



Department of Energy

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FEB 25 2005

Mr. James A. Saric, Remedial Project Manager
 United States Environmental Protection Agency
 Region V, SR-6J
 77 West Jackson Boulevard
 Chicago, Illinois 60604-3590

DOE-0173-05

Mr. Tom Schneider, Project Manager
 Ohio Environmental Protection Agency
 401 East 5th Street
 Dayton, Ohio 45402-2911

Dear Mr. Saric and Mr. Schneider:

**MISCELLANEOUS SMALL STRUCTURES – PHASE II PROJECT AMENDMENT #3
 FOR ABOVE GRADE DECONTAMINATION AND DISMANTLEMENT OF
 COMPONENTS 18Y (ADVANCE WASTEWATER TREATMENT FACILITY (AWWT)
 OZONE GENERATION BUILDING) AND 93A (SOUTHWEST BOILER HOUSE)**

Enclosed is the Miscellaneous Small Structures (MSS) – Phase II Project Amendment #3 for the above grade Decontamination and Dismantlement (D&D) of Components 18Y (AWWT Ozone Generation Building), 93A (Southwest Boiler House) and the associated Component 93A pipe bridge.

If there are any questions concerning this subject, please contact Johnny Reising at 513-648-3139 or Ed Skintik at 246-1369.

Sincerely,

William J. Taylor
 Director

Enclosure: As Stated

Mr. James Saric
Mr. Tom Schneider

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DOE-0173-05

cc w/enclosure:

J. Reising, OH/FCP
E. Skintik, OH/FCP
G. Jablonowski, USEPA-V, SR-6J
T. Schneider, OEPA-Dayton (three copies of enclosure)
F. Bell, ATSDR
M. Cullerton, Tetra Tech
M. Shupe, HIS Geo Trans
R. Vandergrift, ODH
AR Coordinator, Fluor Fernald, Inc./MS78

w/o enclosure:

B. Edmondson, Fluor Fernald, Inc./MS64
J. Fry, Fluor Fernald, Inc./MS64
D. Nixon, Fluor Fernald, Inc./MS01
F. Johnston, Fluor Fernald, Inc./MS52-5
C. Murphy, Fluor Fernald, Inc./MS01
P. O'Neill, Fluor Fernald, Inc./MS52-1
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ECDC Fluor Fernald, Inc./MS52-7 Project Number 1751.1.1

**AMENDMENT #3 - MISCELLANEOUS SMALL STRUCTURES PHASE II
IMPLEMENTATION PLAN
FOR ABOVE GRADE DECONTAMINATION AND DISMANTLEMENT
OF COMPONENTS 18Y AND 93A**

FEBRUARY 2005

1.0 Project Statement

This amendment to the Miscellaneous Small Structures (MSS) Phase II Implementation Plan represents the remedial design documentation for the above-grade decontamination and dismantlement (D&D) of Components 18Y (AWWT Ozone Generation Building) and 93A (Southwest Boiler House) including the Component 93A pipe bridge that extends to the Advanced Waste Water Treatment (AWWT) Facility located at the U.S. Department of Energy (DOE) Fernald Closure Project (FCP) in Fernald, Ohio. Components 18Y and 93A are being added to Phase II of the MSS D&D Project because the D&D completion date has been accelerated to meet the 2006 Fernald Closure Plan and Components 18Y and 93A are small in scope making them relatively easy to D&D.

This document provides the pertinent information required for amending the MSS Phase II D&D Project Implementation Plan. Section 2 provides the general project remediation approach. Section 3 provides the component-specific descriptions. Section 4 provides the D&D implementation schedule. Section 5 provides photographs of Components 18Y and 93A.

2.0 General Project Remediation Approach

The general project remediation approach is described in Section 2 of the MSS Phase II D&D Implementation Plan. However, Section 2 of this document provides a summary of the radiological data, debris/waste volume estimates and above grade dismantlement activities for Components 18Y and 93A.

Recent radiological surveys were obtained to substantiate the information summarized in Table 2-1.

