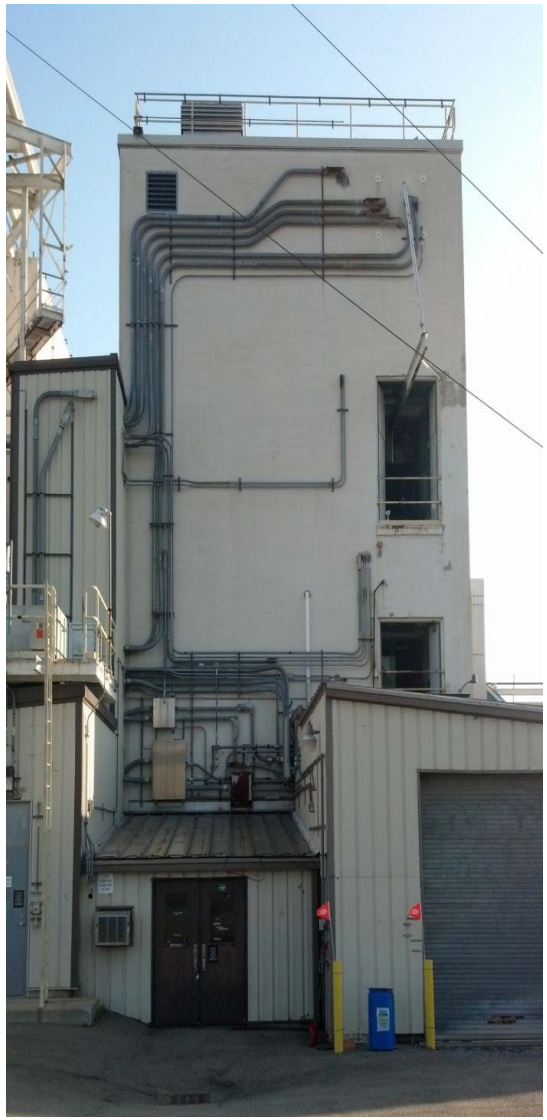


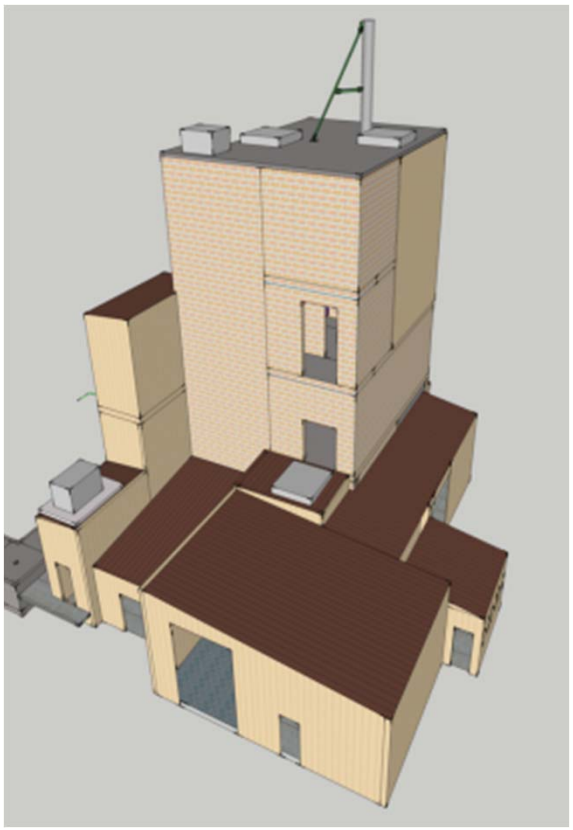
West Valley Demonstration Project
Phase I Decommissioning
01-14 Building Demolition Status

One Project. One Team. One Goal.

