WIPP Town Hall Meeting

December 6, 2017

Sponsored by the U.S. Department of Energy and the City of Carlsbad, NM
Agenda

• Welcome – Mayor Dale Janway

• Introduction – Moderator John Heaton

• WIPP Status – NWP President and Project Manager Bruce Covert

• CBFO Update – CBFO Manager Todd Shrader

• Capital Asset Projects – Federal Project Director Ron Gill
WIPP Status
NWP President and Project Manager
Bruce Covert
Recent Accomplishments

• Received 100\textsuperscript{th} shipment
  o Since April 2017
• Received 12,000\textsuperscript{th} total shipments since opening
• Averaging 5-6 shipments per week
• Resumption of LANL shipments
• NWP receives major corporate award
Shipments (as of 12/04/17)

- Total Shipments received (since 1999) – 12,012
- Shipments since restart – 118
- WIPP drivers have safely traveled almost 14.3 million loaded miles
Room 6, Panel 7 Update

- No extremes in the movement of the ground
- Continue to monitor the area very closely
- Rock falls are not uncommon in prohibited areas of the WIPP underground
- CBFO and NWP continue to evaluate safe work conditions
- Rock fall is not anticipated for five or six weeks
- Employee safety is highest priority
Supplemental Ventilation System

- All tests have been completed
- Received DOE approval to operate the SVS
- Air balancing in the underground complete
- Formal turnover to operations will occur this week
Resumption of Mining in Panel 8

- Resumption this month
- Two new salt haul trucks have been received and are in the underground
- Preventative maintenance activities have been completed on continuous miner
- New de-dusters are installed and tested
- All other equipment needed for mining is ready to go
Community Commitment Plan

- Community Commitment Plan
  - Describes goals for Nuclear Waste Partnership community involvement and support
  - New community liaison – Missi Currier

### 2018 COMMUNITY PLAN SUMMARY

<table>
<thead>
<tr>
<th>Critical Area</th>
<th>Volunteerism</th>
<th>Monetary Donations</th>
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</thead>
<tbody>
<tr>
<td>Education</td>
<td>800 volunteer hours</td>
<td>$70,000</td>
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<tr>
<td>City of Carlsbad</td>
<td>100 volunteer hours</td>
<td>$100,000</td>
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<tr>
<td>Economic Development</td>
<td>200 volunteer hours</td>
<td>$200,000</td>
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<td>Community Support</td>
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<tr>
<td>Totals</td>
<td>2,200 volunteer hours</td>
<td>$500,000</td>
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</tbody>
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Figure 1.0: The 2018 Contractor Community Commitment Plan addresses community needs and builds on more than 30 years of investment in Eddy and Lea counties.
Initiatives Already Begun
• Speakers Bureau
• 2017 SafetyFest
• Christmas on the Pecos Blanket Brigade
• Partnering with High School, City to refurbish recycle bins
• Annual Maintenance Outage
  – January 15-26, 2018
  o Ground control in areas that impact normal operations
  o Apply new epoxy coating to floor in Waste Handling Building
  o Various electrical work that requires power interruption
CBFO Manager’s Update
Todd Shrader
Timely Decisions

- Principal Deputy Assistant Secretary for Environmental Management Jim Owendoff
  - EM conducted a review of the full EM program to identify opportunities to improve effectiveness and execution across the board with a focus on timely decision-making
  - EM-HQ leadership worked with site managers in the field and solicited input from federal employees at all levels
  - Review highlighted the importance of WIPP across EM complex
  - CBFO/WIPP is working with HQ on several key opportunities
    - Most have been discussed in previous Town Hall meetings
Timely Decisions

- Key WIPP Opportunities - Decisions
- Increased Ventilation at WIPP
  - Supplemental Ventilation System – near term
  - Permanent Ventilation – out years
- Improve Surface Infrastructure
- Ramp-Up Emplacement Rates
Safety Significant Confinement Ventilation System (15-D-411) Exhaust Shaft (15-D-412)

Carlsbad Field Office

Ronald E. Gill
Federal Project Director
Summary

• Project Overview
  o Alternatives evaluated
  o SSCVS (15-D-411)
  o Exhaust Shaft (15-D-412)

• Hoisting Capability Mission Need
Although there are two capital asset projects for long term recovery, in the end they will work as one complete ventilation system.
Alternatives Evaluated