TABLE 2-1 SUMMARIES OF RADIOLOGICAL DATA

Comp. No.	Alpha Removable (dpm/100 sq. cm.)			Beta-Gamma Removable (dpm/100 sq.cm.)			Beta-Gamma Total (dpm/100 sq.cm.)		
	Avg Value	Max Value	Sample Size	Avg Value	Max Value	Sample Size	Avg Value	Max Value	Sample Size
18Y	<MDCR	<MDCR	16	<MDCR	<MDCR	16	<MDCR	<MDCR	16
93A	.61	13.35	22	.74	6.6	22	<MDCR	<MDCR	22

A final radiological survey will be performed for Components 18Y and 93A just prior to the start of D&D activities.

Estimates of Components 18Y and 93A material volumes have been summarized in Tables 2-2, 2-3 and 2-4. Tables 2-2 and 2-3 list quantities of materials in units of bulked and unbulk

cubic yards respectively. Table 2-4 lists the estimated weight of material in tons. The waste debris quantities of the piping/pipe bridge associated with Component 93A are included with Component 93A.

TABLE 2-2 MSS D&D PROJECT BULKED MATERIAL VOLUME ESTIMATES (CU YDS)

Component Number	Cat. A	Cat. B	Cat. D	Cat. E	Cat. G	Cat. H	Cat. I-2	Cat. I-4	Cat. J	TOTALS
18Y	0	14	11	0	0	0	4	0	0	29
93A	990	810	1650	15	0	0	150	30	0	3645
Totals	990	824	1661	15	0	0	154	30	0	3674
Container/Qty.	ROB/ 2	ROB/ 2	ROB/ 3	ROB/ 1	N/A	N/A	ROB/ 1	ROB/ 1	N/A	
Interim Storage	OSDF Trans	OSDF Trans	OSDF Trans	OSDF Trans	N/A	N/A	OSDF Trans	OSDF Trans	N/A	
Disposition	OSDF	OSDF	OSDF	OSDF	N/A	N/A	OSDF	OSDF	N/A	

General Notes:

OU3 Debris Categories: Cat. A – Accessible Metals; Cat. B – Inaccessible Metals; Cat. C – Process Related Metals; Cat. D – Painted Light Gage Metals; Cat. E – Concrete; Cat. F – Brick; Cat. G – Non-Regulated ACM; Cat. H – Regulated ACM; Cat. I – Miscellaneous Materials; Cat. J – Special Materials

ROB: Roll-Off Box holds 30 cubic yards (810 cubic feet) and/or 16.95 tons of material; ISD: End-Loading Container/Sea Land boxes, holds up to 36 cubic yards (971 cubic feet) and/or 42,000 lbs. of material. WMB: White Metal Box holds 80 cubic feet with a weight restriction of 8000 lbs.

OSDF Trans: On-site Disposal Facility Transfer area. Refers to direct disposal in the OSDF; however, the ability to deliver debris directly to the OSDF Transfer area is dependent on whether the OSDF is accepting and/or availability of containers (ROBs) for transport. If necessary, Category A,B,D and E debris may be temporarily stockpiled on available building pads or at the On-site Material Transfer Area at project completion. Off-site Com: Off-site Commercial Facility.

TABLE 2-3 MSS D&D PROJECT UNBULKED MATERIAL VOLUME ESTIMATES (CU YDS)

Component Number	Cat. A	Cat. B	Cat. D	Cat. E	Cat. G	Cat. H	Cat. I-2	Cat. I-4	Cat. J	TOTALS
18Y	0	4	3	0	0	0	2	0	0	9
93A	283	231	471	10	0	0	75	15	0	1085
Totals	283	235	474	10	0	0	77	15	0	1094

General Note: Refer to Table 2-1 General Notes for Debris Waste Category descriptions.

TABLE 2-4 MSS D&D PROJECT MATERIAL WEIGHT ESTIMATES (Tons)

Component Number	Cat. A	Cat. B	Cat. D	Cat. E	Cat. G	Cat. H	Cat. I-2	Cat. I-4	Cat. J	TOTALS
18Y	0	2	2	0	0	0	1	0	0	5
93A	550	365	294	21	0	0	30	1	0	1261
Totals	550	367	296	21	0	0	31	1	0	1266

General Note: Refer to Table 2-1 General Notes for Debris Waste Category descriptions.

