

C-755-B Changehouse Building



Facility Overview Briefing

October 19, 2021

Reflects consultation with EPA and Kentucky in accordance with the Site Management Plan that occurred on October 18, 2021.

Purpose

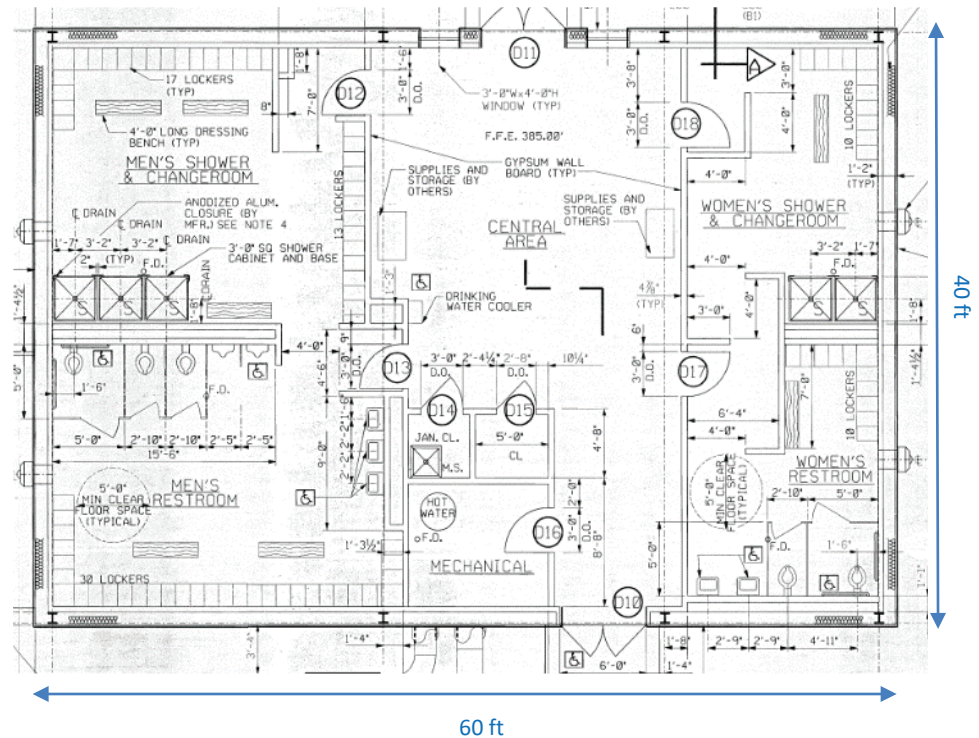
- The C-755-B Changehouse Building is a candidate for future demolition and disposal, contingent upon funding priorities.
- Listed in Appendix 6 of the Site Management Plan (SMP); requires consultation with EPA and Kentucky for CERCLA screening prior to demolition.
- This presentation is intended to serve as consultation, providing the basis for demolition and disposal of the aboveground structure outside of the FFA/CERCLA process.
- The remaining slab/soils will be subject to a future CERCLA evaluation under Geographical Area (GA) 5.



C-755-B Facility Photo: 7/2021

Construction History

- C-755-B is located outside the Paducah Site security fence, east of C-360 between Patrol Road 3 and Dyke Road.
- The facility was constructed in 1993.
- The facility is constructed of prefabricated metal on a concrete slab (8 inches thick).
 - ❑ The structure is fully enclosed with pedestrian doors on the north and south ends.
 - ❑ Sump pumps were not included as part of the structure design.
 - ❑ Floor drains were included as part of the structure design.
- The facility is approximately 2400 ft².
 - ❑ Measuring ~60 ft x ~40 ft.



