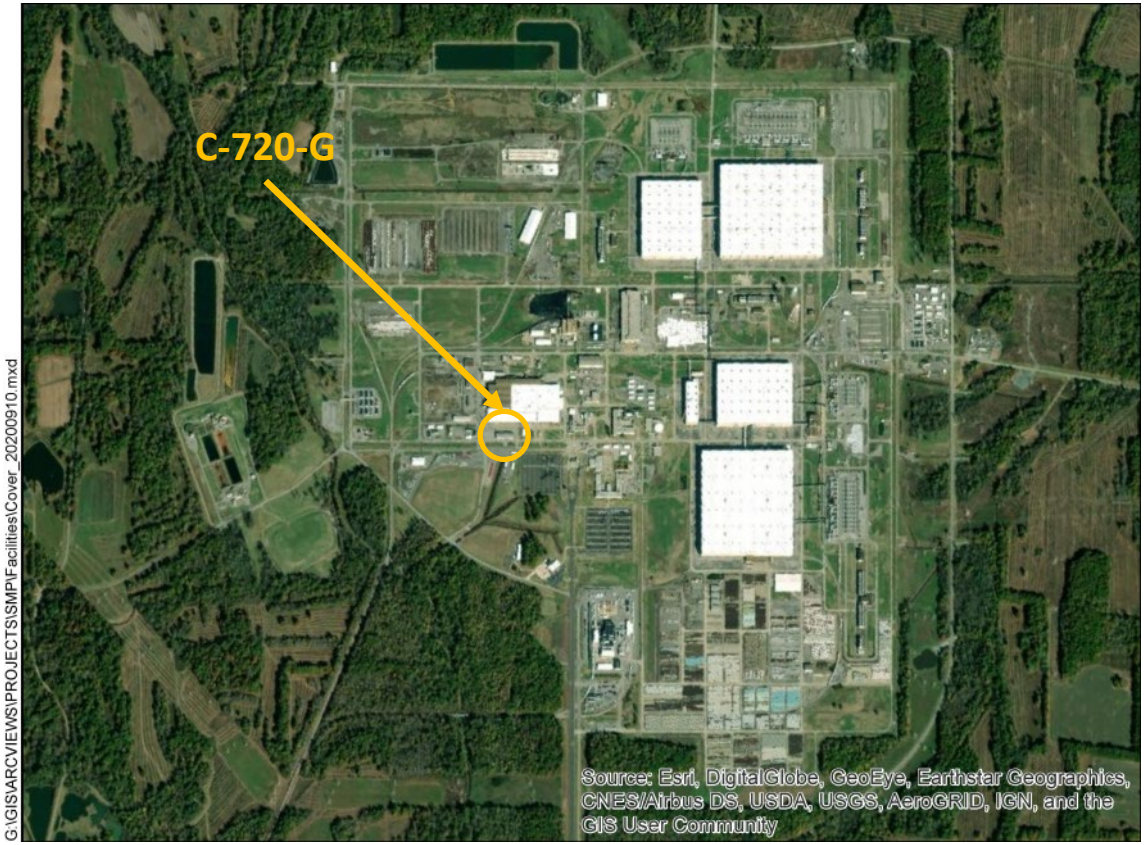
# C-720-G Warehouse



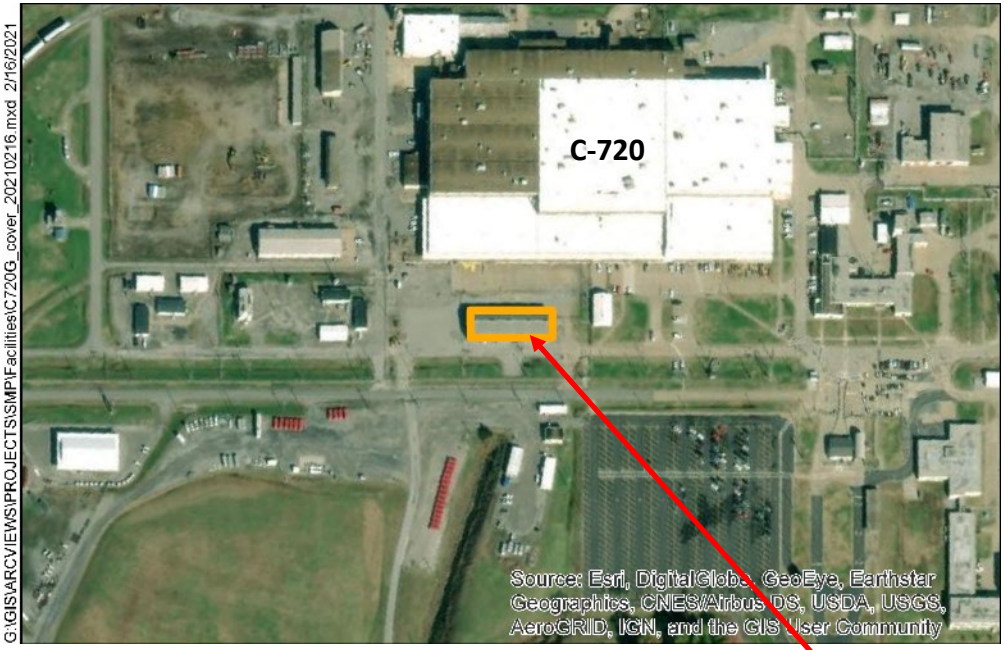

Facility Overview Briefing

July 13, 2021

Reflects consultation with EPA and Kentucky in accordance with the Site Management Plan that occurred on June 28, 2021, and includes incorporation of comments from those discussions.

# Purpose

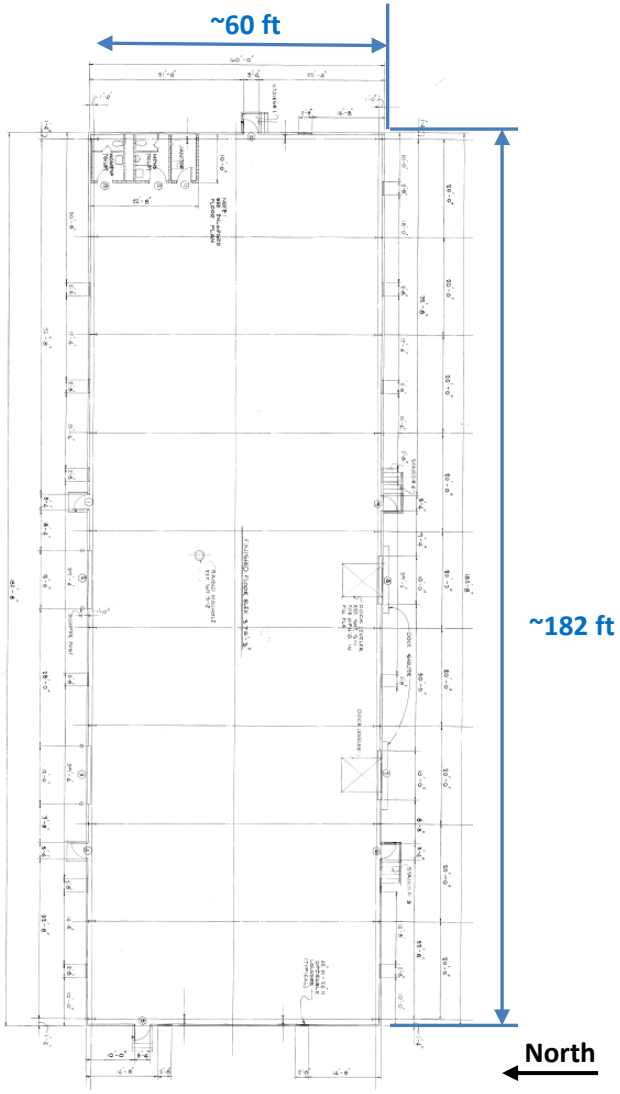
- The C-720-G Warehouse is a candidate for future demolition and disposal, contingent upon funding priorities.
- Listed in Appendix 6 of the Site Management Plan (SMP); requires consultation with EPA and Kentucky for CERCLA screening prior to demolition.
- This presentation is intended to serve as consultation, 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-G Photo: 3/2021**

# Construction History

- C-720-G is located within the Paducah Site security fence, in the southwest corner of the plant just south of the C-720 Building.
- Construction was completed in 1976.
- Construction consists of a one-story prefabricated metal building constructed on a concrete foundation.
- The facility is approximately 10,920 $ft^2$.
  - Measuring ~182 ft x ~60 ft.




