the WIPP is called transuranic (TRU) waste. Transuranic waste is characterized as:

- Radiating more than 100 nanocuries of alpha-emitting transuranic isotopes per gram of waste;
- Having a half-life of greater than 20 years;
- And will remain radioactive for thousands of years requiring isolation in a geologic repository.

Transuranic waste consists of protective clothing, tools, glove boxes, glassware, equipment, soils, sludge, leaded rubber gloves, air filters, ash salt metals, ceramic parts, plastics and solidified waste contaminated with man-made radioisotopes heavier than uranium. These elements include plutonium, neptunium, americium, curium and californium. Transuranic waste is produced during nuclear fuel assembly, nuclear weapons research, production and cleanup, and reprocessing spent nuclear fuel.

Prior to 1970, transuranic waste was buried at DOE sites in shallow landfills. Since then, newly generated transuranic waste has been stored in metal drums and other temporary storage containers in anticipation of its eventual shipment to the permanent disposal site.

Ninety-six percent of the TRU waste identified for disposal at the WIPP is classified as "contact-handled," which means the radiation it emits is not very penetrating and does not require heavy shielding. Inhalation and ingestion are the primary radiation hazards posed by this waste. Even in very small quantities, certain contact-handled transuranic materials – such as those containing plutonium – can deliver significant internal radiation doses if taken into the body.

The remaining four percent of the waste is called "remote-handled." The radiation that this waste emits is very penetrating and

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