SUMMARY OF WIPP RECOVERY WORKSHOP Held at DOE Carlsbad Field Office (CBFO) January 14, 2015

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1. <u>Recovery Performance Measurement Baseline (PMB) Cost and Schedule</u>

Recovery Resource Loaded Schedule of October 21, 2014 is the Interim Baseline that CBFO provisionally approved on December 30, 2014. Comments are being resolved so that PMB can be approved by January 31, 2015. When Final PMB is approved, changes that impact schedule milestones or cost greater than \$250,000 are reviewed by formal change process. Changes may be required to respond to findings and recommendations of the second Accident Investigation Board report on the radiation event.

<u>Cost & Schedule:</u> The \$242 million Recovery Project Cost in the WIPP Recovery Plan (RP) includes a 37 percent contingency, in addition to the \$175.84 million shown in the interim PMB. The Recovery schedule is from March 24, 2014 to February 15, 2018. The current schedule to commence emplacement in Panel 7 of derived waste from underground recovery and waste stored in the Waste Handling Building is April 2016. Estimates of the amounts of such derived waste (low-level and transuranic) will be provided.

The new Permanent Ventilation System (PVS) is necessary for full operations and is currently scheduled in 2019. Interim Baseline cost is \$97,878,313 for the Ventilation, \$17,768,807 for the new exhaust shaft and drifts; a total of \$115,647,121. The RP range, with contingency, is \$65 million to \$261 million for Ventilation and \$12 million to \$48 million for new shaft and drifts.

Alternatives regarding PVS:

Nuclear Waste Partnership (NWP) is finishing an alternatives analysis of the PVS with new exhaust shaft and an alternative without the new exhaust shaft. Some participants request a public process regarding the alternatives before DOE's approval.

Approvals required by the Environmental Protection Agency (EPA) and New Mexico Environment Department (NMED) create large schedule uncertainty that is a greater difference than cost in comparing the two alternatives.

Development of PMB:

Three major components are Scope, Schedule Activities, and Basis of Estimate. Each component takes into account uncertainty and risk. Safety and quality are built in to each component. Risk and uncertainty were developed using modeling. The assumptions used to develop the PMB framework and in the Monte Carlo modeling by NWP will be provided.

2. Critical Path schedule milestones

Near-Term milestones are Project REACH video mapping finished by January 31, 2015; Panel 6 initial closure complete by February 28, 2015; Room 7, Panel 7 closure done by April 30, 2015; underground zones 1-7 recovered by August 31, 2015. Underground zone 8 (south end of the mine) has contamination levels of up to 10,000 disintegrations per minute (dpm)/100 square centimeters (cm²) and underground zone 9 (exhaust drift and shaft) has contamination levels of up to 90,000 dpm/100 cm². A map of the contamination levels in the underground will be made available.

Because of the contamination levels at the entrances to Panel 6, workers carrying out the initial closure of the panel will use personal protective equipment (PPE), including selfbreathing apparatus. Higher contamination levels in Panel 7 will require the Room 7, Panel 7 closure also to be done using PPE. NWP presumes that the contamination spread because of pressure changes when ventilation was switched to filtration (because of the rapid decrease in air flow from approximately 250,000 cubic feet per minute (cfm) to 60,000 cfm) and because both americium and plutonium move by "recoil".

3. Worker Safety

NWP President Bob McQuinn and CBFO Manager Joe Franco stressed that the goal is to have workers receive 0 radiation dose. The NWP contract uses DOE Order 835 for worker and public exposure limits, so worker exposure of less than 100 millirem per year is not a reportable event. The two officials also stated that workers are fully involved in developing the safety procedures for underground activities. Information about the instruments used in air pressure measurements, radiological surveys, and hazardous chemical surveys will be made available.

4. Equipment decontamination

Procedures, including acceptable residual levels of radioactivity, will be provided.

5. Waste characterization

Waste characterization continues to be done at Idaho National Laboratory, Savannah River Site, and Oak Ridge National Laboratory using existing techniques. However, NWP is not certifying any of the containers as ready to ship because characterization changes could be required in the future to address characterization issues that contributed to the radiation release.

6. Baseline and Recovery budgets

The workshop did not discuss the approximately \$185 million WIPP annual budget that is in addition to the Recovery Project. A request was made for a public accounting of what activities are funded from each budget. A participant is concerned about the contractor financial incentives not corresponding to RP milestones.

7. Future underground panels

Contaminated Panel 7 and Panel 8, where mining started, are the disposal areas. Other panels and where they will be located will not be considered until operations resume.

The presentation slides and materials distributed are available at: http://www.wipp.energy.gov/wipprecovery/path_forward.html