



U.S. DEPARTMENT OF  
**ENERGY**

OFFICE OF  
ENVIRONMENTAL  
MANAGEMENT

## WVDP Project Update

Main Plant Process Building  
Deactivation, Preparations and Controlled Deconstruction

**Kelly Wooley**

*Deputy General Manager*

**Citizen Task Force Meeting**

**September 28, 2022**

*(Virtual)*

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## Citizen Task Force Members Tour WVDP

July 27, 2022



Main Plant



Water Management System



HLW Casks (in background)



Drum Cell



Radiation Monitoring Control Room

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## Safety

Metric	August 2022 12-Month Rolling Average
Total Recordable Cases (TRC)	0.31
Days Away Restricted or Transferred (DART)	0.31
Last Lost Time Case Recordable	April 26, 2022
Last Recordable Injury	May 12, 2022

Background Photo: Onsite equipment displays the importance of safety every day

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## COVID-19 Controls

- CHBWW updated COVID-19 Mask and Screening Requirements to note the Cattaraugus County Community Transmission Level is Medium
- COVID-19 activities such as system rounds, preventive maintenance and cleaning/sanitizing continue with an increased emphasis on basic safety measures (e.g., washing your hands frequently, refraining from touching your face, utilizing face protection, use hand sanitizer and disinfectant wipes, etc.)
- CHBWW continues to monitor regional COVID-19 statistics and its personnel in accordance with CDC guidance

Background Photo: Backpack sanitizer is used onsite for deep cleaning onsite

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## Main Plant Deactivation

- **Product Purification Cell (PPC)** – Completed aggressive decontamination of the walls; completed decontamination equipment demobilization

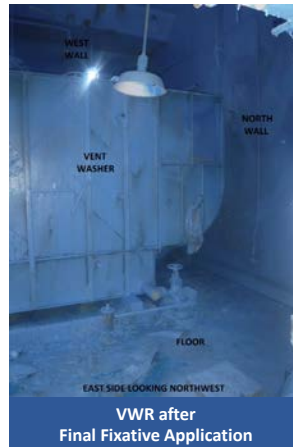


**100% of Main Plant Deactivated**  
**100% of Ancillary Areas Deactivated**  
**7 of 7 Ancillary Facilities Deconstructed**

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## Main Plant Deactivation (Cont.)

- **Vent Wash Room** – Completed all activities, including final cleanup, fixative application and sealed duct openings on Vent Washer unit



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## Main Plant Deactivation (Cont.)

- **Acid Recovery Cell** – Completed floor cutting with track saw
  - Cut floor into 26 blocks for safe removal
  - Blocks will be carefully removed during Main Plant deconstruction to control potential contamination at its source
  - Blocks will be loaded individually into specialty containers for off-site disposal



(l) ARC before cutting; (m) Track saw with \*60-inch blade; (r) ARC floor cuts completed

\*Initial cutting begins with a 32-inch blade, then a 48-inch blade, and finally a 60-inch blade until the desired depth is reached

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## Main Plant Demolition Preparations

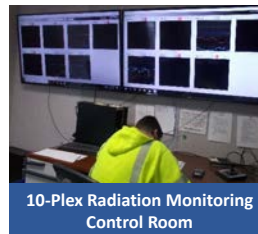
- **Water Management System** – Completed installation; completed development of Work Instruction Package; completed demonstrations as part of the start-up process; and issued Standard Operating Procedure revision (based on management and employee feedback)
- **Drum Cell Modifications** – Currently being used for preparing waste containers for MPPB deconstruction
- **10-Plex Modifications** – Currently supporting operations for MPPB deconstruction, including showers, locker rooms, radiation monitoring control room, and respirator issue room
- **Rail Operations** – Rail shipments resumed after conducting additional training, revising operating procedures, and incorporating lessons learned from the derailment event



Water Management System



Drum Cell



10-Plex Radiation Monitoring Control Room

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## Commencement of Main Plant Deconstruction

- **Contractor \*Readiness Assessment (CRA)** – Completed CRA for the future deconstruction of the Main Plant Process Building; and declared readiness on August 31
- **Department of Energy Readiness Assessment (RA)** – Completed September 13; approval to proceed on September 15; and commenced the controlled deconstruction on September 21
- DOE’s planned approach for deconstructing the MPPB incorporates best practices and lessons learned from WVDP and across the DOE complex including:
  - The use of deliberately planned and sequenced deconstruction
  - Implementation of robust work controls
  - An extensive modelling and real-time monitoring system to help ensure that any potential radiological exposure from deconstruction activities is kept well below regulatory levels

*\*Demolition readiness is comprised of both physical condition of the Main Plant Process Building (i.e., deactivated), as well as the preparations undertaken by the site to ensure well-developed systems and processes are in-place to ensure a safe demolition (Readiness Assessments).*

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## Commencement of Main Plant Deconstruction



Start of Main Plant controlled deconstruction (Solvent Storage Terrace Area)

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## Main Plant Deconstruction Equipment (New)

- **Quarry Saw** – This piece of equipment will be used to make pre-cuts in the Off-Gas Cell corner wall as part of Main Plant deconstruction



Quarry Saw



8-Foot and 4-foot saw blades

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## Balance of Site Facilities and Infrastructure

### NEW WORK SCOPE:

- **New Guard House** – Construction of the new guard house continues; inside work ongoing



Concrete foundation for new Guard House in June 2022



Guard House on September 12, 2022

- **Legacy Waste (HICs)** – Completed the safe relocation of the remaining four HICs to a new storage area onsite
- **Tank Sampling (8D-4)** – Completed a pre-entry video inspection and radiological survey inside the pump pit

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