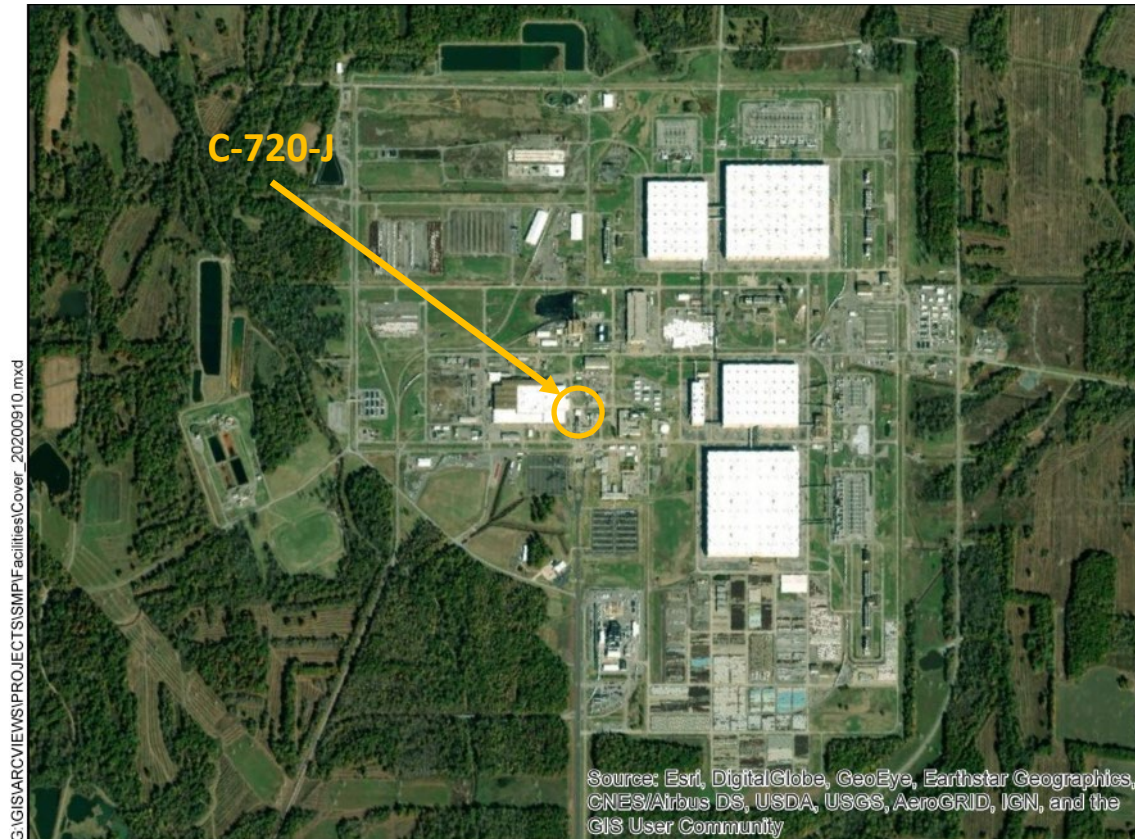


C-720-J Air Lock



Facility Overview Briefing

July 13, 2021

Reflects consultation with EPA and Kentucky in accordance with the Site Management Plan that occurred on June 28, 2021.