**Engineering Plan View Drawing: A1-720G**

# Operational History

- C-720-G has been in operation since its construction with the primary function of supporting Plant Stores as a receiving facility and warehouse.
- Primarily accepted and stored shipments of newly purchased furniture/equipment except as follows.
  - Items cleaned out from the C-720 warehouse were temporarily staged at C-720-G for sorting, surveying, and final disposition.
- USEC leased the facility in the early 1990s; continued to use it for the same purpose and also staged materials pending sale in auctions.
- C-720-G transitioned from USEC to DOE in 2014.

Exterior of C-720-G

Interior of C-720-G



**C-720-G Photos: 3/2021**

# Current Status

- C-720-G is currently operational and continues to support Plant Stores as a receiving facility and warehouse.

- Walkdown inspection conducted in March 2021 and employee interviews confirmed no unusual conditions.
  - ❑ Area contains office space and warehouse storage with items well organized and properly stored.
  - ❑ No floor sumps; however, the facility contains a sewer manhole.
  - ❑ Historically contained a generator storage area (GSA) and currently contains one active GSA consisting of two roll-off bins to collect various solid waste (e.g., cardboard, office furniture, misc. trash).
  - ❑ Known radiological contamination is limited to the following.
    - ✓ A radiological survey detected contamination on two items being staged (motor mount, bearing housing). Both were removed from C-720-G into a radiological material area.
    - ✓ One area (~8 ft x 10 ft) on north end of the warehouse contains fixed contamination area (FCA). The FCA is marked and covered with a paint fixative which typically contains an epoxy additive. The historical source of the FCA is not known.
  - ❑ Two newly installed chemical storage trailers (referred to as TOX boxes) located outside which stores newly purchased chemical products (e.g., hand sanitizer, spray paint, insect repellant, grease, cleaners, hydraulic lubricant).

Photos from top to bottom: interior warehouse storage, office space, and exterior chemical storage trailers/TOX boxes (2021)

