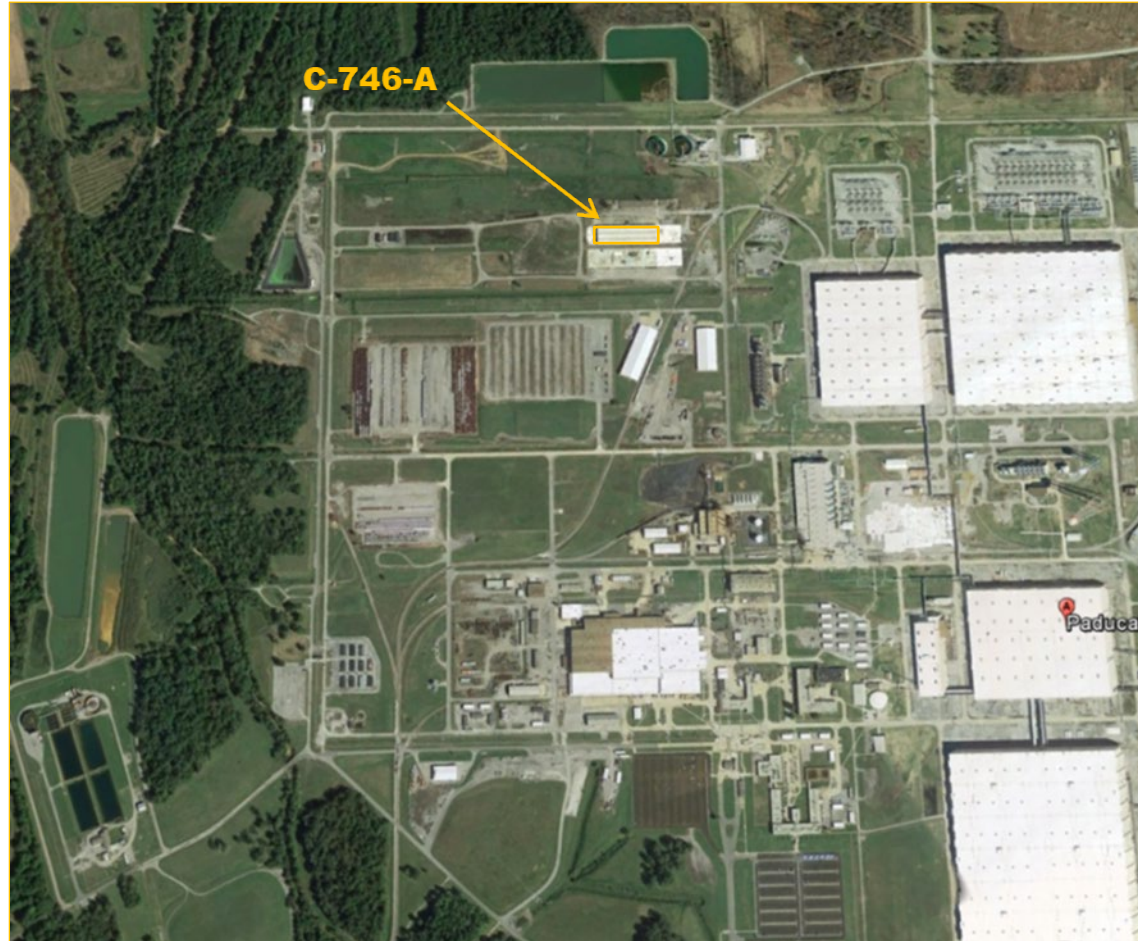


Reflects consultation with EPA and Kentucky in accordance with the Site Management Plan that occurred on August 17, 2020, updates made and presented May 20, 2021, and includes incorporation of comments from those discussions. EPA and Kentucky concurred on these revisions May 24, 2021, and May 25, 2021, respectively.

C-746-A North Warehouse



Facility Overview Briefing
Presented August 17, 2020
Updated May 20, 2021

C-746-A North Warehouse

Purpose:

- C-746-A North Warehouse (C-746-A) was previously proposed for demolition in 2016 but deferred due to funding cuts.
- Candidate for future demolition contingent on funding priorities; slab/soils would remain for future CERCLA evaluation under Geographical Area 9.
- C-746-A is on the list of facilities in Appendix 6 of the Site Management Plan (SMP) that require consultation with EPA and Kentucky.
- This presentation is intended to serve as consultation providing basis for demolition and disposal of the aboveground structure outside of the FFA/CERCLA process.

