WIPP M&O Pre-Proposal Conference and Tour

Site Tour Script

As you know we can't answer any questions but do have cards for you to write down any questions that you may want addressed. I will collect them at the end of the tour and answers will then be provided for everyone at a later date on the website. There will be no eating and drinking on the tour, so if you have anything, please leave it on the bus. Also please leave all cameras and cell phones on the bus. You will be returning on the same bus in a few hours.

Please follow me through security so that we can get you badged and verify that you completed the safety training yesterday.

Please be reminded that nothing on the tour alters the terms and conditions of the solicitation.

There are four shafts into the underground. You can see the air shaft and salt shaft on your left. You will be going into the mine through the waste shaft which is located on the left behind the support building. The exhaust air shaft is on the other side of the waste building and can't be seen from here.

The site currently operates seven days a week, two shifts during the week, with approximately 350 workers on site during the day. The afternoon shift is considerably smaller in size. Waste operations are typically conducted between 6:30 AM and 1:30 AM Monday through Thursday and 6:30 AM to 3:30 PM on Friday through Sunday. There is no afternoon shift over the weekends.

On your left you can see the warehouse and maintenance shop. Behind the row of buildings on the left are a series of trailers that are used as offices for personnel working at the site.

Behind the salt shaft you can see the piles of salt that have been removed from the mine. DOE does have an agreement to sell salt, but that only went into effect last year and will not alleviate the requirement to maintain the salt piles and control runoff.

We are going to the lamp room in the support building where the tour will be split up. The support building also houses the shift office and the Central Monitoring Room which is the central control location for all operations at the site.

Arrive at the lamp room. Meet the underground tour guides

If you are scheduled to take the underground tour please follow_____, _____, and _____into the lamp room. Everyone else please stay with me and we will begin the surface tour.

SURFACE TOUR

We will be walking to the waste handling bay where we will review the Contact Handled waste processing activity.

Tour travels into the Contact Handled bay where they go up to the entry control point in front of the story board. The tour guide then reviews the process with them.

If everyone can follow the pictures on the board, I will quickly review our contact handled waste process.

- *The first photo shows the waste arriving and being inspected at the front gate.*

- *Next a radiological Swipe test is made on the TRUPACT*

- *The TRUPACTs are unloaded from the trailer*

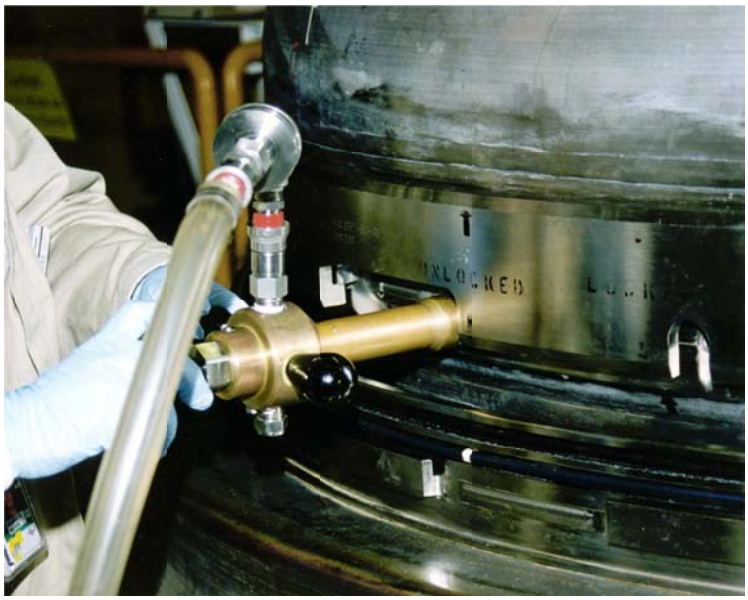
- *TRUPACT coming thru airlock on forklift*

- *Here a Forklift is bringing the TRUPACT through the airlock and loading it onto one of the docks*

- *Next a radiological tech surveys outer lid of TRUPACT. You will notice that there are multiple checks throughout the process to ensure that there is no contamination on the container or the TRUPACT*

- *Now, the radiological tech performs a survey on the inner vessel*

- *A vent port tool is inserted by the waste handler into the inner vessel and air is drawn through an in-line filter to ensure there are no airborne elevated levels inside the inner container. Throughout the process, controls are in place to ensure that there is no radiological release and that there has been no breach of the waste containers.*



- *The waste handler operates the vacuum system to ensure that the TRUPACT stays under negative pressure*

- *Next the inner vessel is covered with a vent hood to capture any potential airborne release*

- *The vent hood is also connected to the ventilation system*

- *After the lid is raised a Rad tech will then take swipes from the interior of the lid*

