



U.S. DEPARTMENT OF
ENERGY

OFFICE OF
ENVIRONMENTAL
MANAGEMENT

West Valley Demonstration Project

Guide to Successful Waste Shipments

Session 99

Daniel Sullivan

Facility Project Director

Department of Energy – West Valley

March 8, 2017

Two Successful Projects

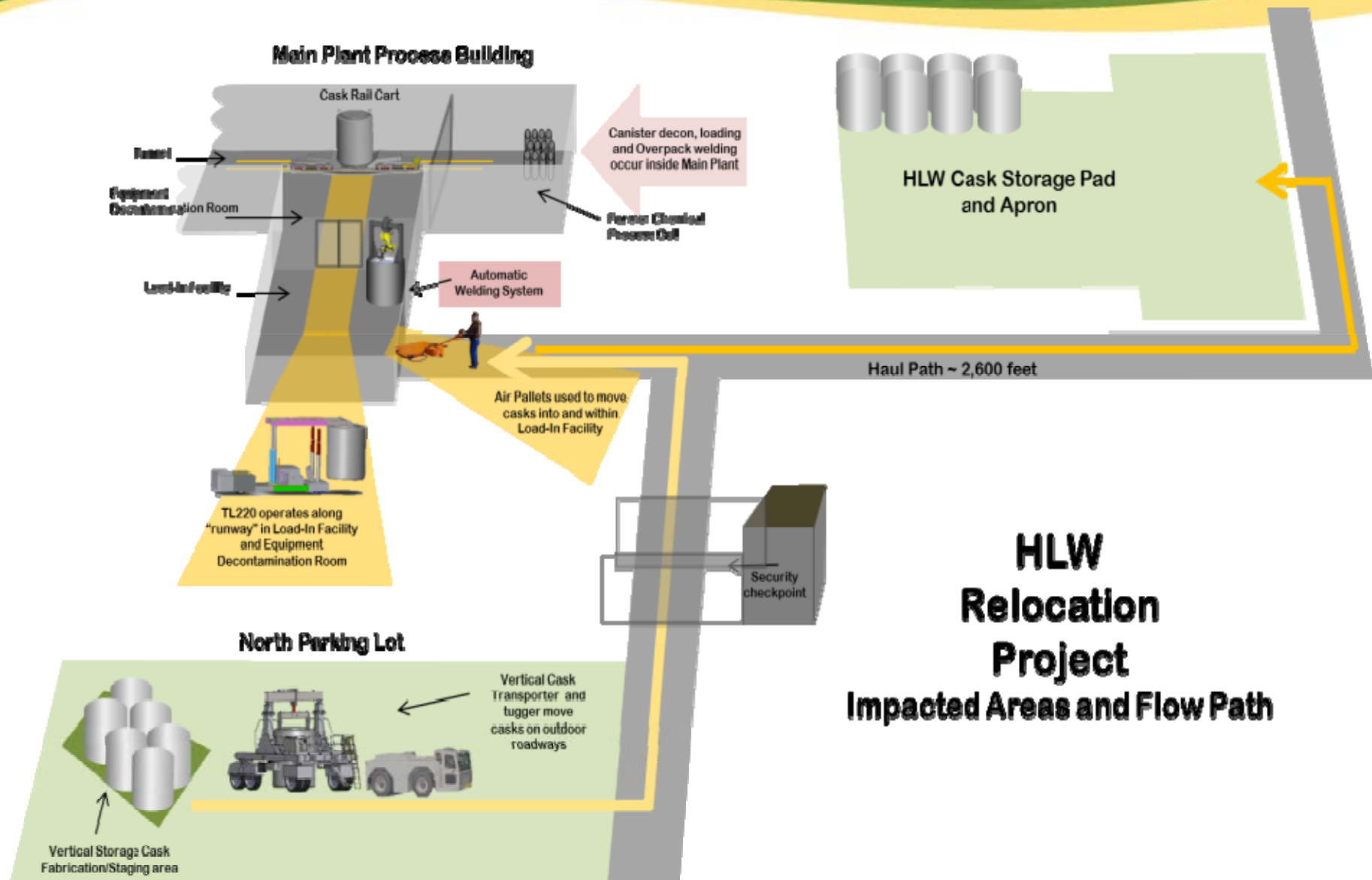


High-Level Waste Canister Relocation and