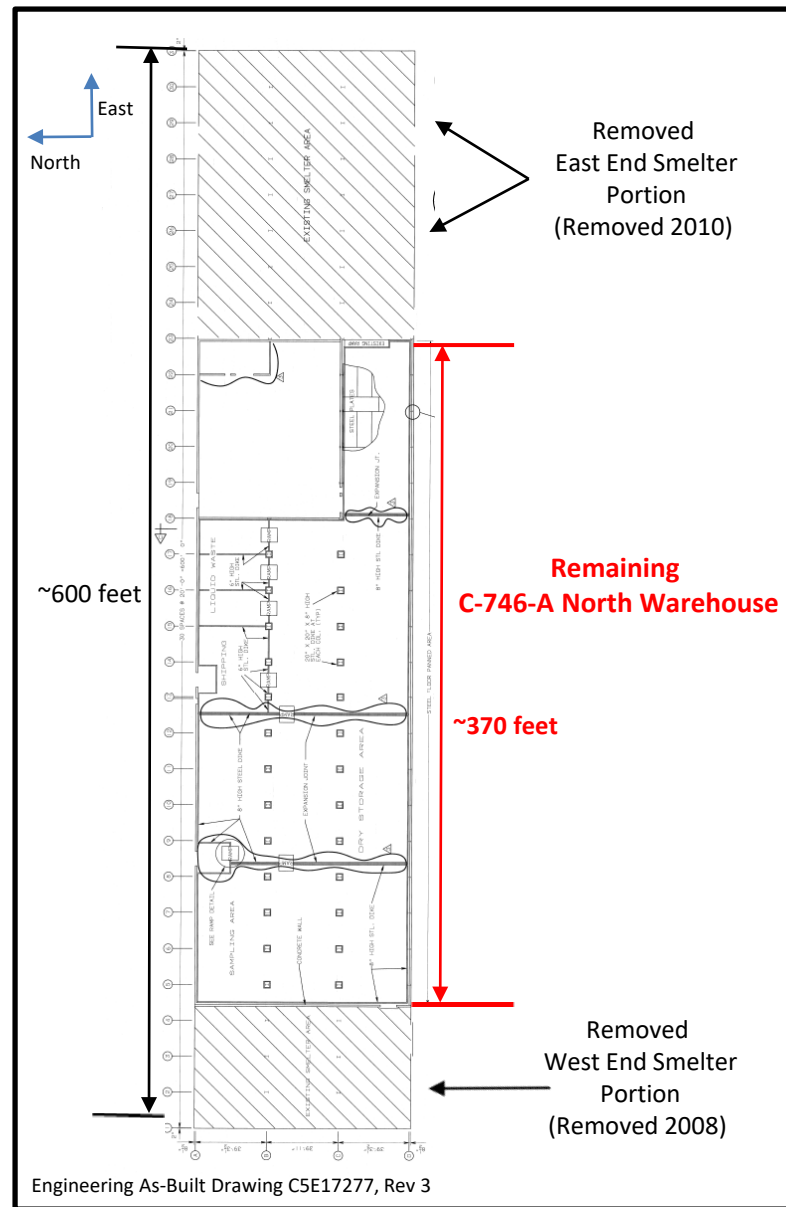


C-746-A North Warehouse Photo: 2016

C-746-A North Warehouse

Construction History:

- Constructed in the early 1950s:
 - Engineering Design Drawings
 - Plant Documents
 - Interviews
- Single-floor, prefabricated steel building with a poured 8-inch concrete slab; originally consisted of 3 segments:
 - East End (EE) Smelter
 - C-746-A North Warehouse
 - West End (WE) Smelter
- Overall building size at original construction measured ~600 x 120 feet, but the EE and WE Smelters have been removed leaving the C-746-A North Warehouse, measuring ~370 feet x ~120 feet.



C-746-A North Warehouse

Operational History:

- The C-746-A North Warehouse was initially used (early 1950s) to store materials to support construction of the plant.
 - Smelting operations were isolated and limited exclusively to East End and West End portions of the building.
 - 12-inch masonry firewalls separated the smelting operations from the centralized warehouse.