- Nuclear Waste Partnership (NWP) proposed a total of 24 alternatives with 2 requiring additional study through Conceptual Design
  - Alternative 1-A
    - Provide a new unfiltered exhaust shaft for mining operations and use existing exhaust shaft with additional filtration capacity for full waste handling and disposal operations
  - Alternative 1-D
    - Existing exhaust shaft with filtered ventilation sufficient for full mining and waste handling and disposal operations

- An Independent Analysis of Alternatives was contracted with Trinity Engineering Associates that developed 4 alternatives that were similar to the ones developed by NWP
Group 1 – Underground Ventilation System Alternatives

- 1-A New Exhaust Shaft for mining operations and use existing exhaust shaft with additional filtration capacity for full waste disposal operations
- 1-B New exhaust shaft for combined mining and filtered disposal exhaust
- 1-C Two new exhaust shafts – one for mining exhaust unfiltered and one for disposal exhaust filtered
- 1-D Existing exhaust shaft with filtered ventilation sufficient for full mining and waste handling operations
- 1-E New intake shaft, use existing exhaust shaft with additional filtration capacity, unfiltered exhaust through Air Intake Shaft (AIS)/SHS shafts
- 1-F New intake shaft, new exhaust shaft with additional filtration capacity. Separate waste and clean side circuits
Group 2 - Underground Ventilation System Alternatives

Auxiliary Options

• 2-A Local exhaust filtration at the disposal panel/room – use in conjunction with alternatives 1-A through 1-F
• 2-B Use existing ventilation system as standby – use in conjunction with alternatives 1-A through 1-F
• 2-C Unfiltered exhaust with shift to filtration capacity – use in conjunction with alternatives 1-A through 1-F
Group 3 – Existing Ventilation System Alternatives (Do Nothing)

- 3-A Current filtration Mode with Interim and Supplemental ventilation systems
- 3-B Current filtration Mode with Interim and Supplemental ventilation systems – expand IVS to achieve a total filtered flow rate of 330,000 acfm
- 3-C Use existing exhaust shaft, 1-860 fan for filtered circuit or 1-700 fan for unfiltered circuit
- 3-D Decontaminate the underground and existing exhaust shaft and use 700 fans
SSCVS (15-D-411) Status

• Completed Independent Cost Estimate
• Nearing completion of an External Independent Review (EIR)
  o Within the cost range approved at CD-1
  o Turn Over to Operations – March 2021
  o Complete D&D of Existing System and Schedule Margin – November 2022
• Completing actions from EIR
• Anticipated Critical Decision 2/3 January 2018
• Anticipated Request for Proposal for Construction January 2018
• Award Construction Contract March 2018
• Start Construction April/May 2018
SSCVS (15-D-411) Site Plan
SSCVS (15-D-411) Scope

New Filter Building
- 55,553 sqft
- 125 ft Exhaust Stack
- 2 3,000 KW Standby Diesel Generators

Salt Reduction Building
- 24,966 sqft

Existing Exhaust Shaft
- 110,000 CFM Dedusters and Demisters
  - 5 online
  - 1 in standby
  - 1 in maintenance

Total Airflow – 540,000 CFM
- 22 27,000 CFM Safety Significant HEPA filter housings
  - 20 online
  - 1 in standby
  - 1 in maintenance
- 7 110,000 CFM Dedusters and Demisters
  - 5 online
  - 1 in standby
  - 1 in maintenance
- 22 27,000 CFM Safety Significant HEPA filter housings
  - 20 online
  - 1 in standby
  - 1 in maintenance
- 6 1,000 HP Fans (housings, motors, Variable frequency drives
  - 4 online
  - 1 in standby
  - 1 in maintenance

24,966 sqft
4 online
1 in standby
1 in maintenance
Exhaust Shaft (15-D-412) Status

• Working to change project name to “Ventilation Shaft”
• Will be sinking the shaft using conventional mining methods
• Independent Cost Estimate undergoing factual accuracy review
  o Anticipated project completion September 2022
• External Independent Review (EIR) scheduled for February 2018
• Anticipated Critical Decision 2/3 May 2018
North Access Road Bypass
• New shaft is providing a 30 foot diameter shaft to allow a hoisting capability

• Mission Need Statement and business case is being developed now for FY 2019/2020 budget cycle for design and construction funds with install starting in FY 2022 after shaft sinking

• Pre-conceptually a new material hoist and salt hoist capability installed – still evaluating potential alternatives
Questions?