

OPERABLE UNIT 3

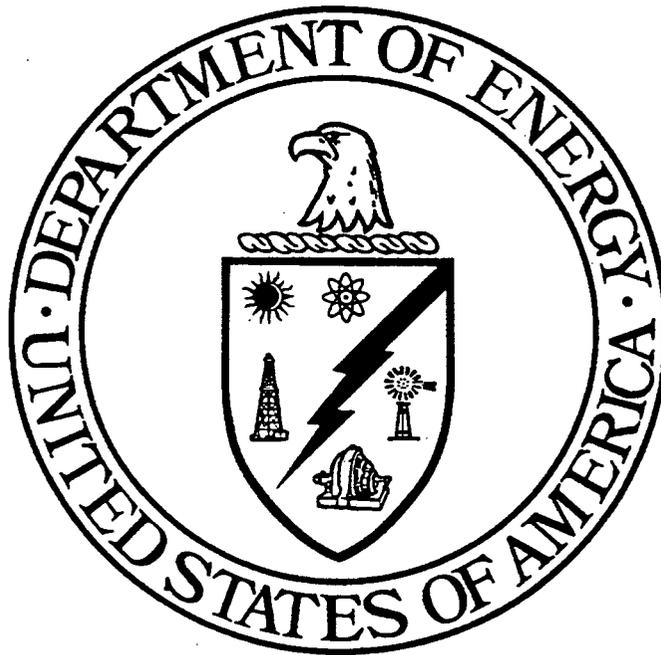
2004

MISCELLANEOUS SMALL STRUCTURES D&D PROJECT

TASK ORDER #405 COMPLETION REPORT

1751-RP-0003

Revision 0



JANUARY 1999

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
FERNALD, OHIO

U. S. DEPARTMENT OF ENERGY
FERNALD AREA OFFICE

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INTRODUCTION

The attached Task Order #405 Completion Report is submitted in accordance with the "Miscellaneous Small Structures Implementation Plan For Above-Grade Decontamination and Dismantlement", which was previously approved by the U.S.EPA and Ohio EPA on September 11 and July 9, 1998, respectively. Section 4.0 of that Plan states:

"Within 30 days from completion of D&D activities covered in a Task Order, DOE will provide the regulatory agencies with a Task Order Completion Report that will address the following issues:

- A summary description of the Task Order scope and components;
- The completion date of D&D activities;
- The location of the debris generated by the D&D activities; and
- Any documented lessons learned from the Task Order implementation.

All other details will be submitted in the MSS-D&D Project Completion Report."

Accordingly, this report summarizes the above information for Task Order #405 which includes the Plant 8 Old Drum Washer (8F), Gas Meter Building (22A), Incinerator Sprinkler Riser House (39C), and the Utility Shed East of Trailers (45B).

Task Order #405 was funded through the Accelerated Site Technology Deployment Program.

DESCRIPTION OF TASK ORDER #405 COMPONENTS:

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Task Order #405 consisted of the D&D of the following components:

- Plant 8 Old Drum Washer (8F);
- Gas Meter Building (22A);
- Incinerator Sprinkler Riser House (39C); and
- Utility Shed East of Trailers (45B).

The Plant 8 Old Drum Washer (8F) was located adjacent to the west wall of the Recovery Plant on the Plant 8 West Pad. It was approximately 12 ft. x 10 ft. x 7 ft. high, and was used to wash drums from both the Recovery Plant and other site operations, for reuse. This unit was abandoned in place due to the fact that a new drum reconditioning unit was installed in the Rotary Kiln/Drum Reconditioning Building to the south. Because the Old Drum Washer was located on another component, it consisted of the enclosed steel equipment only, and not the concrete beneath it.

The Gas Meter Building (22A) was a single-story structure with cinder block walls and concrete floor, located southwest of the Finished Products Warehouse (77). It was approximately 16 ft. x 20 ft. x 10 ft. high. It housed the main natural gas meter for the site and ancillary equipment, and also contained incoming and distribution natural gas lines.

The Incinerator Sprinkler Riser House (39C) was located in the northeast corner of the "A" Street and 101st Street intersection. It was a single-level building, consisting of cinder block walls and a concrete floor, and was approximately 9 ft. x 7 ft. x 8 ft. high. This facility originally provided fire protection for the Old Cooling Water Tower (3K), and was later used to provide fire protection for the Incinerator Building (39A). The Incinerator Sprinkler Riser House housed one pump and accompanying equipment.

