

**ADMINISTRATION COMPLEX IMPLEMENTATION PLAN  
FOR ABOVE-GRADE  
DECONTAMINATION AND DISMANTLEMENT**

**DOCUMENT NUMBER 1789-PL-0002 (REV. 0) PCN3**

**PAGE CHANGES**

**INCLUDES:**

**COVER PAGE/RECORD OF REVISION**

**PAGE 21/22**

# OPERABLE UNIT 3

## ADMINISTRATION COMPLEX IMPLEMENTATION PLAN FOR ABOVE-GRADE DECONTAMINATION AND DISMANTLEMENT



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FERNALD ENVIRONMENTAL MANAGEMENT PROJECT  
FERNALD, OHIO

U. S. DEPARTMENT OF ENERGY  
FERNALD AREA OFFICE

FINAL

DOCUMENT CONTROL NO. 1789-PL-0002 (REV. 0) PCN3

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".
10/27/04	Rev. 0, PCN3	Page 21, Section 2.5.3, "Asbestos Removal", added paragraph 2 to address demolition of the asbestos floor tile in Buildings 11, 14A and 31A.

### 2.5.2 Preparatory Action: Facility Shutdown

Facilities Shutdown activities will be performed by FEMP personnel in accordance with applicable Facilities Shutdown procedures. The Facility Shutdown scope will consist of the following activities:

- removal of all salvageable equipment;
- removal of loose, gross contamination;
- general clean-up; and
- disconnection of all utilities.

All steam, potable water, electrical power, fire protection alarms and systems, compressed air, and communication systems will be disconnected at the equipment or at the building exterior to establish the known condition of each energy source within the remediation area. Section 3.2.2 of the OU3 Integrated RD/RA Work Plan further discusses the scope of this preparatory action.

### 2.5.3 Asbestos Removal

The removal of ACM from components will be conducted by a contractor qualified to conduct asbestos abatement operations. This activity will involve removing all friable types of asbestos, typically consisting of thermal system insulation (TSI) on pipes, tanks, and equipment and non-friable ACM such as floor tile, mastic, gaskets, etc.). Component-specific details of asbestos removal, including estimated quantities, are provided in Section 3, as applicable. ACM removal strategies that will be applied to this project were discussed in depth in Section 3.2.4 of the OU3 Integrated RD/RA Work Plan while overall project specific requirements for the D&D Contractor are detailed in Specification Section 01516.

Floor tile in Buildings 11, 14A and 31A will be left in place during demolition. The debris containing floor tile will be wetted just prior to loadout for disposition in the OSDF. If necessary, a continuous water spray will be used to prevent visible emissions during debris loadout in the OSDF. A minimum of two workers will be provided with breathing zone monitors during the debris off-loading and compaction. Air monitoring results for asbestos fibers will be reported to the regulators by e-mail as soon as the data has been properly validated. Fluor H&S will evaluate the BA data to verify emissions controls are adequate for worker protection.

PCN3

#### 2.5.4 Surface Decontamination

Surface decontamination, also known as release cleaning, refers to the removal of loose surface contamination and, if necessary, the encapsulation of remaining contaminants. The goal of surface decontamination is to minimize the potential for release of contaminants during handling and disposal. Specification Section 01517 addresses the removal and/or fixing of radiological contamination and generally covers the following activities:

- cleaning low-level uranium contaminated materials and/or building surfaces by *contaminant removal or encapsulation* to meet debris and/or structure release criteria;
- controlling and moving effluent produced during the removal and/or encapsulation of contamination.

To identify materials/surfaces that may require surface cleaning, existing radiological surveys were reviewed. These surveys provide Radiological Engineers with an indication of the extent of alpha removable, and beta-gamma removable, and total beta-gamma radiological contamination.

Decontamination efforts are not anticipated since process operations did not occur in these structures. If necessary, applicable details from Specification Section 01517 will be incorporated into the project work scope for these structures. Specification Section 01517 identifies the requirements for removing/fixing of contamination, including DOE-approved methods, while Specification Section 01120 identifies the level of decontamination needed to meet material handling criteria. Among other requirements, these specifications require removal of surface contamination and sealing of all openings of equipment and debris that are potentially contaminated internally with removable contamination. For large items such as ductwork, the Contractor may encapsulate all internal surfaces in lieu of sealing. Acceptable methods for removing surface contamination include, but are not limited to: low volume hydro-blasting with a minimum of 1,000 psi, steam-cleaning, sponge blasting, CO<sub>2</sub> blasting, etc. FEMP Project Management will be notified prior to encapsulation of debris to allow for inspection for visible residues. Acceptable methods for encapsulating contamination, which is not readily removed by the above-identified methods include, but are not limited to, encapsulating coatings, non-strippable coatings as referenced in Article 2.2 of Specification