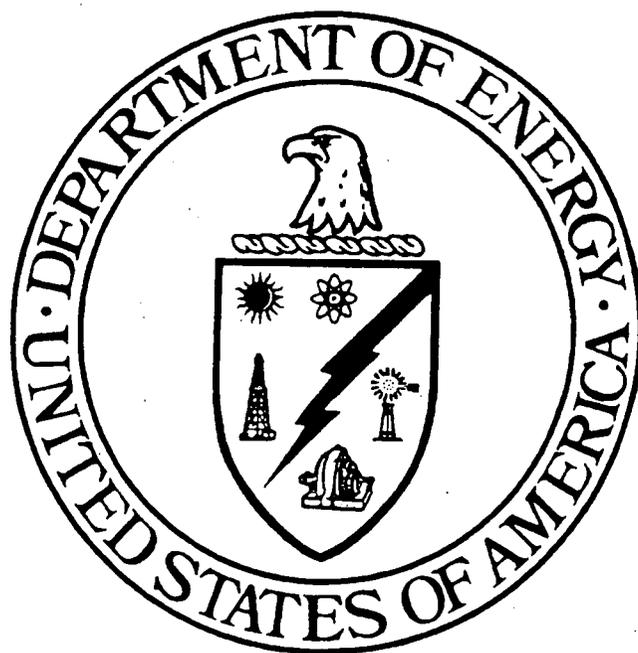


OPERABLE UNIT 3

ADMINISTRATION COMPLEX IMPLEMENTATION PLAN FOR ABOVE-GRADE DECONTAMINATION AND DISMANTLEMENT



SEPTEMBER 2004

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
FERNALD, OHIO

U. S. DEPARTMENT OF ENERGY
FERNALD AREA OFFICE

FINAL

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RECORD OF ISSUE/REVISION

<u>DATE</u>	<u>REVISION NO.</u>	<u>DESCRIPTION AND AUTHORITY</u>
2/28/02	Rev. 0	Issued approved Implementation Plan
4/09/02	Rev. 0, PCN1	On Pages 11, 14 and 15 along with Appendix C Specification Section 01120 Paragraph 3.3.A.4, allow for Debris Category I material to be commingled with Debris Categories A, B, D and incidental E.
9/20/04	Rev. 0, PCN2	Pages 28, 30 and 34 under "Asbestos Removal", changed first sentence to remove the phrase "and floor tile/mastic".

3.0 COMPONENT-SPECIFIC REMEDIATION

This section presents component-specific remediation tasks identified for the Administration Complex D&D project. Background information provided in this section was obtained primarily from the OU3 RI/FS Work Plan Addendum (DOE 1993), records from Removal Actions 9 and 12, and the remediation contract Statement of Work (SOW). Structural (plan and section view) drawings have been compiled for each of the Administration Complex D&D project components and are shown in Appendix D (see Appendix D list of drawings for component identification). Photographs illustrating various features throughout the Complex are provided in Appendix E (see listing of photograph numbers and accompanying drawing in Appendix E for photograph identification). Information regarding the remediation approach was obtained from the remediation contract SOW, performance specifications, and the OU3 Integrated RD/RA Work Plan.

3.1 Building 11 – Service Building

Background

Building 11 (Service Building) is a two-story, rectangular structure that is approximately 230 ft. x 322 ft. and 30 ft. high. It consists of cinder block construction on reinforced poured concrete footers with reinforced, poured concrete floors, glass windows and a flat reinforced poured concrete roof. The building is located just south of 1st Street in the block that runs east of C Street, and west of B Street. Appendix D also provides drawings that show the floor plan layout and section views of Building 11, while photographs are provided in Appendix E.

Process Area Description

Building 11 houses four process areas: the FEMP cafeteria and kitchen (the kitchen is no longer in use); locker rooms; maintenance department offices and laundry facilities. Only the laundry facility is considered a wet process.