- The C-746-A North Warehouse was used through the 1980s for plant stores and maintenance operations.
 - West End Smelter ceased operation in the 1980s and was demolished in 2008
 - East End Smelter ceased operation in the 1980s and was demolished in 2010

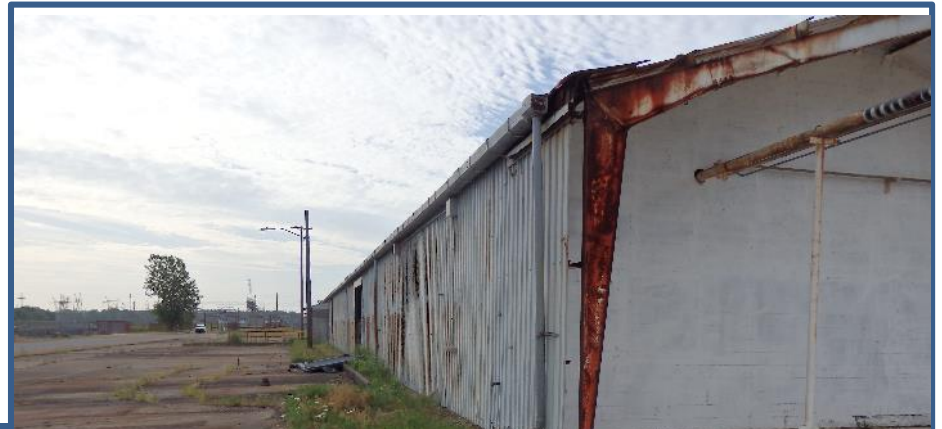
- From 1989 to 2010 the C-746-A North Warehouse was converted and operated as a RCRA storage and treatment facility.

- The C-764-A North Warehouse also contained a trash sorting and compacting operation for sanitary waste (nonhazardous).

C-746-A North Warehouse

Current Status:

- Ceased RCRA waste operations in 2010.
- Deactivation and RCRA clean closure completed in 2011.
- Limited non-RCRA infrastructure items remaining (e.g., light fixtures, electrical component housing and wiring, empty cabinets, portable heaters/fans).
- Listed in Appendix 6 of the SMP pending further CERCLA determination.

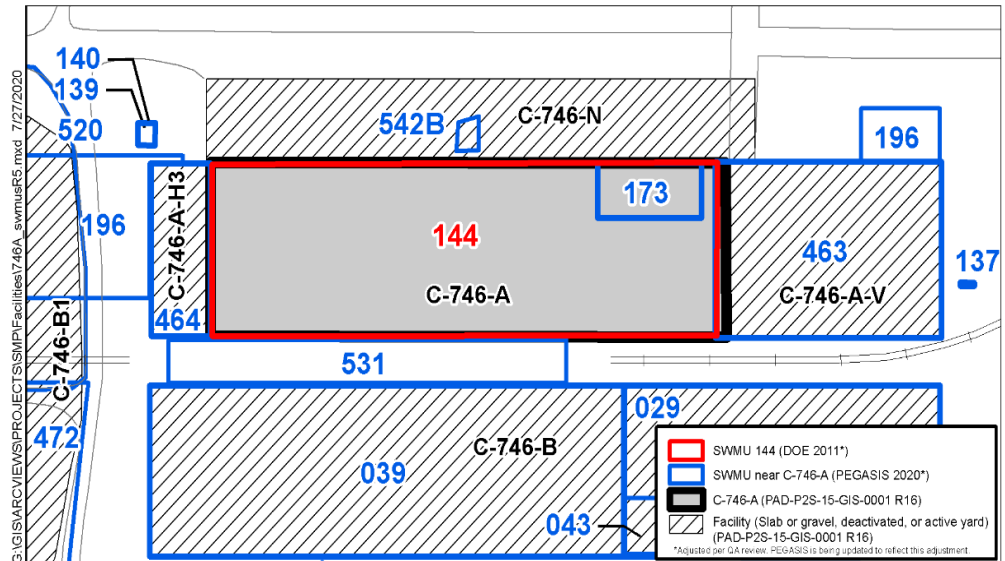


Removed light fixtures

C-746-A North Warehouse

Environmental Impacts – Solid Waste Management Units

SWMUs – Adjacent to C-746-A	
SWMU No.	Facility Name
144	C-746-A Hazardous & Mixed Waste Storage Facility
173	C-746-A Trash Sorting Facility
196	C-746-A Septic System
463	C-746-A East End Smelter
464	C-746-A West End Smelter
531	Aluminum Slag Reacting Area (C-746-H4) near the C-746-A Facility
542b	G-746-A-01, S-746-A-01, S-746-A-02 (GSA/SSAs located outside C-746-B)



- The C-746-A North Warehouse was designated as SWMU 144 based on converting it to a RCRA treatment and storage facility.