Purpose

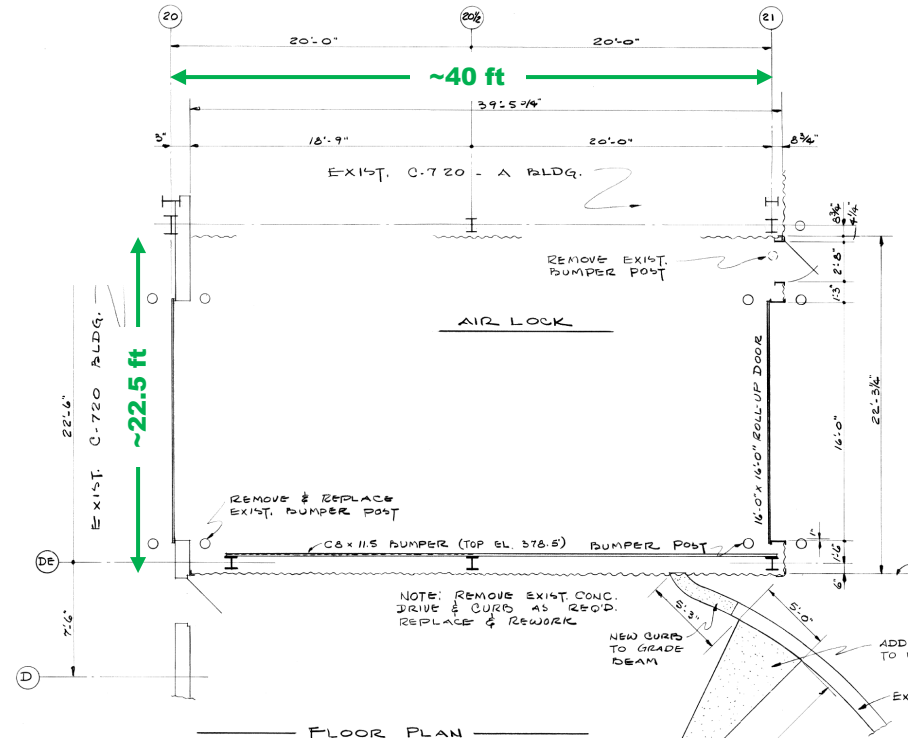
- The C-720-J Air Lock is a candidate for future demolition and disposal, contingent upon funding priorities.
- Listed in Appendix 6 of the Site Management Plan (SMP); requires consultation with EPA and Kentucky for CERCLA screening prior to demolition.
- This presentation is intended to serve as consultation, 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) 14.



C-720-J Photo: 3/2021

Construction History

- C-720-J is located within the Paducah Site security fence, on the eastern side of the C-720 Machine Shop and Stores Building.
- Construction was completed in 1979.
- Construction consists of corrugated cement-asbestos siding (transite) on a concrete slab.
- The facility is approximately 900 ft².
 - ❑ Measuring ~ 22.5 ft x ~ 40 ft.



Operational History

- C-720-J has served as an air lock between the two roll-up doors for entering and exiting the C-720 building from its construction in 1979 to present.
 - ❑ The airlock is used to maintain temperatures within the facility when it is being heated and cooled.
- USEC leased the facility in the early 1990s and continued to use C-720-J as an air lock.
- The facility was transitioned from USEC to DOE in 2014.
- After the facility transitioned to DOE in 2014, the facility has remained active and continues to be used as an air lock.



East end of C-720-J



South side of C-720-J

C-720-J Photos: 3/2021

Current Status

- C-720-J provides an air lock between two roll-up doors for entering and exiting the C-720 building and is used to maintain temperatures within the facility when it is being heated and cooled.
- Walkdown inspection conducted in March 2021 and employee interviews confirmed no unusual conditions.
 - No floor sumps or floor drains are present.
 - Not used for radiological storage; facility does not contain any radiological postings.
 - No generator staging area (GSA) or satellite accumulation area (SAA).
 - No known chemical spills.
 - No visible evidence of environmental issues (e.g., no visible floor staining inside or immediately surrounding the facility outside).
 - Empty with exception of small amount of stored items along north interior wall.
 - Facility constructed with transite (cement-asbestos) wall panels.