- *Rad tech wipes inner containment vessel lid before unloading continues*

- *Next the waste handler will remove the inner containment vessel lid*

- *In this photo, standard waste boxes are lifted out of the TRUPACT,*

- *Here a Rad tech performs swipes on a payload*

- *This is a photo of a 14 pack drum payload being lifted out of a TRUPACT*

- *This photo shows a comparison of the drums and waste boxes on a pallet*

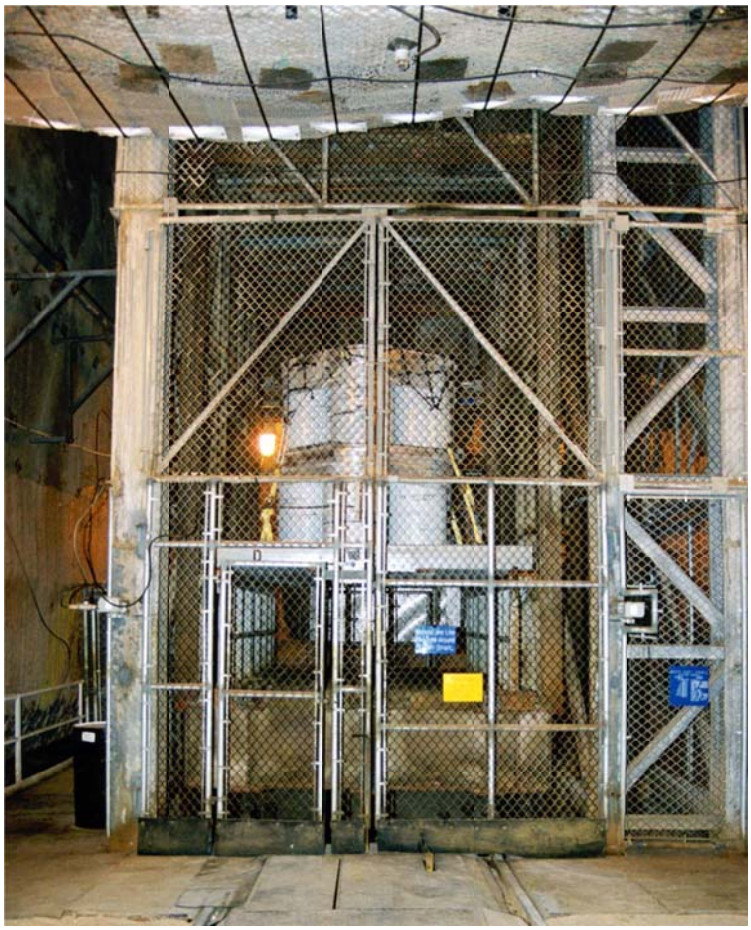
- *Prior to shipment, each container receives a barcode to maintain inventory control. This photo shows a waste handler scanning a barcode*

- *Here a forklift is moving waste barrels on a pallet*

- *The barrels are then moved to the conveyance loading car*

- *This photo shows the barrels on a conveyance car which then moves on tracks to the waste hoist*

- *The waste is then transported underground*



- *Next the barrels are moved on to the transporter*

- *This photo shows a waste handler removing barrels from the underground transporter*

- *Finally the waste is placed in the underground. If you look to the left in this photo you can see 21 drums* in *place with a bag filled with Magnesium Oxide (MgO) on top of the stack. MgO provides an engineered barrier for the waste. An engineered barrier is required by the Environmental Protection Agency.*

Please follow me and we will go on to the TRUPACT III processing area. On your right is the compressor building which supplies all the compressed air for the site. Also you can see the fire water pump house and the domestic water holding tanks. A potable water line comes to the site. Sewage is treated through a septic system.

We are now entering the TRUPACT Maintenance Building. You can see one of the forklift charging stations on your right. All surface waste handling vehicles used inside the buildings are electric, in order to limit the amount of flammable materials that are near the waste.

We are now in the TRUPACT III unloading area. The site will begin receiving TRUPACT III shipments in the next few weeks. The waste will be coming from the Savannah River Site and their shipments are projected to continue into FY13. A Readiness Assessment was successfully completed on Jun 24, 2011 and the first of 6 planned TRUPACT III packages has just been accepted from the manufacturer.

The TRUPACT III is the only square NRC licensed Type B container in existence and enables us to take oversize boxes of TRU waste without resizing.

The TRUPACT III is brought into the area using an Automatic Guided Vehicle (AGV). This provides close control of the waste which is needed given the tight clearances in the area. A robot is used to remove the bolts on the container and the waste is removed from the side of the unit and processed in a similar fashion to other contact handled waste received at the facility.

We will now go over to the remote waste handling bay.

(As we enter the area.) The canister loading room is on the right. The transfer cell is located directly below.