Storage Project

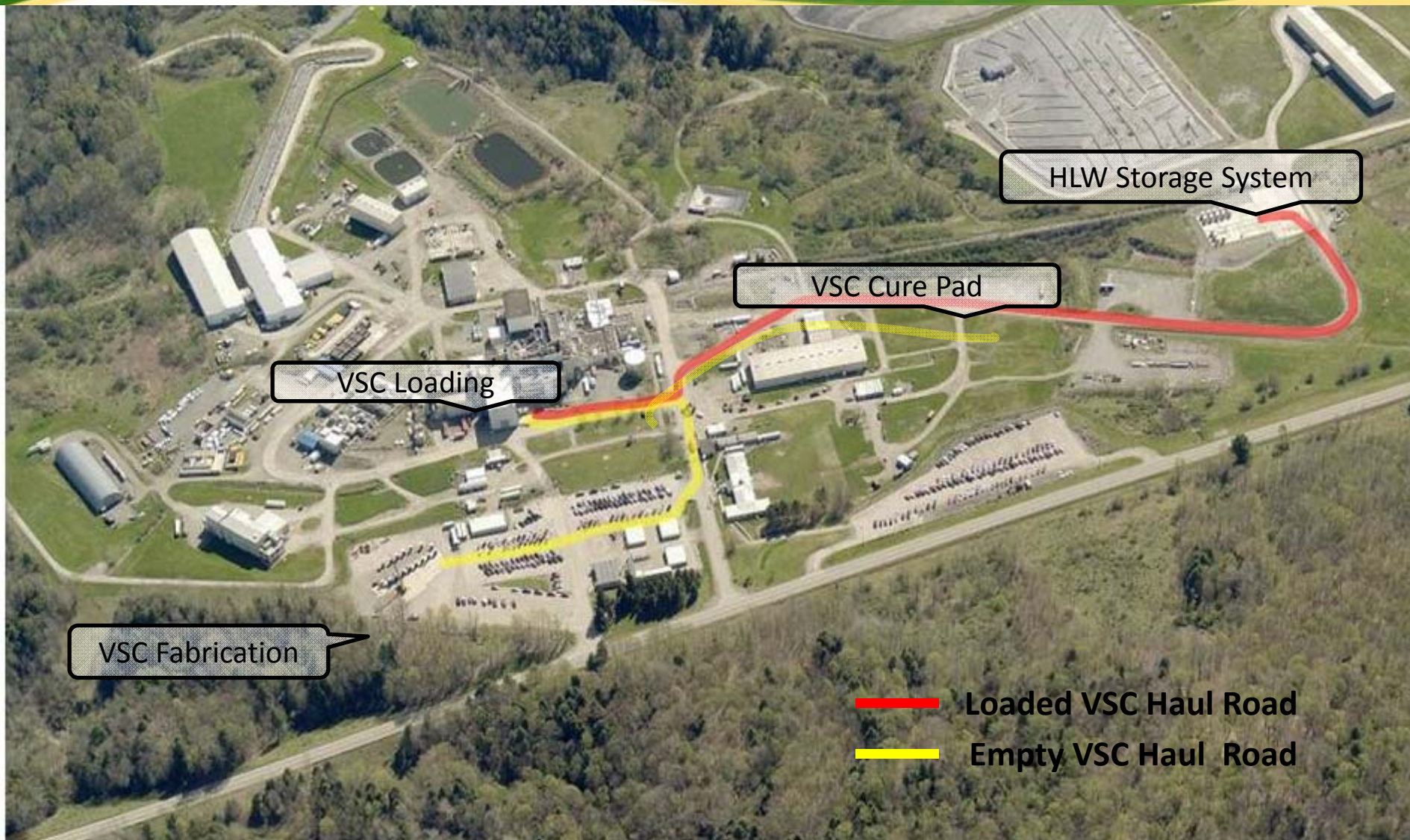


Vitrification Component Shipment

HLW Canister Relocation and Storage Project



Site Haul Roads



Success Story

- High-Level Waste crews completed the relocation and long term interim storage of 275 canisters of vitrified HLW one year ahead of schedule.
- All work completed safely and compliantly.