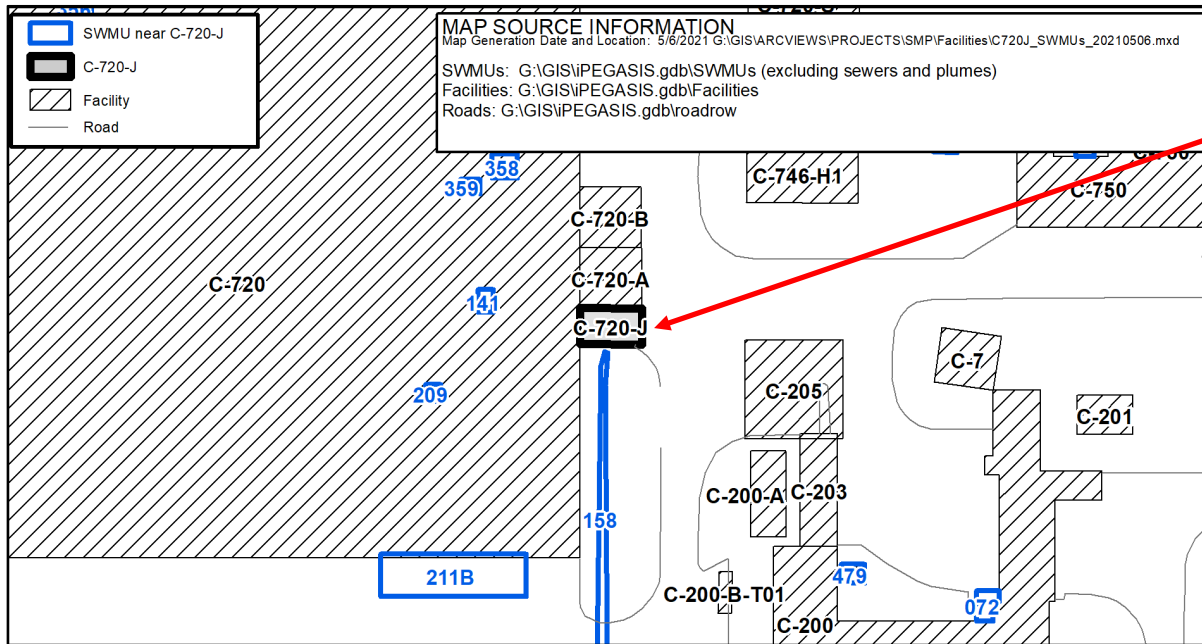


Looking east into the C-720-J Air Lock
from inside C-720



Interior south wall of C-720-J

Environmental Impacts (Solid Waste Management Units)



- C-720-J is not designated as a SWMU/AOC.

The SWMU 158 boundary is adjacent to C-720-J and consists of an area where leakage from chilled waterlines located under the concrete pad near the C-720 Truck Alley occurred. SWMU 158 was included in the Soils OU remedial investigation.

SWMU No.	Facility Name	Current Status	NFA Approved By
072	C-200 Underground Gasoline Tanks	NFA	EPA HSWA Class 1 Permit Mod 3/17/1993; KDWM (UST C-200A; UST Branch) 11/23/1999
141	C-720 Inactive TCE Degreaser	NFA	KDWM 8/11/1992; EPA HSWA Class 1 Permit Mod 3/17/1993—Regulated by RCRA Permit
158	Chilled-Water System Leak Site	Soils OU Remedial	
209	C-720 Compressor Shop Pit Sump slab and underlying soils	Soils and Slabs OU	
211B	C-720 TCE Spill Site Southeast	GWOU/ Soils and Slabs OU	
358	DMSA C-720-03	NFA	KDWM 4/24/2009
359	DMSA C-720-04	NFA	KDWM 4/24/2009
479	C-204 Disintegrator Building	NFA	KDWM 6/3/2002

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-720-J has been used as an air lock for entering/exiting C-720 since its construction in 1979 to present.
 - ❑ Building materials used for construction could contain lead-based paints and asbestos-containing materials (e.g., cement-asbestos wall panels), both of which can be effectively verified during a predemolition inspection and properly managed using standard demolition and waste management practices.
 - ❑ No history or records of chemical use or spills that would pose an environmental release threat.