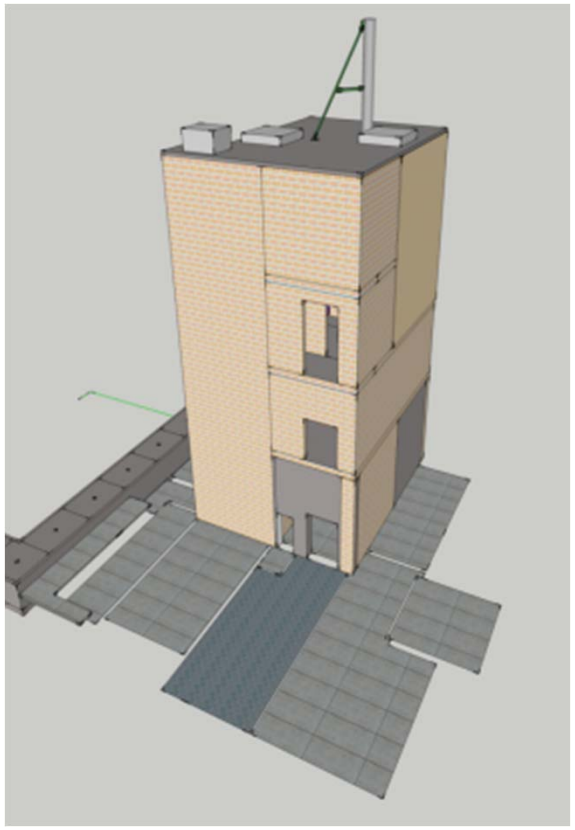
Presented by: Tom Dogal, CHBWV

February 27, 2013

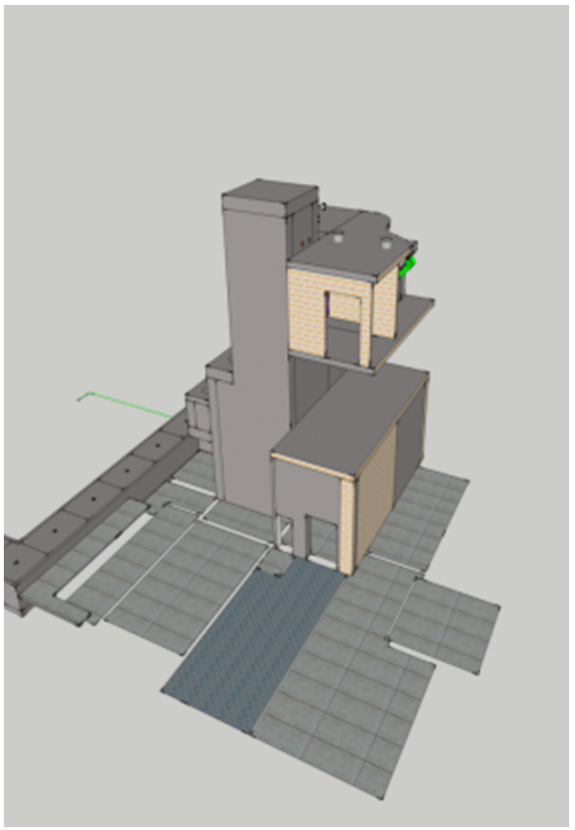
01-14 Building: Steps to Demolition



Original Construction



Step 1 Complete



After Step 2 – In Progress

Building 01-14 Readiness for Demolition

- Initial Preparations
  - Radiological characterization (facility, piping, systems)
  - Utility deactivations/isolations (tell-tailing & draining)
  - Removal of highly contaminated piping/pumps/ hazardous materials
  - Foaming/grouting of Waste Dispensing Vessel, reheaters, and vittrification offgas piping for removal during demolition
  - Fixative application to cells, sumps, highly contaminated piping internals
  - Thermaflex® contamination encapsulant application to filter housing and selected areas in cells

Building 01-14 Readiness for Demolition

- Final preparations
  - Removal of ventilation system filters
  - Isolation of remaining utility and instrument air systems (pipe bridge)
  - Isolation/plugging of fire lines (control room)
  - Removal of remaining hazardous materials throughout building
  - Isolation of remaining electrical systems
  - Removal of asbestos containing materials (internal/external)
  - Removal of shielded pipe chase section tying 01-14 Building to the Utility Room
  - Site preparations (boundaries, cargoes, run-on/run-off controls, radiological controls)
  - Waste management (containers, shipper/landfill arrangements)