TABLE 2-5 ABOVE GRADE DISMANTLEMENT ACTIVITIES

Component Number	Inventory Removal	Facilities Shutdown	Asbestos Abatement	Surface Decon	Equip./Sys. Dismantlement	Transite Removal	Structural Steel or Steel Frame Dismantlement	Concrete or Masonry Removal
18Y	Not Required	X	Not Required	X	X	Not Required	Not Required	Not Required
93A	X	X	Not Required	X	X	Not Required	X	X

3.0 Component-Specific Description

This section presents component-specific descriptions for Components 18Y and 93A. Background information provided in this section was obtained primarily from the Facility Owners and facility drawings.

3.1 Component 18Y – AWWT Ozone Generation Building

Background – Component 18Y (AWWT Ozone Generation Building) was constructed in the 1990's and is located between and at the north end of the east and west Stormwater Retention Basins. Component 18Y is a single story, metal-frame building measuring twenty feet long by sixteen feet wide with a flat roof measuring approximately twelve feet high. Exterior equipment associated with Component 18Y that will be dismantled as part of the overall 18Y D&D includes miscellaneous pumps, piping and a 3,760-gallon fiberglass tank measuring ten feet tall with an eight-foot diameter.

Process Area Description – Component 18Y was constructed in the 1990's and housed the equipment that generated ozone for use at the Advanced Wastewater Treatment Facility.

3.2 Component 93A – Southwest Boiler House

Background – Component 93A (Southwest Boiler House) was constructed in the late 1990's and is located just north of the AWWT Facility at the FCP. Component 93A is a single story, structural steel, metal-frame building measuring eighty feet long by 55 feet wide with a sloped roof measuring approximately thirty feet at its highest point. Exterior equipment associated with Component 93A that will be dismantled as part of the overall 93A D&D includes two fuel oil heating units, a 10,000 gallon fuel tank, a 15,000 gallon brine tank & associated equipment, a metal frame out-building structure (measuring eight feet long by five feet wide and six feet tall), an air-supply system, piping/pipe bridge that runs east (approximately forty feet) and piping/pipe bridge that runs south (approximately 120 feet).

Process Area Description – Component 93A was constructed in the 1990's to provide a source for the remaining steam-heated site facilities. Once those remaining facilities were abandoned, Component 93A was converted to a laundry and garage support facility. Most recently, Component 93A was used as an on-site one time processing facility of slightly enriched, mixed, low-level waste for shipment to an approved offsite Treatment Storage and Disposal Facility. Treatment of this waste was done in accordance with the Uranium ASSAY adjustment Project Work Plan #40600-PL-0001, Revision 1 dated November 2004.

4.0 Schedule

The implementation schedule for field remediation of Components 18Y and 93A are identified in Table 4-1.

TABLE 4-1 COMPONENTS 18Y AND 93A D&D SCHEDULE

Activity	Date
Component 18Y Demolition Start	August 1, 2005
Component 93A Demolition Start	September 6, 2005.
Component 18Y Complete Demolition	September 2, 2005
Component 93A Complete Demolition	October 31, 2005.
Issue Project Completion Report	As part of the MSS Phase II Project Completion Report. See Figure 4-1 from the MSS Phase II D&D Project Implementation Plan, 1751-PL-0004 (Rev 0) PCN1 dated February 2003.

5.0 Photographs

Photos compiled for Components 18Y and 93A are summarized in Table 5-1 and attached as Appendix A.