Floor Plan View: Excerpt from Engineering Drawing A5E 18089-C00, dated 1993

Operational History

- C-755-B was constructed in 1993 as an Environmental Restoration (ER) support facility.
- C-755-B was designed and built to be a changehouse.
- Various subcontractors supporting ER activities have used the facility.
 - ❑ In 2016, C-755-B was transferred to the infrastructure support services contractor who continues to operate C-755-B as a changehouse.
- USEC did not lease or use the facility.
- The facility contains the following:
 - ❑ A common area with laundry bins and lockers
 - ❑ A mechanical room
 - ❑ Two storage rooms with cleaning supplies
 - ❑ Separate men's and women's restrooms, showers, and changerooms

Common Area



Mechanical Room



East Storage Room



West Storage Room

Current Status

- C-755-B continues to operate as a changehouse.
- Walkdown inspection conducted in July 2021 and employee interviews confirmed no unusual conditions.
 - No floor sumps.
 - Drains associated with the restrooms and showers drain to the sanitary sewer system.
 - Not used for radiological storage, nor does the facility contain any radiological postings.
 - No generator staging area (GSA) or satellite accumulation area (SAA).
 - No known asbestos-containing materials (ACM) or lead-based paint.
 - No known chemical spills.
 - No signs of cracks in concrete pad.
 - Chemical storage cabinets/shelving are present that contain small quantities of chemicals that are stored in accordance with regulatory requirements and site procedures.



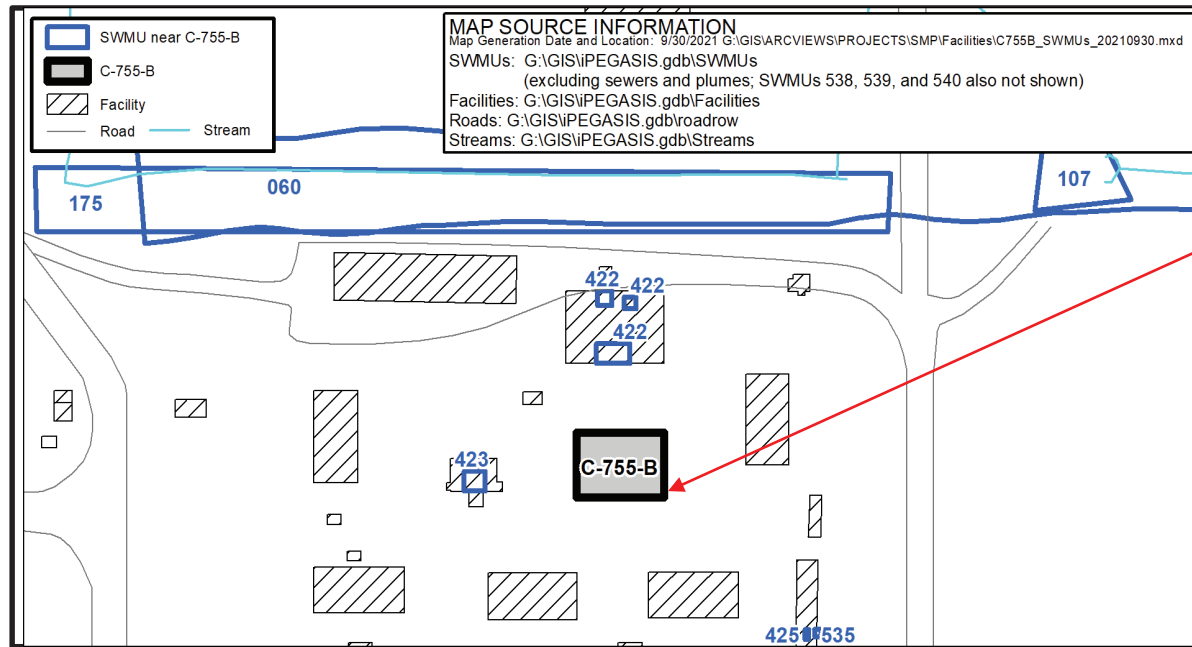
Women's Restroom,
Storage and
Changehouse Lockers



Note: Photo was edited to remove photographer's reflection from mirror.

Men's Restroom and
Changehouse Lockers

Environmental Impacts (Solid Waste Management Units)



The C-755-B Changehouse Building is not designated as a SWMU/AOC.