Radiological/Environmental Mitigations

- National Emissions Standards for Hazardous Air Pollutants (NESHAPS) modeling (EDE 0.00348 mrem/yr) – below required approval level (0.1 mrem/yr)
- Full-time Radiological Control Technician coverage
- Demolition zone perimeter air monitoring (work boundaries)
- Daily air monitoring during demolition
- Equipment operator breathing zone monitoring
- Off-Site Ambient Air Monitoring (16 stations located offsite)
- Contamination survey of radiological boundary area and inside equipment cabs
- Frequent surveys of processor head/bucket/debris
- Dust suppression during demolition
- Adjacent facility access control and monitoring (Utility Room & Main Plant Process Building monitoring)
- Controlled water runoff from dust suppression
- Lockdown of debris at end of day

01-14 Building – Step 1 Complete

- Completed demolition of:
  - Control room
  - Truck bay
  - Conference room
  - Motor control center room
  - Clean drum room
  - Utility pipe bridge

01-14 Bldg Start of Demo

01-14 Building Demolition, cont.

01-14 Building Demolition

- Completed demolition on the north side of the facility around the off-gas pipe gallery and the pipe bridge between the Utility Room and the 01-14 Building
- Continued waste load out of clean demolition debris for disposal
- Expect to complete demolition of 01-14 Building by early May 2013

Demolition of North Side of 01-14 Building

01-14 Building Demolition, cont.

- Continuing demolition of Step 2 which includes roof structure and exterior concrete block walls

01-14 Southeast Corner

01-14 Bldg. North Facade

01-14 Bldg. SW Corner


02/13/2013

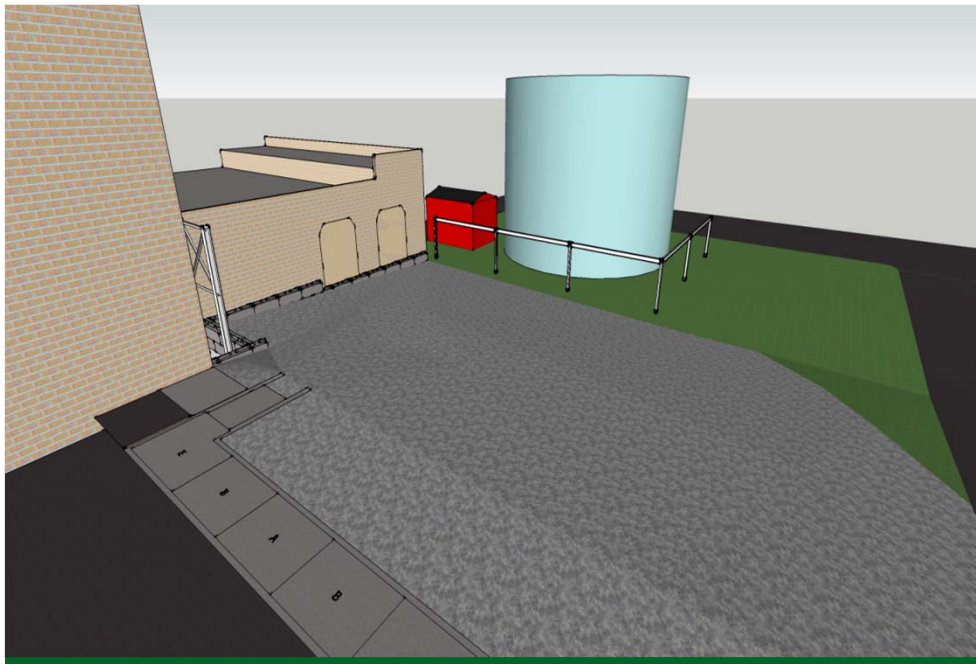

02/13/2013


02/13/2013


AMERICAN DND
02/13/2013

Demolition Description (cont'd)

- Next: Step 3 – (Partially Rad. Contaminated)
  - Additional site work, demolition of remainder of facility
  - Waste: Structural materials (including concrete/block), painted structural steel via 20 cubic yard intermodals to Energy Solutions, majority of special equipment via cargo/ intermodals to Nevada National Security Site, wastewater to on-site interceptor for treatment via holding tanks in Utility Room



End State – Earthen cover sloping from north to south

Demolition – Step 2
(as of February 22, 2013)

Questions?