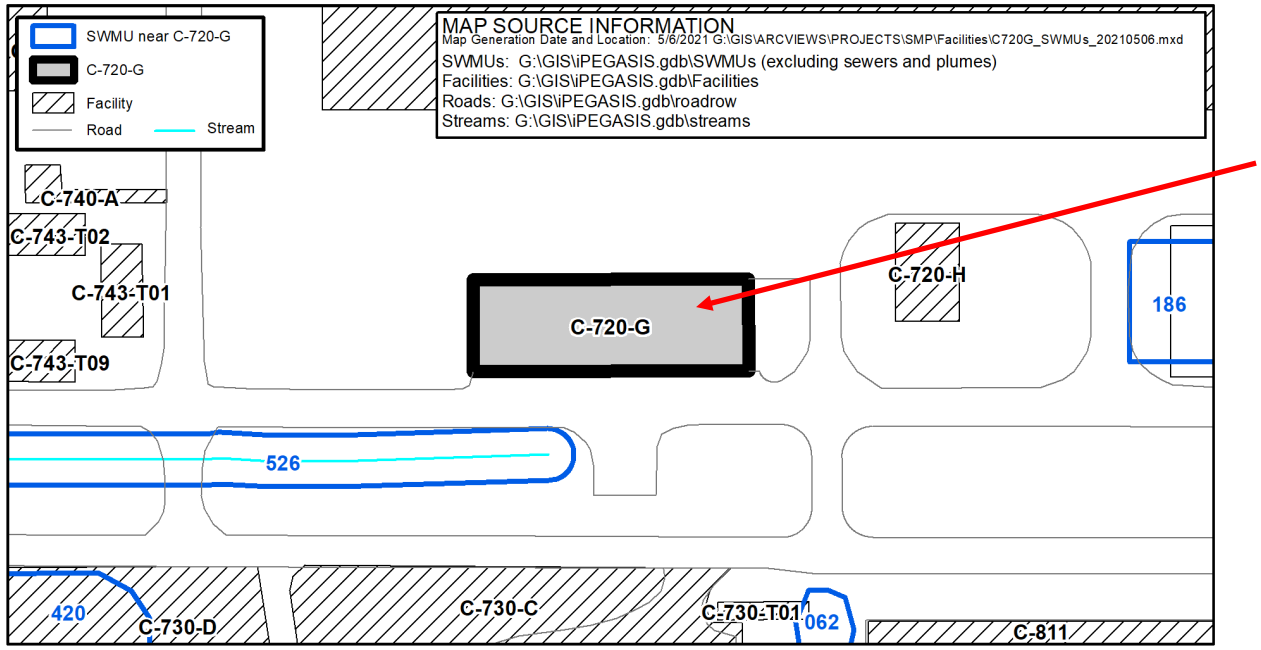
# Current Status

- Walkdown inspection conducted in March 2021 identified an inactive chemical feed station that is no longer in operation.
  - Located on the west wall of the facility and operated from 1997 to 2018.
  - Distributed sodium thiosulfate from a poly tank (~200 gal) into the storm sewer manhole located outside the northwest corner of the building.
  - Used to treat/reduce chlorine levels in plant sanitary water originating from C-333 and C-720 prior to discharge to KPDES Outfall 009.
  - The station is no longer in operation and all sodium thiosulfate has been removed.
- No known chemical spills or leaks.



Photo (3/2021) of Sodium Thiosulfate Chemical Feed Station.

# Environmental Impacts
## (Solid Waste Management Units)




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

| SWMU No. | Facility Name | Current Status | NFA Approved By |
|---|---|---|---|
| 062 | C-375-S6 SW Ditch (KPDES 009) | SWOU Removal Action | |
| 186 | C-751 Fuel Facility | NFA | KDWM 10/20/1993 |
| 420 | G-752-C-02 | NFA | KDWM 3/8/2007 |
| 526 | Internal Plant Drainage Ditches (includes KPDES 016) | SWOU Remedial Action | |

# 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-G has served as a receiving facility and warehouse storage since its construction in 1976.
  - Chemical use within the facility was limited to the Sodium Thiosulfate Chemical Feed Station that is no longer active and has no history of any spills or leaks.
  - Radiological contamination is “fixed” and limited to a small area on the concrete floor in the north end of the facility.
  - C-720-G has contained GSAs with items securely containerized and operated in accordance with applicable requirements and procedures; no known releases or spills have occurred.
  - Building materials used for construction could contain lead-based paints and asbestos-containing material, both of which can be effectively verified during a predemolition inspection and properly managed using standard demolition and waste management.

# 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 and the storm sewer manhole 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-G 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 fixed radiological contamination that may exist on the pad. For example, the following BMPs will 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.