C-746-A North Warehouse

Environmental Impacts:

- **C-746-A North Warehouse (SWMU 144):** Originally bordered by the East End Smelter (SWMU 463) and West End Smelter (SWMU 464) on each end:
 - Smelter operations were isolated and separated from the centralized warehouse by 12-inch masonry firewalls.
- The aboveground structures for the EE and WE smelters were demolished and removed using CERCLA removal actions under the FFA:
 - High temperature furnaces were used to smelt various radiologically contaminated metals.
- The concrete slabs remaining after removal of the EE and WE smelter buildings were radiologically surveyed, inspected for residual materials, and sealed with an epoxy-based fixative.
- The concrete slabs and underlying soils for the EE and WE Smelters will be evaluated as part of the Soils and Slabs OU under the FFA.

C-746-A North Warehouse

Environmental Impacts:

- The C-746-A North Warehouse has been used for the following purposes:
 - **1950s:** Warehouse storage of materials during initial construction of the plant;
 - **1950s-1980s:** Plant Stores for purchased materials and maintenance operations;
 - **1989-2010:** RCRA permitted treatment and storage unit.

- During operation of C-746-A as a RCRA permitted treatment and storage unit:
 - Used primarily for storage; treatment limited to crushing of fluorescent light bulbs;
 - Operations conducted compliant with permit conditions and site waste procedures;
 - RCRA clean closure was completed in 2011 and approved by Kentucky.



SWMU 144 - Metal pan area facing east
C-746-A Hazardous and Mixed Waste Storage Facility
February 14, 2011



SWMU 144 - Concrete area facing southeast
C-746-A Hazardous and Mixed Waste Storage Facility
June 3, 2011

C-746-A North Warehouse

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.
- RCRA treatment/storage activities were managed in accordance with the RCRA permit, subject to internal and regulator inspections, and has undergone a RCRA-clean closure, including decontamination of the floor.
- Analytical results from floor scrubbing and scabbling during RCRA closure suggest no evidence of residuals from a spill or release.
- Based on the nature of historic operations and RCRA-clean closure, both Kentucky and EPA granted no further action under the RCRA/HSWA Permits and Site Management Plan.
- In preparation for demolition, results from radiological surveys of the interior building surfaces indicate nearly all radionuclides present are fixed with only about 1% being removable.

C-746-A North Warehouse

Conclusions and Recommendations:

- Pending availability of funding, DOE/FRNP proposes to proceed in the near-term with demolition and disposal of the C-746-A North Warehouse (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.
 - ❑ Deactivation will include removal of any accessible loose items being stored (to the extent practicable) prior to demolition.
 - ❑ Floor drains (if present) will be delineated, documented, and isolated prior to demolition

- 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 survey (as necessary) to support demolition and waste disposition.

C-746-A North Warehouse

Conclusions 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)].

- Document the removal of the C-746-A facility in the appropriate annual SMP revision.