Laundry: Since being refurbished and enlarged in 1987, this process area provides cleaning services for on-site process clothing using washers, dryers and dry cleaning equipment. Historically, the laundry also serviced articles from off-site operations. Before entry into the

process area, clothes are monitored to ensure that all articles are radiologically clean. Tetrachloroethylene has not been used in the operation in several years.

Maintenance: The maintenance shop, located near the southwestern corner of the first floor, handles malfunctions associated with laundry facilities and provides storage for small items used for any maintenance or repair work on the administration side of the FEMP. Service fluids are stored in one area of the maintenance office. Although this storage area has a concrete floor, it does not have a dike or any other form of containment. Very little work on equipment is done within the room itself; any work that is done must be radiologically clean upon entry.

Locker Room (Changing Room): Changing rooms are located on most of the first floor. Separate rooms are available, according to sex, employment status (visitor or permanent employee) and radiological contamination. This area provides lockers and shower facilities. Numerous drainage pipes carry wastewater to the laundry sump. Like the laundry area, these facilities were refurbished and enlarged in 1987.

Cafeteria/Kitchen: Although the kitchen is no longer in service, this area provides a lunchroom area with vending machines for FEMP employees and subcontractors.

Remedial Tasks

Four remedial tasks apply to Building 11 and are described below.

Preparatory Action: Facility Shutdown

No hold-up legacy waste (inventory) was ever present in Building 11. The kitchen ductwork is contaminated and has been sealed. Other than standard facility shutdown work such as utility disconnections and removal of salvageable equipment, no preparatory actions will be necessary.

Asbestos Removal

Standard asbestos abatement practices are planned for the removal of friable ACM piping identified in Table 2-2 for Building 11. Friable ACM on the 2nd floor hot water tank will be removed inside a negative pressure enclosure. ACM removal work will be performed in accordance with the work scope condition/specification for asbestos removal (Specification Section 01516 – Asbestos Abatement).

PCN2

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Surface Decontamination

Efforts to remove radiological contamination are not anticipated since no production processes occurred in the building. Areas found to have fixed contamination will be locked down to ensure containment. Loose material contained in the heating, ventilation, air-conditioning (HVAC) system and other building cavities will be surveyed for removable radiological contaminants that may have been deposited. Applicable details from Specification Section 01517 (Removing/Fixing Radiological Contamination) have been incorporated into the project work scope for the D&D of this structure.

Above-Grade Dismantlement

Equipment/systems removal activities will be performed in accordance with the work scope conditions from applicable requirements for Specification Section 15065 (Equipment/Systems Removal) and actual building demolition work will be performed in accordance with the requirements for Specification Section 01526 (Structural Steel Dismantlement) and Specification Section 03315 (Concrete/Masonry Removal). The preferred methods for structural dismantlement are use of a trackhoe shear, track hoe excavator and front end loader. Due to the potential for fugitive dust emissions during structural dismantlement the building surfaces will be pre-wetted and continually wetted during demolition.

3.2 Building 14A – Administration Building

Background

Building 14A (Administration Building) is an irregularly shaped two-level structure measuring 143 X 240 X 24 Feet high. Building 14A is located south of the Service Building (Building 11) and the 10-Plex Trailer Complex (T-23). Building 14A is constructed of cinder block walls supported on reinforced concrete footers with poured concrete floors. The building comprises a central hallway with east and west wings and a partial basement is located under the west wing.

Process Area Description

Building 14A houses the main offices for site management, the main mailroom, central reproduction, central computing and the Emergency Operations Center (EOC). The building is also equipped with several restrooms/locker rooms.

Remedial Tasks

Four remedial tasks apply to Building 14A and are described below.

Preparatory Action: Facility Shutdown

No hold-up legacy waste (inventory) was ever present in Building 14A. Other than standard facility shutdown work such as utility disconnections and removal of salvageable equipment, no preparatory actions will be necessary.