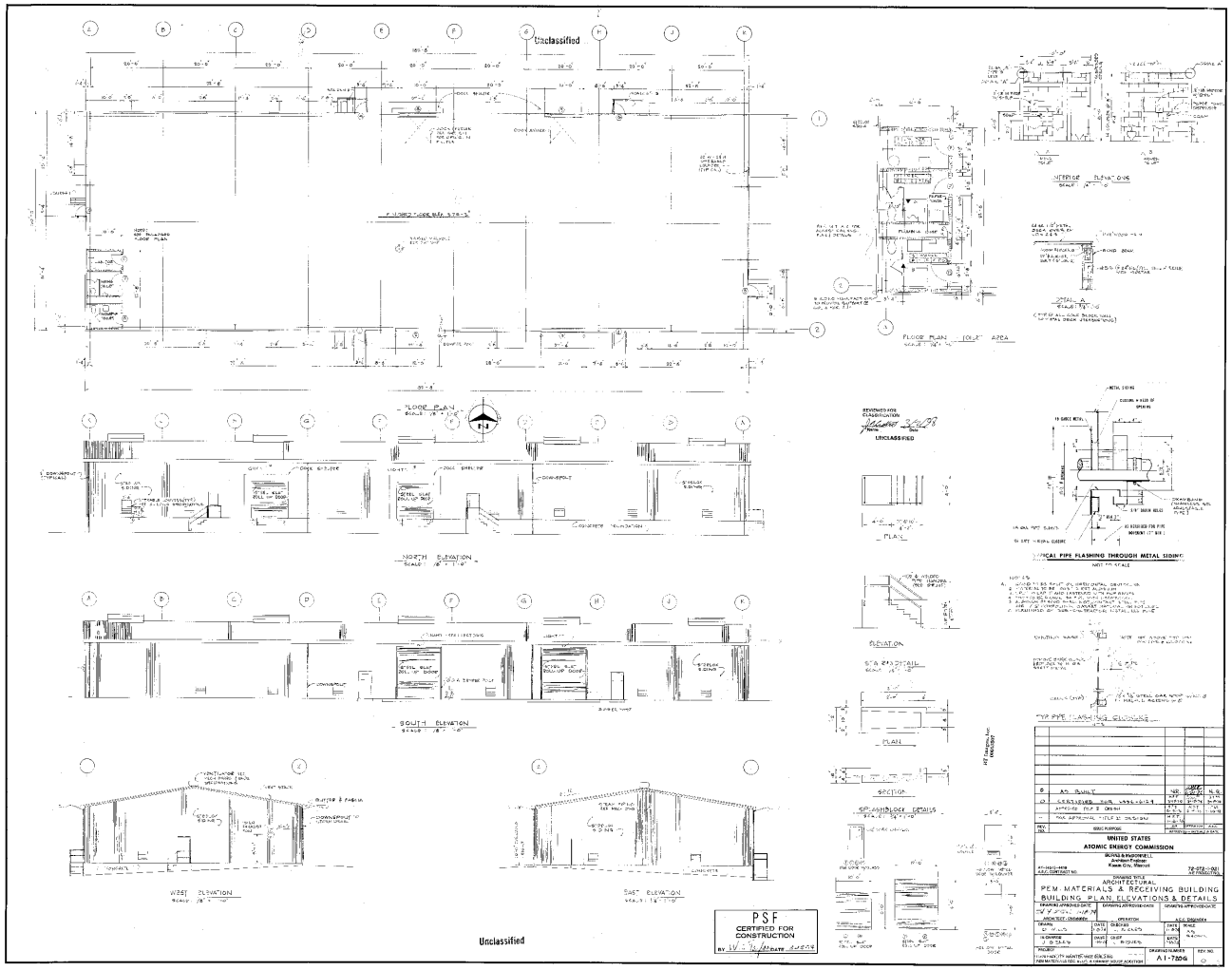
- Removal of the C-720-G Warehouse will be documented in the appropriate annual SMP revision.

- The future evaluation conducted for GA 14 will further evaluate the threat of release associated with the concrete pad and soils from the C-720-G Warehouse.