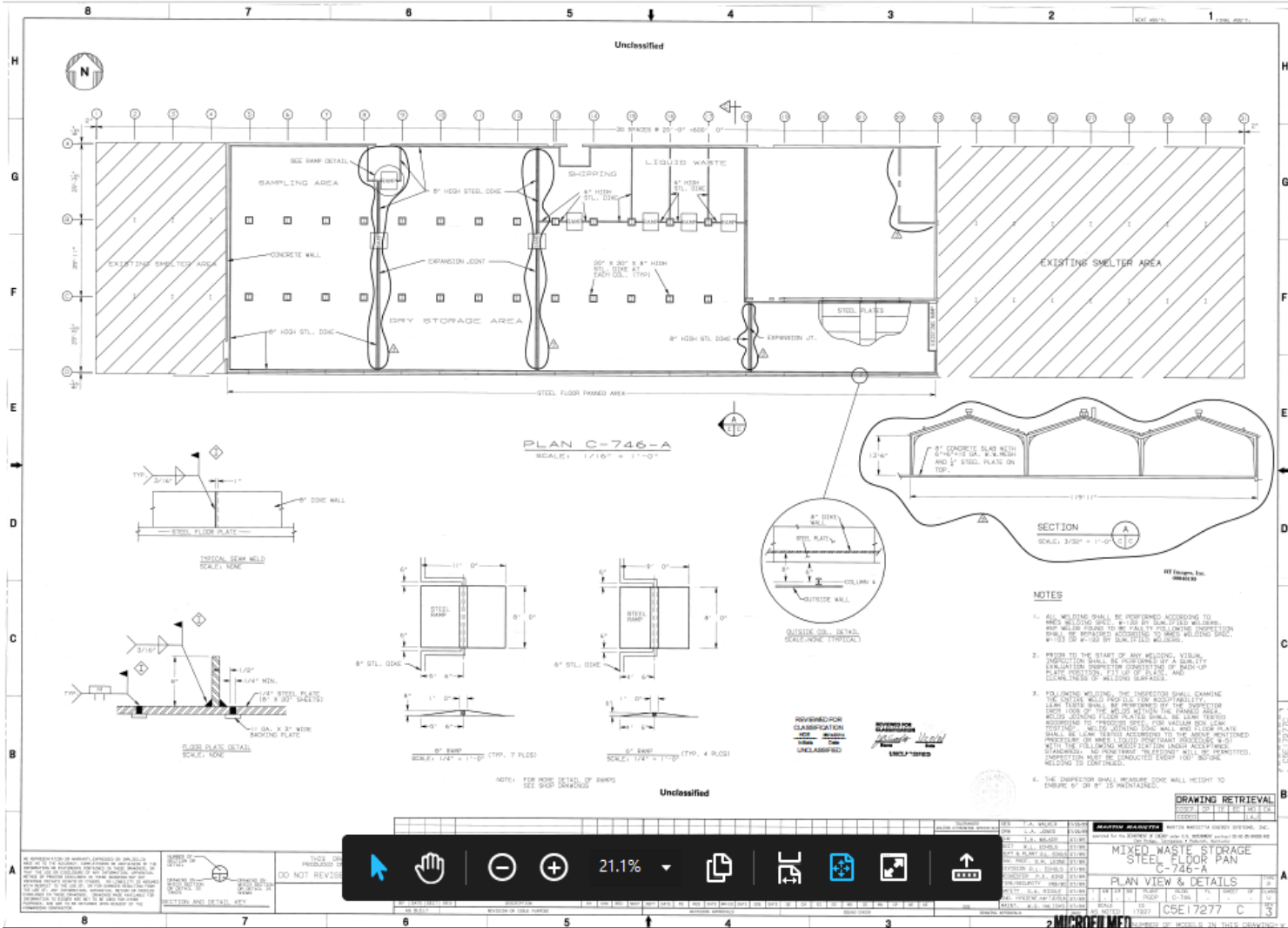
- The future evaluation conducted for Geographical Area 9 will further evaluate the threat of release associated with the concrete pad/soils from C-746-A.