Conclusion and Recommendations

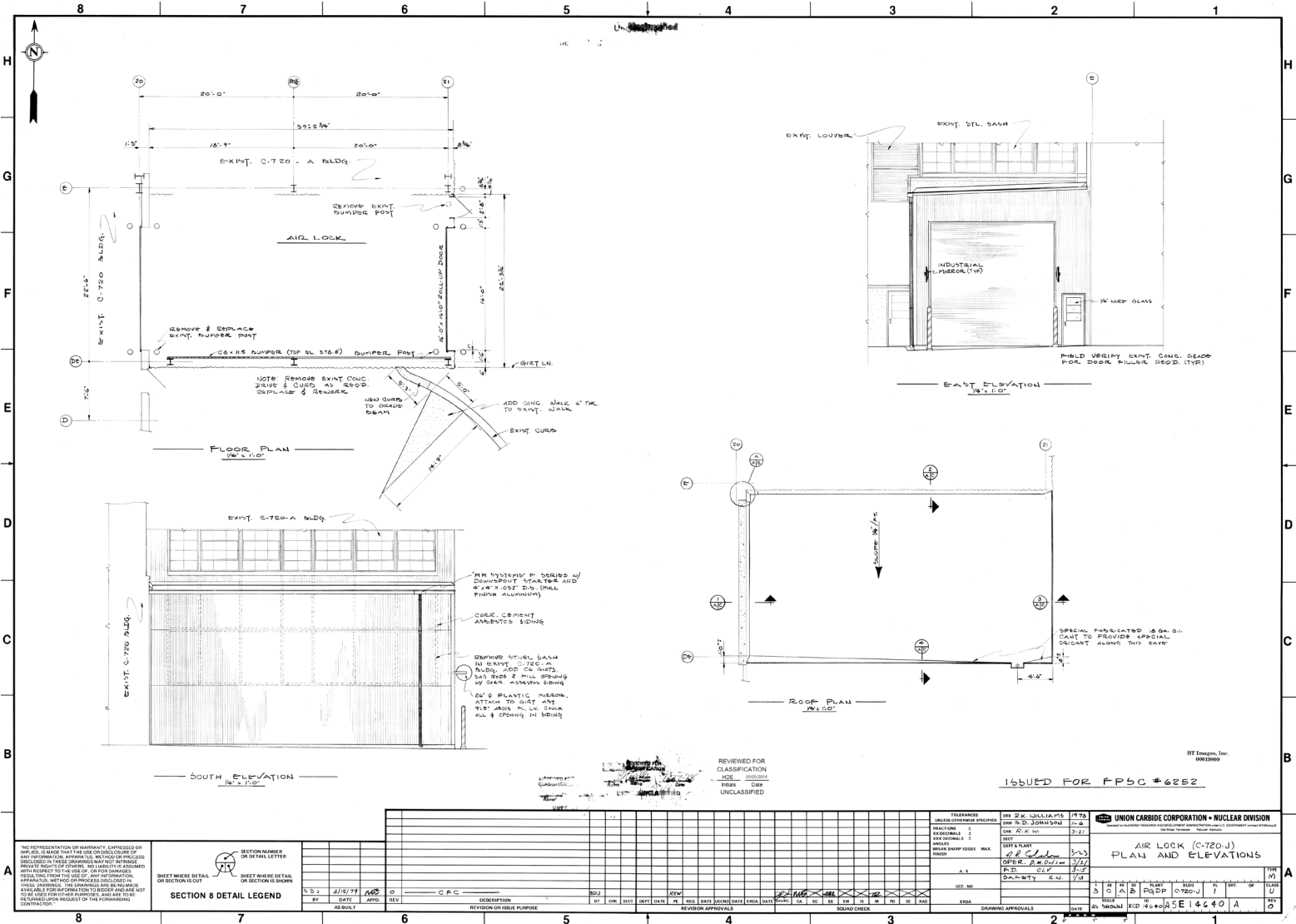
- Walkdown inspection of the facility, employee interviews, and other reviewed historical information did not identify any unusual conditions that would pose a potential threat of environmental release during future demolition of the aboveground structure.
 - ❑ Deactivation will include removal of any 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-720-J 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/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-720-J facility will be documented in the appropriate annual SMP revision.
- The future evaluation conducted for GA 14 will further evaluate the potential threat of release associated with the slab/soils from the C-720-J facility.