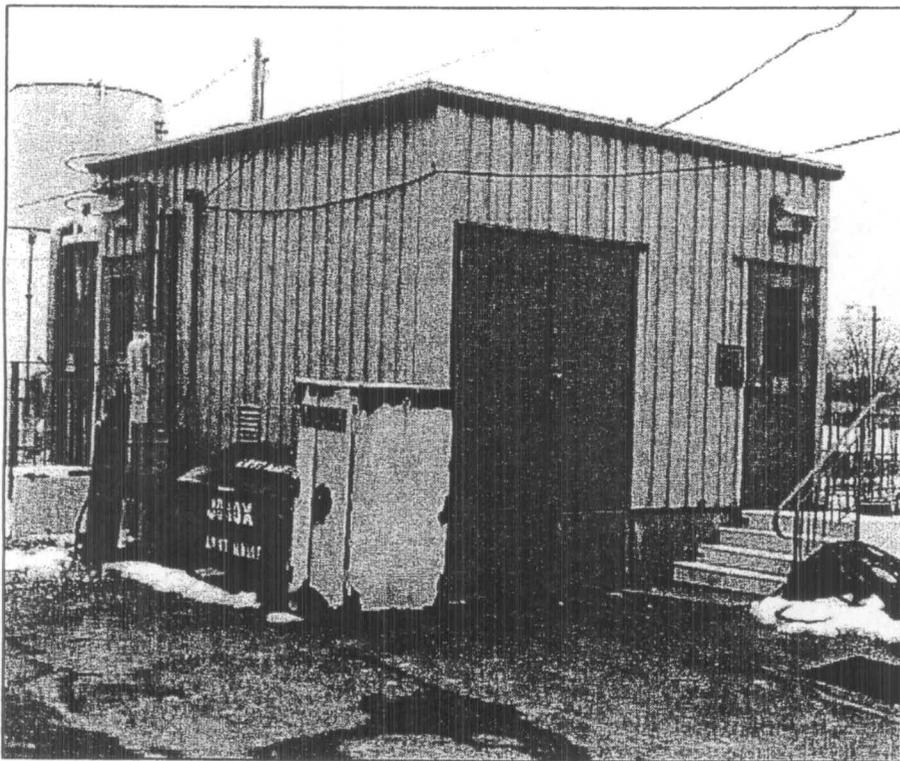
TABLE 5-1 PHOTOGRAPHS

Component	Photo #
18Y	7177D-536; Component 18Y Exterior
18Y	7177D-537; Component 18Y Exterior
93A	7177D-534; Component 93A Exterior
93A	7177D-535; Component 93A Exterior