The Utility Shed East of Rust Trailers (45B) was located along "A" Street, northeast of the Rust Engineering Building (45A). This facility was a single story structure, consisting of a wood frame and concrete pad, and was used to store small tools and excess office furniture. It was approximately 12 ft. x 12 ft. x 10 ft. high.

DESCRIPTION OF REMEDIATION ACTIVITIES:

The following applies to all four of the above components:

- Aside from utility disconnections, no preparatory actions were necessary;
- None of the components were declared to be Hazardous Waste Management Units (HWMUs); and,
- All structures were dismantled and size-reduced by using a Pemberton demolition rotating mobile shear (model PES-II-700) that was mounted on a John Deere 450LC Crawler Excavator.

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Friable asbestos-containing material (ACM) was only present in the 12 linear feet of 2" line that ran from the Utility Shed (45B) to the high line. It was abated in accordance with the Project Work Scope Condition/Specification for Asbestos Abatement (3-1751-TS-0001). The 8 linear feet of pipe insulation associated with the Old Drum Washer was tested, and was found to be non-ACM.

Transite was only present in the roof panels of the Incinerator Sprinkler Riser House (39C). The panels were removed in accordance with the Project Work Scope Condition/Specification for Transite Removal (3-1751-TS-0001).

The cinder block walls of the Gas Meter Building (22A) and the Incinerator Sprinkler Riser House (39C) were dismantled using the hydraulic shears, and water spray was employed during dismantling as necessary for dust control purposes.

During the shearing of the Old Drum Washer (8F), a small amount of airborne particulates was noticed. In accordance with existing procedures, water was immediately sprayed onto the material as a dust suppressant and D&D activities were shut down until a sample of the wetted material was analyzed.

- The results of the sampling showed that the radioactive contamination level was 1.2 million dpm. The D&D activities were then re-evaluated to ensure safety to the workers and protection of the environment.
- It was determined that over the years, contamination from the drum washing operation had accumulated between the bottom of the drum washer and the top of the concrete pad. Initial inspection revealed that some of the metal debris had a thin layer of rust colored material affixed to it. Due to the sampling results mentioned above, a conservative approach was taken in that the material was assumed to be a potential process residue. Consequently, the debris was washed to ensure the OSDF visual inspection criteria was met. Washwater from this activity was carefully collected and subsequently treated through the AWWT.
- After the washing operation, some of the drum washer sludge/residue which still had visible residue (considered Category J waste which does not meet the OSDF WAC) was containerized into three (3) 55-gallon drums for shipment to the Nevada Test Site (NTS).

TIME FRAME:

Task Order #405 was issued on November 12, 1998. The project was started on November 16, 1998, and was completed on January 20, 1999.

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LOCATION OF DEBRIS:

The debris from Components 8F, 22A, 39C, and 45B was placed into (6) Roll-Off Boxes, (3) White Metal Boxes, and (3) 55-gallon drums. The ROB's were moved to the areas as follows:

<u>Debris Category</u>	<u>Debris Description</u>	<u>No./Type of Boxes</u>	<u>Container Location</u>
A, B, D, & incidental E	Metal	1 ROB 1 ROB 3 WMBs	OSDF Transfer Area South of 18D South of 3E
E	Concrete	2 ROB's 1 ROB	Placed in the OSDF OSDF Transfer Area
G	Transite	(a)	Plant 4/Plant 7 Area
H	ACM	< 1 (b)	North of 12B
I-4	Misc. Debris	1 ROB	South of 18D
J	Sludge/Residue	3 Drums	South of 3E

(a) ROB's were not used. Approximately 0.5 cubic yards of transite panels were banded to a metal pallet, and then were transported to the Plant 4 Pad transite pile.

(b) Approximately 4 cubic feet of ACM was transferred to an asbestos ISO (Sealand) container located north of Building 12B.

LESSONS LEARNED:

During D&D operations, contamination was encountered underneath the Old Drum Washer, that was not detected by standard D&D surveys. However, upon detection, field work was immediately halted and the situation was assessed. A "good" lesson learned is that when there are enough qualified people observing the operation, any anomalies can be quickly detected and efficiently addressed.

The Hydraulic Shear continues to do an excellent job of safely dismantling and size-reducing steel (in the form of columns, beams, and miscellaneous items) and cinder block walls.