

Facility Overview Briefing May 11, 2020

DOE briefed EPA and Kentucky on November 6, 2019, with details concerning the demolition and disposal of this facility. This briefing reflects those discussions and includes incorporation of comments received from EPA and Kentucky during those discussions.

#### **Construction History:**

- Built in early 1970s based on
  - Engineering Design Drawing
  - Aerial Photos
  - Interviews
- Consisted of an open structure comprised of a sheet metal roof supported by steel posts and beams.
- Built on a concrete pad measures approximately 15 feet by 17 feet.



Original design drawing (E-E-12551-A), dated 1970, illustrates design of the structure was consistent with configuration at final demolition.

#### **Operational History:**

- Documents and interviews both indicate the facility was used exclusively to store CIF<sub>3</sub> gas cylinders.
- A remote location was selected to construct the facility due to the hazardous nature of chlorine trifluoride (CIF<sub>3</sub>) gas.
- No other chemicals were stored at the facility, nor was it used for any other purpose.



Pre-Demo: 2014

#### **Current Status:**

- FRNP demolished and disposed of the "aboveground" structure in April of 2019; all CIF<sub>3</sub> gas cylinders had been removed prior to demolition.
  - Removed demolition debris met the WAC for disposition in the U-Landfill.
  - Concrete pad and surrounding soils were left in-place.





#### **Environmental Impacts:**

- No evidence of environmental releases from C-742-B based on
  - Process Knowledge
  - Interviews
  - Visual Inspections
  - Sample results available from adjacent SWMUs and internal ditch
- Bordered by the following areas
  - > SWMU 548
  - C-745-B Cylinder Yard
  - Internal Plant Ditches
- No information to indicate a release or threatened release of a hazardous substance into the environment from operations at this facility or the facility itself that would require an evaluation for a potential response action to protect future public health or welfare or the environment.



#### SWMU 548:

- Borders the C-742-B facility on both the east and west sides.
- Used by USEC to stage materials/debris during routine maintenance of the C-745-B Cylinder Yard.
- Consisted of concrete piers, gravel, stanchions, and wood pallets.
- The SWMU materials/debris was removed by USEC for proper management.
- Sample results for disposition of the material indicated:
  - PCBs less than 50 ppm
  - Tc-99, Cs-137, and Th-228/232
    slightly above detection limits



View #2 Looking Southeast Toward SWMU 548 Wood Pallets, Gravel, Stanchions 4/11/07

#### Surface Water OU (On-Site) Site Investigation/BRA (2008)

- Collected samples from East-West Ditch bordering C-742-B and SWMU 226 on north side:
  - Identified upstream portion of ditch with elevated levels of uranium adjacent to SWMU 226 (Outside DMSA).
- Past radiological surveys of SWMU 226 indicated soil contamination as high as 180,000 dpm.
- DMSA waste from SWMU 226 has been removed (pre-2009), and remaining soils will be addressed under Soils & Slabs OU.



### **C-742-B Drying Agent Cylinder Storage Building** Conclusions and Recommendations:

- The April 2019 demolition and disposal focused only on the aboveground structure of the facility; the concrete pad and surrounding soils have been left inplace.
- Process knowledge, sampling data, and other information (e.g., interviews, inspections) do not indicate any environmental release from the C-742-B facility.
- No information to indicate a release or threatened release of a hazardous substance into the environment from operations at this facility or the facility itself that would require an evaluation for a potential response action to protect future public health or welfare or the environment.
- Document the removal of the C-742-B facility aboveground structure from Appendix 6 of the FY 2020 SMP.
- The future evaluation conducted for Geographical Area 10 will further evaluate the threat of release associated with the concrete pad/soils from C-742-B.

#### **Corrective Measures:**

- FRNP is instituting the following corrective measures to ensure all future demolition projects are properly screened in accordance with the Site Management Plan:
  - Environmental checklist procedure has been expanded to include the requirements of the Site Management Plan with respect to facilities requiring regulatory reviews.
  - Demolition of structures are now required to be brought to the FRNP High Hazard Review Board (HHRB) for review and approval to ensure all requirements (including the Site Management Plan) have been evaluated prior to project field implementation.