# C-720-G Warehouse

BACKUP INFORMATION

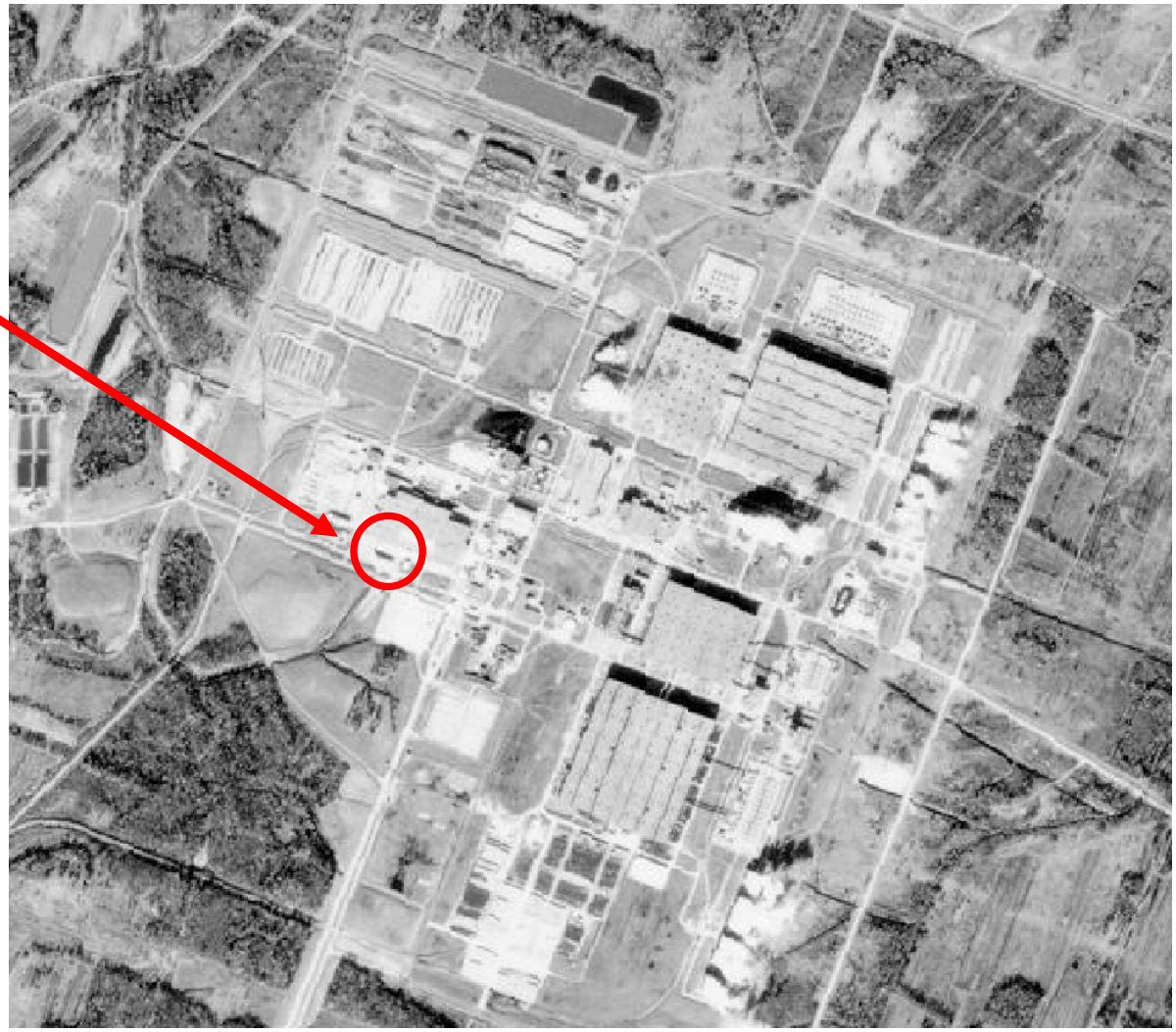
# C-720-G Engineering Drawings




**Engineering Drawing: A1-720G**

# C-720-G Aerial Photograph

Portion of aerial photograph taken in 1983, depicting C-720-G.



Modified from Aerial Photograph: 1983

# C-720-G 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:
  - Plant Utilities Personnel (45 years plant expertise)
  - Plant Stores Personnel (21 years plant expertise)
  - Plant RADCON Personnel (12 years plant expertise)
  - Waste Operations Personnel (20 years plant expertise)
- Documents:
  - Paducah Gaseous Diffusion Plant Sitewide Strategy Facility Background Information, FPDP-RPT-0021, May 2016
  - Report for Environmental Audit Supporting Transition of the Gaseous Diffusion Plants to the United States Enrichment Corporation, DOE/OR/1087&V5, June 1993
  - Fluor Federal Services, Inc., Paducah Deactivation Project Comprehensive Environmental Compliance Due Diligence Review, CP5-ES-0101, October 2014

# C-720-G Sources

- Documents:
  - Radiological Anomalous Condition Reports (2018, 2020)
  - Lee Wan & Associates, Inc., Asbestos Survey Report, Volume 7, October 1990