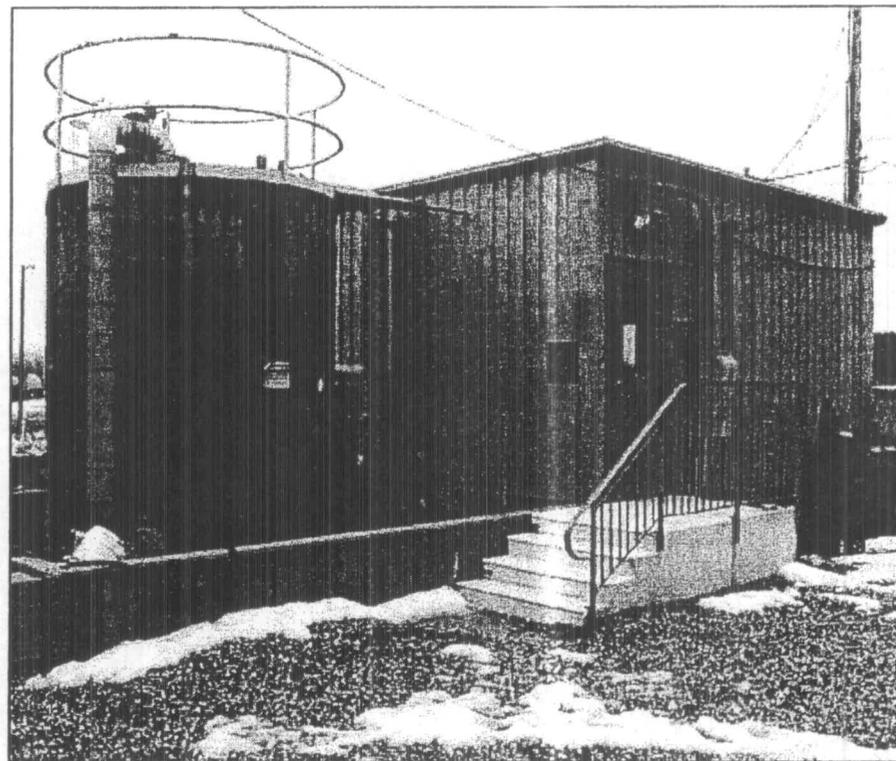
APPENDIX A

PHOTOS

AWWT OZONE GENERATION BUILDING COMPONENT 18Y

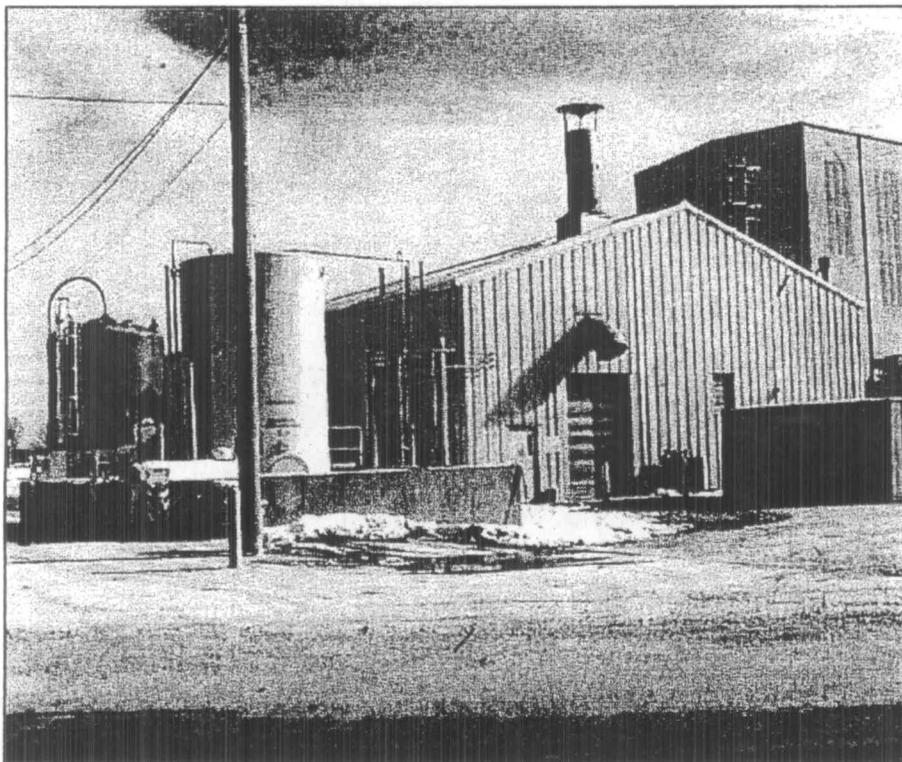


7177D-536

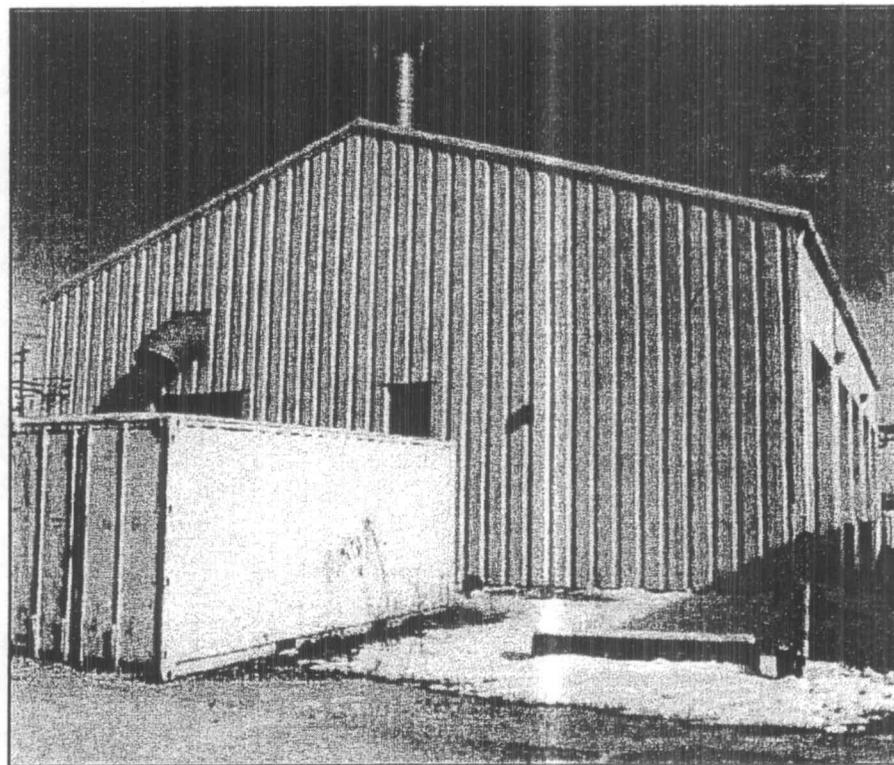


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SOUTHWEST BOILER HOUSE COMPONENT 93A



7177D-534



7177D-535