SUMMARY ADDITIONAL POINTS ON THE CONTINUING WIPP EXPERIENCE

Don Hancock, Southwest Research and Information Center January 27, 2011 - to the Blue Ribbon Commission on America's Nuclear Future

- 1. Accomplishing WIPP's mission can demonstrate whether the federal government and its contractors, at the cost of billions of dollars: (1) can safely operate WIPP to meet the "start clean, stay clean" standard for up to 175,564 cubic meters (m³) of transuranic (TRU) waste; (2) can safely transport TRU waste through more than 20 states without serious accidents or release of radioactive or hazardous contaminants; (3) can meet commitments to clean up TRU waste at about 20 Department of Energy (DOE) nuclear weapons sites; and (4) can safely close, decontaminate, and decommission the WIPP site, beginning in about 2030 or earlier.
- 2. What happens with WIPP also will demonstrate whether legal prohibitions on high-level waste and spent nuclear fuel, and promises that such waste never will come to WIPP are reliable. If such guarantees are not enduring, any other state or tribe has no reason to believe in binding commitments related to any other nuclear waste facilities.
- 3. WIPP's mission success is not assured because of, among other things, the repository design and use, the continuing uncertainties about the TRU waste inventory, and DOE and contractor performance. Instability in Panel 1 resulted in less than 60 percent of its capacity being used. DOE and contractor decisions resulted in Panels 3 and 4 not being filled to capacity, so that about 14,000 cubic meters of contact-handled (CH) waste capacity has not been used. More than half of the remote-handled (RH) waste capacity also has not been used. The long-time design of Panels 9 and 10 may not be used.
- 4. Characterization of the TRU waste inventory over the past two years has resulted in about 27 percent of waste managed as TRU being classified as low-level waste and not disposed at WIPP.
- 5. Failed efforts to reduce costs and accelerate the disposal schedule also have reduced the available capacity for both CH and RH waste.

Recommendations to the Commission

- 1. The prohibition on high-level waste and spent nuclear fuel at WIPP and in New Mexico should continue to be the federal government's policy.
- 2. The WIPP operational and decommissioning phases should be completed before additional geologic disposal sites are chosen. Successful performance would demonstrate the capability of the federal government and its contractors and provide a basis for public confidence. Without success of the first-of-its-kind facility, the prospects for public support for other waste sites are not promising.
- 3. If the federal government builds more nuclear weapons for decades, the new TRU waste created should be handled in another facility. Expanding WIPP's lifetime for such new wastes is not consistent with the law, promises to the state, and technical limitations of the site.

¹ WIPP Land Withdrawal Act §12. Public Law 102-579. Signed into law on October 30, 1992. http://www.westgov.org/wga/initiatives/wipp/PIG-Web/Introduction/WIPP%20Land%20Withdrawl%20Act.pdf