Final Cask Transported to Interim Storage Pad



HLW Crew



Vertical Storage Cask Interim Storage Pad

Vitrification Component – Shipment Project



Vitrification Melter

Packaged: 14'x13'x13', 195 tons

CFMT (Concentrator Feed Make-up Tank)

Packaged: 13'x14'x19', 167 tons

MFHT (Melter Feed Hold Tank)

Packaged : 13'x14'x16', 150 tons

CHBWV received Special Package Authorization from the US Nuclear Regulatory Commission (NRC) to ship the melter, primarily by rail, for disposal to Waste Control Specialist (WCS) in Andrews, Texas in October FY17.

Contract Awards



Impact Limiter Installed on Melter Package

- Shipment of Vitrification Melter, Concentrator Feed Makeup Tank (CFMT) and Melter Feed Hold Tank (MFHT)
 - MHF Logistics (MHF), Waste Control Specialists (WCS) and CHBWV walk-down site upgrades and measure melter package with impact limiter installed – mid-September
 - MHF begins mobilization onsite and assembles equipment – late October
 - MHF begins loading three heavy, low-level waste packages onto heavy haul trailers for transport to Blasdell, NY (35 miles north of the site)
 - Low-level waste packages loaded on a Special Railcar for transport to WCS in Andrews, Texas for permanent disposal – mid-November

On-Site Preparations for Transport



Gantry Crane Assembly



Heavy Haul Truck Assembled on Site

Journey Begins



After more than a decade, the vitrification components were transported by heavy haul truck from the site to the rail yard in Blasdell, New York.



Each component was transferred to an 8-axle rail car, separated by idlers and locomotives – approximately 650 feet long.

Permanent Disposal

First Time DOE Shipped for Disposal a Waste Package that has Undergone a WIR Evaluation and Determination Process.



Careful & meticulous coordination of Team
+
Advanced planning
+
Rigorous safety focus
=
On schedule execution



Melter, CFMT, and MFHT Grouted in Place at WCS

Transportation Success Factors

- A highly visible waste shipment traveling 35 miles through neighborhoods, highways, Tribal Territory
- 144 wheels, police escorts, utility companies, traveling at less than 30 miles per hour, placarded “Radioactive” (Class 7)
- Loaded onto a Special Train (Three 8-axle rail cars, each separated by idlers and locomotives – approximately 650 feet long) traveling across 10 states

Why no media attention, 911 calls, public interest or concerns?

- Timely, open, transparent, frequent, consistent communication to a variety of stakeholders – start to finish.



**Meeting of the West Valley Citizen Task Force
with Congressman Tom Reed**

Transportation Success Factors

Communication

- Coordinated Communication Plan (DOE-EM 31, 33, Contractors, Agencies)
- Prepared Fact Sheet
- Communication with the public, DOT, DOE, New York State Energy Research and Development Authority (NYSERDA), NRC, Seneca Nation, local, state and federal elected officials, regulatory agencies, New York State Department of Environmental Conservation, Coalition for West Valley, Emergency Responders, members of the Citizen Task Force and the media
- Emergency Response Plan, including an on-site exercise involving local responders
- Single Point of Contact for Inquiries



THIS IS AN EXERCISE



A site-wide emergency and evacuation exercise provided opportunity to test the response capabilities of numerous on and off-site response teams.

Transportation Success Factors

ONE TEAM

- Safety inspections of heavy haul transportation equipment (trucks, rail cars, equipment used to transload components)
- 24-Hour Emergency Response Contact List
- Both heavy haul truck and rail cars equipped with tracking capabilities for monitoring during transport
- Experienced Transload Contractor (MHF)
- Experienced Transporter (Perkins)
- 27 total permits required to move from West Valley to transload rail station located 35 miles north of the site
- 12 Third-party contractors supported the move

LOGISTICS AND PLANNING

- Transportation planned in accordance with all relevant regulations, including those of the DOE, DOT, NRC, as well as applicable state, local and tribal requirements
- Shipments designed to comply with all fee and permit/clearance requirements

SUCCESS SUMMARY

- ONE TEAM
- LOGISTICS AND PLANNING
- EXPERIENCED CONTRACTORS
- EFFECTIVE COMMUNICATIONS