

FINAL REPORT

Demolition of Magazines 7, 11, and 54

**MOUND PLANT
MIAMISBURG, OHIO**

April 1998

Final

(Revision 0)



**Main Hill Non-Rad Project
Babcock & Wilcox of Ohio**

EXECUTIVE SUMMARY

This is the final report documenting the demolition of Magazines 7, 11, and 54 from December 1997 to February 1998. This document serves as a record of the demolition action and reports final costs, schedule, waste disposition information, photographs, method of demolition and any unusual findings. This document also lists references of other related documents.

Magazine 54 was an explosives storage magazine located on the west end of DS Building on the main hill of the Mound Plant. It was a one story, 331-square foot, reinforced concrete structure that was constructed in 1970. Magazines 7 and 11 were explosive storage magazines located south of I Building also on the main hill of the Mound Plant. They were one story, reinforced concrete structures, 387 and 372 square feet respectively. Both Magazines 7 and 11 were constructed in 1957. All three magazines were binned as No Further Action by the D.O.E. - U.S.E.P.A. - O.E.P.A Core Team on May 14, 1997. At the time of the demolition, all weapons program activities had ceased and all energetic materials had been removed from the magazines. In addition to the magazines, a blast wall between Magazine 11 and I Building was removed to below grade and the lightning rod pole was removed.

The Main Hill Non-Rad Project of Babcock & Wilcox of Ohio demolished the three magazines including the foundations as construction demolitions. Some subsurface features were left in place after the demolition. These include grade beams beneath Magazine 54 that extend from the former foundation of Magazine 54 to the vicinity of T Building roof. A portion of the southern wing wall and footer of Magazine 11 to act as a retaining wall for the hillside at the location of the above ground rad transfer lines from SW Building to WD Building was left in place. The blast wall between Magazine 11 and I Building was removed only to below grade due to it's proximity to a sanitary sewer. The electrical duct bank from I Building to Magazine 7 also stayed.

In preparation for the demolition of Magazines 7 and 11 an asbestos abatement was performed to remove the steam lines from I Building to the magazines.

Personnel sampling for crystalline silica was performed during demolition activities. Due to the proximity to an URMA (Underground Radiological Management Area), samples were taken of the soils in the construction zones and analyzed only for radionuclides. This data was used only for worker protection during the demolition process. The areas were then regraded and backfilled to contour.

TABLE OF CONTENTS

EXECUTIVE SUMMARY ES-1

1.0 SUMMARY OF EVENTS 1-1

 1.1. PERSONNEL ORGANIZATION FOR THE DEMOLITION 1-1

 1.2. CHRONOLOGICAL NARRATIVE OF KEY DEMOLITION ACTIVITIES 1-2

 1.3. LISTING OF FINAL RESOURCES COMMITTED 1-3

2.0 EFFECTIVENESS OF THE DEMOLITION 2-1

3.0 RECOMMENDATIONS 2-1

4.0 REFERENCE LIST OF SUPPLEMENTAL DOCUMENTS 2-1

LIST OF TABLES

Table 1. Organization of the Demolition 1-2

Table 2. Materials and Disposition 1-4

Table 3. Demolition Project Total Cost Summary 1-4

APPENDICES

APPENDIX A PHOTOGRAPH DOCUMENTATION

1. SUMMARY OF EVENTS

1.1. ORGANIZATION OF THE DEMOLITION

Table I.1. Organization of the Demolition

Agencies or Parties Involved	Contact	Description of Participation
US EPA HSRM-6J 77 W. Jackson Chicago,IL 60604	Tim Fischer 312-886-5787	Federal agency responsible for site oversight.
Ohio EPA 410 E. Fifth St. Dayton, OH 45402-2911	Brian Nickel 937-285-6468	State agency responsible for site oversight.
DOE-MB P.O. Box 66 1 Mound Road Miamisburg, OH 45343-0066	Art Kleinrath 937-865-3597	Federal OSC responsible for project oversight and success.
B&W of Ohio Main Hill Non-Rad Project P.O. Box 3030 Mound Rd. Miamisburg, OH 45343-3030	Dennis J. Gault 937-865-3913	Provided the OSC with technical assistance, administrative support, sampling, photo and site documentation, site safety, and report preparation.
B&W of Ohio General Superintendent and Equipment Manager P.O. Box 3030 Mound Rd. Miamisburg, OH 45343-3030	Rich Higgins 937-865-4400	Provided the personnel and equipment necessary for the demolition.
B&W of Ohio Gamma Spec / Soil Screening P.O. Box 3030 Mound Rd. Miamisburg, OH 45343-3030	Jeff Stapleton 937-865-5561	Provided analytical services during verification sampling.