Asbestos Removal

Standard asbestos abatement practices are planned for the removal of friable ACM piping identified in Table 2-2 for Building 14A. Friable ACM on the basement hot water tank will be removed inside a negative pressure enclosure. ACM removal work will be performed in accordance with the work scope condition/specification for asbestos removal (Specification Section 01516 – Asbestos Abatement).

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Surface Decontamination

Efforts to remove radiological contamination are not anticipated since no production processes occurred in the building. Areas found to have fixed contamination will be locked down to ensure containment. Loose material contained in the heating, ventilation, air-conditioning (HVAC) system and other building cavities will be surveyed for removable radiological contaminants that may have been deposited. Applicable details from Specification Section 01517 (Removing/Fixing Radiological Contamination) have been incorporated into the project work scope for the D&D of this structure.

Above-Grade Dismantlement

Equipment/systems removal activities will be performed in accordance with the work scope conditions from applicable requirements for Specification Section 15065 (Equipment/Systems Removal) and actual building demolition work will be performed in accordance with the

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Above-Grade Dismantlement

Equipment/systems removal activities will be performed in accordance with the work scope conditions from applicable requirements for Equipment/Systems Removal (Specification Section 15065) and actual building demolition work will be performed in accordance with the requirements for Structural Steel Dismantlement (Specification Section 01526). The preferred methods for structural dismantlement are use of a track hoe shear, track hoe excavator and front end loader. Due to the potential for fugitive dust emissions during structural dismantlement the building surfaces will be pre-wetted and continually wetted during demolition.

3.5 Building 31A – Engine House Garage

Background

Building 31A (Engine House Garage) is a single-story building located in the southeastern corner of the intersection of 1st Street and D Street. It is an irregular shaped building, measuring approximately 62 x 123 x 17 ft. high. The building is constructed of cinder blocks with a concrete roof and floor.

Process Area Description

Building 31A is operated as a garage for performing general maintenance on the on-site vehicles. The garage also houses the facility's ambulance and fire engine. The garage is considered a wet process area because of the frequent use of solvents and oils.

Remedial Tasks

Four remedial tasks apply to Building 31A and are described below.

Preparatory Action: Facility Shutdown

No hold-up legacy waste (inventory) was ever present in the Component 31A area. Other than standard facility shutdown work such as utility disconnections and removal of salvageable equipment, no preparatory actions will be necessary.

Asbestos Removal

Standard asbestos abatement practices are planned for the removal of friable ACM piping identified in Table 2-2 for Building 31A. ACM removal work will be performed in accordance with the work scope condition/specification for asbestos removal (Specification Section 01516 – Asbestos Abatement).

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Surface Decontamination

Efforts to remove radiological contamination are not anticipated since no production processes occurred in the building. Areas found to have fixed contamination will be locked down to ensure containment. Loose material contained in the heating, ventilation, air-conditioning (HVAC) system and other building cavities will be surveyed for removable radiological contaminants that may have been deposited. Applicable details from Specification Section 01517 (Removing/Fixing Radiological Contamination) have been incorporated into the project work scope for the D&D of this structure.

Above-Grade Dismantlement

Equipment/systems removal activities will be performed in accordance with the work scope conditions from applicable requirements for Equipment/Systems Removal (Specification Section 15065) and actual building demolition work will be performed in accordance with the requirements for Concrete/Masonry Removal (Specification Section 03315). The preferred methods for structural dismantlement are use of a track hoe shear, track hoe excavator and front end loader. Due to the potential for fugitive dust emissions during structural dismantlement the building surfaces will be pre-wetted and continually wetted during demolition.

3.6 Building 46 – Heavy Equipment Building

Background

Building 46 (Heavy Equipment Building) is a single-story building, measuring approximately 220 x 59, located just east of the Engine House Garage. It is a pre-engineered facility consisting of a structural steel frame on a reinforced, poured concrete base, sloped steel roof panels, steel siding panels and glass windows.