SWMU No.	Facility Name	Current Status	NFA Approval By
060	C-375-E2 Effluent Ditch (KPDES 002)	SWOU	
107	Concrete Rubble Pile (5)	SWOU	
175	Concrete Rubble Pile (28)	SWOU	
422	G-755-A-01, G-755-A-02, G-755-A-03	NFA	KDWM 1/28/2004
423	G-755-C-01	NFA	KDWM 1/28/2004
425	G-755-T-08	NFA	KDWM 1/28/2004
535	S-755-T08-01 (Satellite Accumulation Area at C-755, Trailer 8)	NFA	KDWM 2/14/2006
538*	S-MST-01-01 & S-MST-01-02 (Mobile Trailer 01)	NFA	KDWM 2/14/2006
539*	S-MST-02-01 & S-MST-02-02 (Mobile Trailer 02)	NFA	KDWM 2/14/2006
540*	S-MST-03-01 & S-MST-03-02 (Mobile Trailer 03)	NFA	KDWM 2/14/2006

* These SWMUs are in the area but are not shown on the map.

Environmental Impacts

- No information to indicate a release or threatened release of a hazardous substance that would require an evaluation for a potential response action to protect future public health or welfare or the environment.
 - ❑ C-755-B was built and has operated as a changehouse building from its construction in 1993 to present.
 - ❑ Building materials used for construction do not contain known ACM or lead-based paints.
 - ❑ No history or records of chemical use or spills that would pose an environmental release threat.

Conclusion and Recommendations

- Walkdown inspection of the facility, employee interviews, and other reviewed historical information did not identify any unusual conditions that would pose a potential threat of environmental release during future demolition of the aboveground structure.
 - ❑ Deactivation will include removal of any accessible loose items being stored (to the extent practicable) prior to demolition.
 - ❑ Any floor drains will be delineated, documented, and isolated prior to demolition.
- Pending ceasing of operation, deactivation, and availability of funding, proceeding with demolition and disposal of the C-755-B facility (aboveground structure) outside of the FFA/CERCLA process, contingent upon the fact that no additional changes have occurred that would affect the CERCLA determination of the facility prior to demolition, is recommended.
- All applicable laws, regulations, and DOE procedures/protocols will be followed to ensure the demolition and disposal of the aboveground structure occurs in a safe, compliant manner, including conducting any additional radiological characterization through confirmation radiological surveys (as necessary) to support demolition and waste disposition.

Conclusion and Recommendations

- As part of the demolition of the aboveground structure, the appropriate best management practices (BMPs) will be evaluated and implemented (as needed) to prevent/minimize the pooling and/or migration of storm water that may come into contact with any contamination that may exist on the pad/subsurface structure(s). For example, the following BMPs will be implemented as necessary:
 - Radiological surveying will occur following demolition.
 - Decontamination and/or application of fixatives and/or barriers to contaminated surfaces above regulatory posting limits.
 - Isolation measures and other types of barriers to minimize and/or control runoff/pooling of contaminated storm water (e.g., seal inlets to drains/sumps/subsurface structure(s)).

- Removal of the C-755-B facility will be documented in the appropriate annual SMP revision.

- The future evaluation conducted for GA 5 will further evaluate the potential threat of release associated with the slab/soils from the C-755-B facility.

C-755-B Changehouse Building

BACKUP INFORMATION

C-755-B Sources

- Engineering Drawings:
 - Provided in presentation
- Databases:
 - Issues Management System
 - Regulatory Compliance Archive Spill Log (pre-2018)
 - PCB Database (1989 – 2021)
 - Active GSAs and SAAs Master List
- Employee Interviews:
 - O&M Manager and Supervisor (5 years, total of 12 years plant expertise)
 - Compliance Subject Matter Expert (27 years plant expertise)
 - Compliance Subject Matter Expert (45 years plant expertise)
- Documents:
 - Paducah Gaseous Diffusion Plant Sitewide Strategy Facility Background Information, FPDP-RPT-0021, May 2016