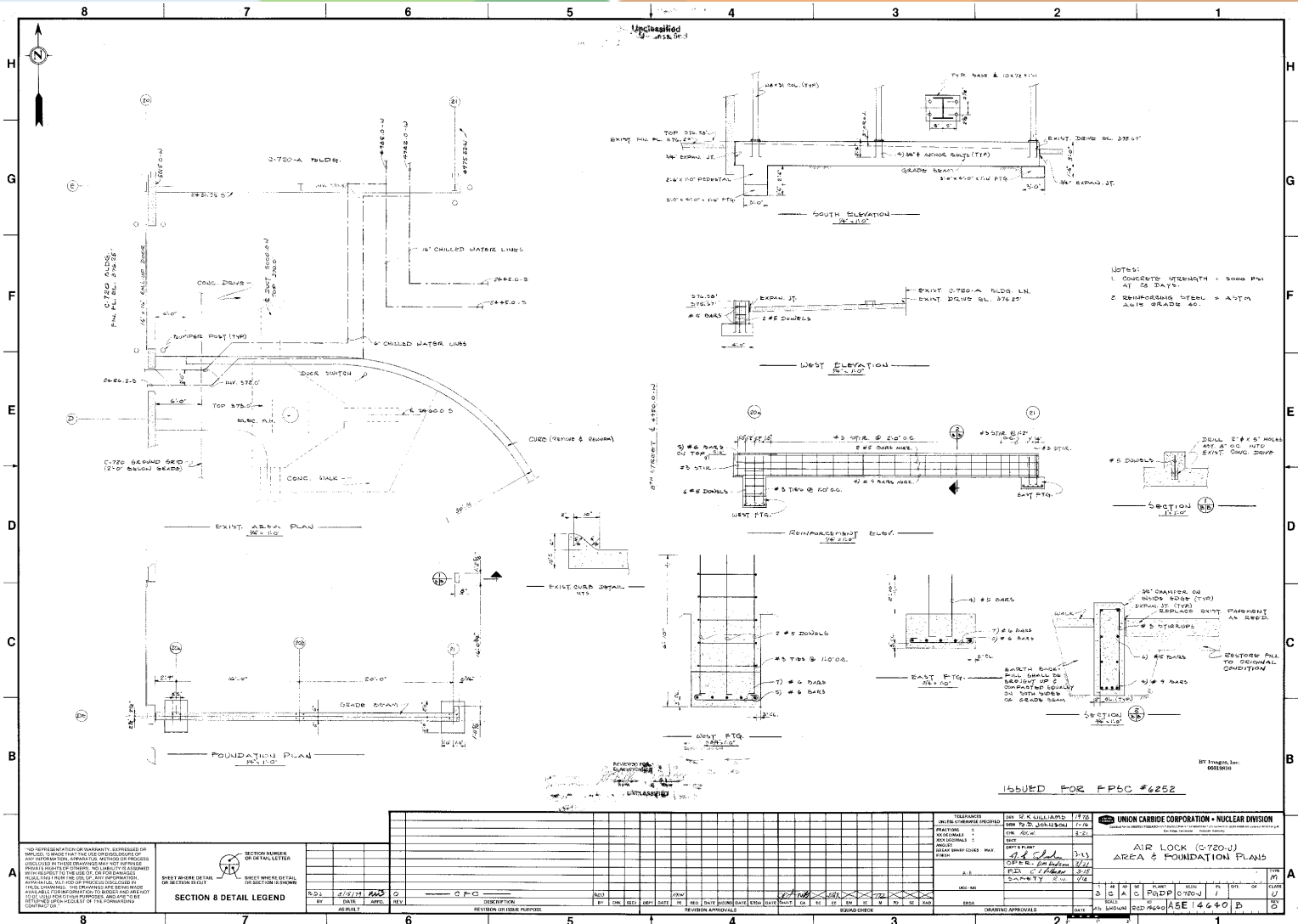
BACKUP INFORMATION

C-720-J Engineering Drawings



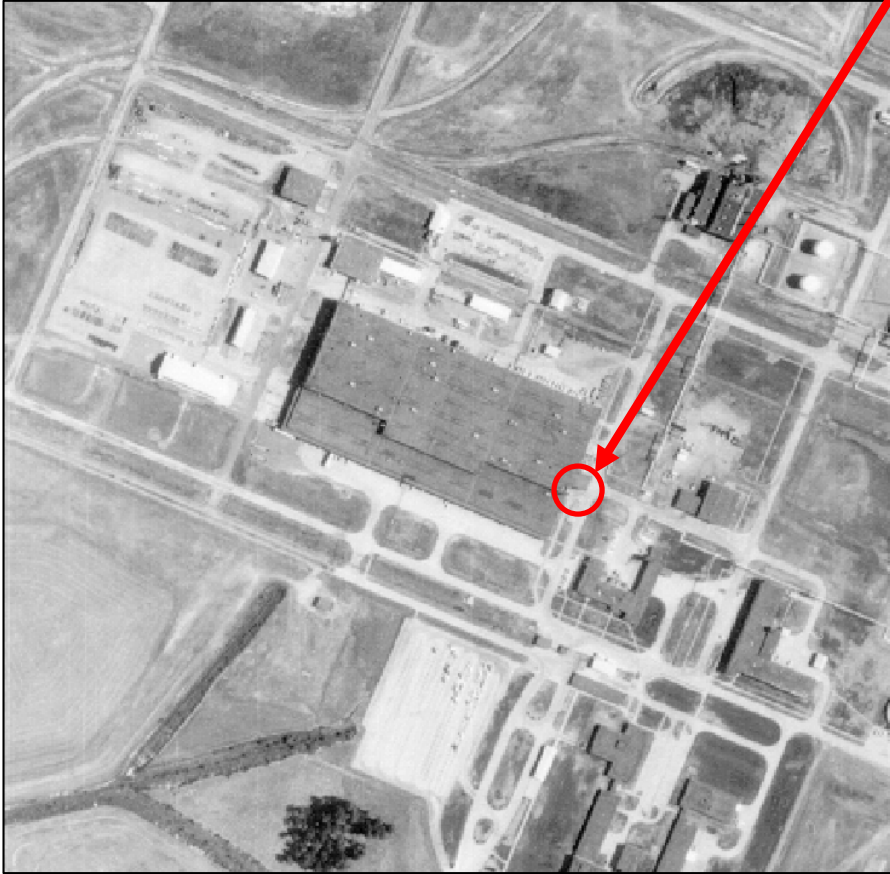
Engineering Drawing: ASE-14640-A

C-720-J Engineering Drawings

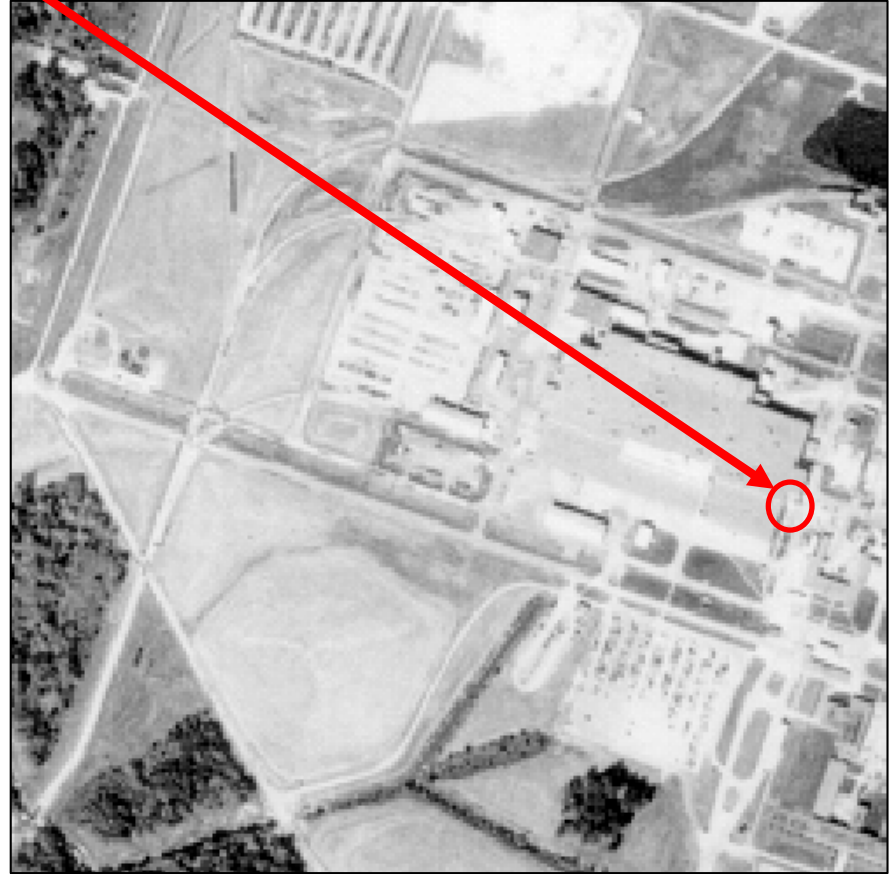


C-720-J Aerial Photograph

C-720-J



Modified from Aerial Photo: July 1971 (71PGD053)



Modified from Aerial Photo: September 1981 (81PGD100)

C-720-J Sources

- Engineering Drawings:
 - Provided in presentation
- Databases:
 - USEC's BPS
 - Issues Management System
 - Regulatory Compliance Archive Spill Log (pre-2018)
 - PCB Database (1989 – 2021)
 - Active GSAs and SAAs Master List
- Employee Communication:
 - Facility Manager (25 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
 - Fluor Federal Services, Inc., Paducah Deactivation Project Comprehensive Environmental Compliance Due Diligence Review, CP5-ES-0101