If everyone will gather around the story board, I will quickly review the Remote Handled waste process

- *On arrival at WIPP, the RH-72B road cask is trailered into the Remote-Handled bay.*
- *The impact limiters are removed and radiological surveys are performed on newly exposed areas of the road cask.*
- *The road cask is rotated to a vertical position and placed on a road cask transfer car.*
- *Road cask transfer car is moved into the cask preparation station.*
- *Waste handling crews remove the 18 lid bolts. The outerlid is lifted from the road cask. Radiological surveys are performed.*
- *The radiological assessment filter is attached and the inner vessel lid lift fixture is installed.*
- *The road cask is moved by the transfer car into the cask unloading room.*
- *The road cask is lowered into the transfer cell and placed on the transfer cell shuttle car.*
- *A facility cask is moved into the unloading station and rotated to a vertical position.*
    - *The facility canister is lowered into the shield insert. Swipes are taken to ensure there is no contamination. The facility canister is then lifted into the facility cask.*
- *The facility cask is rotated to a horizontal position prior to being moved on a transfer car to the waste hoist conveyance.*

- *The facility cask is placed on the waste hoist conveyance for the 2,150-foot trip down to the WIPP underground.*
- *Once the waste arrives in the underground, the facility cask is removed from the transport car by forklift and taken to a disposal room.*
- *A 17-foot deep borehole in the wall has been predrilled and is ready for the disposal of Remote Handled waste.*
- *Emplacement equipment pushes the facility canister into the previously-prepared borehole, and then fills the borehole with a shield plug, completing the emplacement process. The shield plug reduces the dose rate from the Remote Handled waste so that personnel can work in the area without additional controls.*

This completes the above ground portion of the tour. We will now take you to the Lamp room for the underground portion of your tour (or to the bus for your return transportation back to Carlsbad)

As we go out, you can see the exhaust fans on the right. These other buildings are the safety building and across the street, the engineering and training buildings.

Please be reminded that nothing on the tour alters the terms and conditions of the solicitation.

UNDERGROUND TOUR (starting in lamp room)

On a typical day, the waste hoist will be operated for personnel transport every couple of hours. The hoist has two levels. The top can hold 75 personnel while the bottom is used to hold the waste that is being transferred for emplacement.

We are going 2150 feet below the surface. The trip takes approximately 4 minutes. The hoist is supported by six wire ropes that are checked weekly and non-destructively inspected annually. Replacement, if required, is done during the extended maintenance outage over the winter holidays. The shaft is lined with concrete down to the top of the salt formation. The waste is placed near the middle of the salt bed which is approximately 2,000 feet thick. In addition to waste and personnel, utility cables also pass through the shaft.

Once we reach the bottom, please follow your guide to the carts which will take us to Panel 6 where waste is currently being placed. All waste emplacement is located in the south end of the mine. The north end is where the research activities are being conducted. The research activities can vary over time and are located in the mine to take advantage of the extremely low radiation background provided by the salt. These research activities are independent of the waste operations but are required to be supported, but not conducted, by the M&O Contractor.

Underground, everything is measured from the salt shaft. There are three primary routes of transfer. Waste is moved through the East 140 passage, salt extraction occurs through the west 30 passage, and the west 170 passage is the primary construct route. As we travel to the panel we will pass through an air lock that controls the air flow in the southern portion of the mine and we will pass the first three panels on the left which are full and closed.

This is Room 7 of Panel 6 and is the first room of this Panel to be filled. Each Panel has 7 rooms and we have filled five of the Panels. Here you can see the waste that has been just emplaced. As you can see MgO bags are placed on each stack. The boreholes contain RH waste and the RH is placed and sealed prior to CH waste placement. If RH is not placed and sealed first, we lose the capability to go back and utilize that RH disposal space at a later date. The boreholes that you see are drilled up to three months before waste placement. In the disposal rooms, the salt creeps in at a rate somewhere between 5 and 7 inches a year.

In this room you can see in more detail what the RH emplacement process looks like. The device in front of you is called the Horizontal Emplacement and Retrieval Equipment and it is used to place both the waste and the five foot concrete plug into the borehole. RH waste is currently being emplaced in this room.

This Panel is just being mined and you can see how the salt is excavated. As you can see it is extracted in two layers since the miner can't reach the 15.5 foot ceiling from the floor. The WIPP Land Withdrawal Act authorizes 10 Panels. Five are complete, three additional ones are designed and the last two are being planned. Four of the full Panels are closed and Panel 5 closure will commence later this year.

This is a good location to pick up salt souvenirs, so I will give you a couple of minutes before we go back to the waste hoist.

Remember if you have any questions, please submit them in writing. Please be reminded that nothing on the tour alters the terms and conditions of the solicitation.

Individuals return to the waste hoist and are transported back to the lamp room. One of the escorts takes the visitors back to the bus for transport back to Carlsbad or waits with them to begin the surface tour.