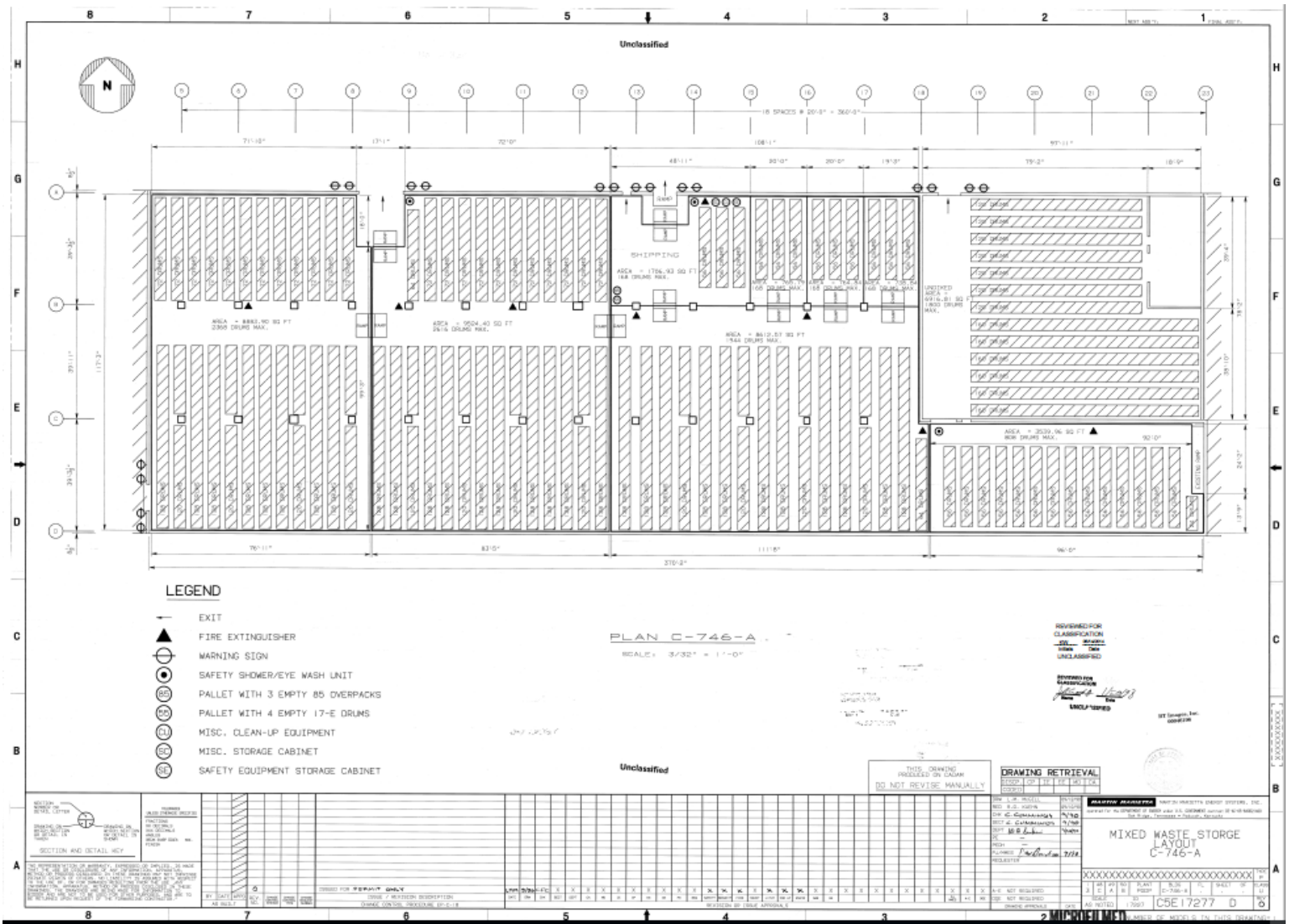
C-746-A North Warehouse

Backup Engineering Design Drawings

C-746-A North Warehouse



C-746-A North Warehouse





C-746-A North Warehouse

SWMU Summary

C-746-A North Warehouse

SWMU No.	Facility Name	Current Status	NFA Approval By	Notes
29	C-746-B TRU Storage Area	NFA	EPA HSWA Class 1 Permit Mod 3/17/1993	
39	C-746-B PCB Waste Storage Area	NFA	EPA HSWA Class 1 Permit Mod 3/17/1993	
43	C-746-B Waste Chemical Storage Area	NFA	8/19/1991	
137	C-746-A Inactive PCB Transformer Sump Area	Soils & Slabs OU	--	Initially evaluated under ARRA and Soils OU
139	C-746-A1 UST	NFA	KDWM 12/9/2005	
140	C-746-A2 UST	NFA	KDWM 12/19/1996	The Final SER for WAG 15 reported that this UST did not exist (The NFA date is the document submittal date)
144	C-746-A Hazardous & Mixed Waste Storage Facility	NFA	EPA HSWA Class 1 Permit Mod 3/17/1993—Regulated by RCRA Permit; KDWM 10/10/2011	RCRA Clean Closed
173	C-746-A Trash Sorting Facility	NFA	EPA HSWA Class 1 Permit Mod 3/17/1993; KDWM 12/18/1992	
196	C-746-A Septic System	Soils OU	--	
463	C-746-A East End Smelter	Soils & Slabs OU	--	Facility structure removed under the Inactive Facility D&D OU; only the slab remains
464	C-746-A West End Smelter	Soils & Slabs OU	--	Facility structure removed under the Inactive Facility D&D OU; only the slab remains
472	C-746-B Pad	BGOU	--	SWMU 472 was granted NFA on 8/17/2009. After more information became available, SWMU 472 was transferred to the Remaining Remediation Additional BG Sources OU via a Revised SAR dated 7/7/2010
520	Scrap Material West of C-746-A	BGOU Soils OU	--	SWMU 520 was, based on additional information, added to the Remaining Remediation Additional Burial Ground Sources OU in a Revised SAR dated 7/7/2010
531	Aluminum Slag Reacting Area (C-746-H4) near the C-746-A Facility	Soils OU	--	
542b	G-746-A-01, S-746-A-01, S-746-A-02 (GSA/SSAs located outside C-746-B)	NFA	KDWM 1/28/2004	