1.2. CHRONOLOGICAL NARRATIVE OF DEMOLITION ACTIVITIES

- 05 Jan. 98 Started demolition activities for Magazine 54.
- 12 Jan. 98 Started asbestos abatement for Magazines 7 and 11.
- 19 Jan. 98 Started demolition activities for Magazine 11.
- 20 Jan. 98 Completed asbestos abatement of Magazines 7 and 11.
- 22 Jan. 98 Completed demolition activities for Magazines 11 and 54.
- 26 Jan. 98 Started demolition activities for Magazine 7.
- 29 Jan. 98 Completed demolition activities for Magazine 7
- 02 Feb. 98 Completed removal of Magazine 54 foundation.
- 03 Feb. 98 Removed the blast wall and the lightning rod pole from the vicinity of Magazine 11.
- 05 Feb. 98 Completed backfilling Magazines 7, 11, and 54.
- 19 Mar. 98 Sowed grass seed at the location of former Magazines 7 and 11.

1.3. RESOURCES COMMITTED

Table I.2. Materials and Disposition

Material	Quantity	Method	Location
Construction Debris	180 cubic yards	To Be Crushed	Mound Site: to be used as fill material
Metals	30 cubic yards	Recycled	Franklin Metals

Table I.3. Project Cost Summary

Project Costs:	Cost (\$)
LABOR	\$77,969.00
MATERIALS & SUPPLIES	\$6,374.00
PURCHASED SERVICES	\$6,874.00
WASTE ALLOCATIONS	\$17,593.00
Total Cost and Ceiling:	Cost (\$)
TOTAL PROJECT COST	\$108,810.00
PROJECT CEILING	\$108,443.00

2. EFFECTIVENESS OF THE DEMOLITION

The magazines were successfully demolished and the areas restored. Radiological soil samples taken during the demolition activities indicated no elevated results per MD-10438.

2.1. ACTIONS TAKEN BY MOUND PERSONNEL

All fieldwork and laboratory analysis was completed Babcock & Wilcox of Ohio personnel.

3. RECOMMENDATION

3.1. RECOMMENDATION TO THE DEPARTMENT OF ENERGY

Magazines 7, 11, and 54 have been removed from the CERCLA process as No Further Action locations by the Mound 2000 Core Team. The buildings have been demolished and the area has been restored. It is recommended to the Department of Energy that Babcock & Wilcox of Ohio's contractual obligations for the scope of work relating to these magazines is complete.

4. REFERENCE LIST OF SUPPLEMENTAL DOCUMENTS

Contact Mark Becker, Babcock & Wilcox of Ohio; Public Relations, at (937) 865-4450 to request access to these supplemental documents.

- i.e.,
- Mound Plant Building Data Package for Magazines 5, 6, 7, 10, 11, 53 and 54:
November 4, 1997
 - Work Plan: Magazines 7, 11, and 54: December 1997
 - Job Safety and Health Analysis: Magazines 7, 11, and 54: December 1998

APPENDIX A

PHOTOGRAPH DOCUMENTATION

MAGAZINE 7



Mound Plant Magazine 7

9.119-33



02/19/08 Site of former Rldn 11 & 7 magazines *980364

27 April 98

MAGAZINE 11



Mound Plant Magazine 11

9.122-33



02/19/98 Site of former Bldg. 11, magazine *980365

MAGAZINE 54





01/21/98 Bldg.54, Magazine, demolition *980015

