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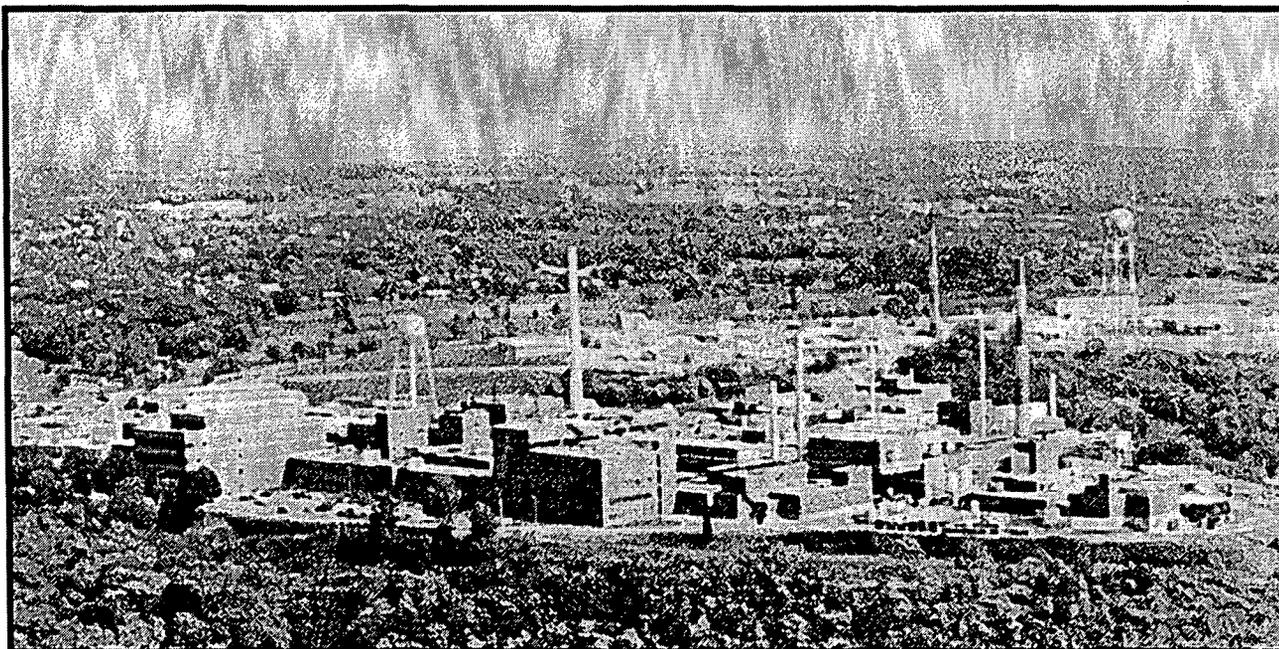
**Environmental
Restoration
Program**



Miamisburg Closure Project Potential Release Site Package

PRS 317

Public Review Draft
January 2006





CH2MHILL

CH2M HILL Mound, Inc.

1075 Mound Road

P.O. Box 750

Miamisburg, OH 45343-0750

SMO-050/06
January 19, 2006

Mr. Don Pfister, Director
Miamisburg Closure Project
U. S. Department of Energy
175 Tri-County Parkway
Springdale, OH 45246

ATTENTION: Paul Lucas

SUBJECT: **Contract No. DE-AC24-03OH20152:** Deliverable #39 Potential release site and removal action documentation; Section C.2.1 Facilities; PRS 317 PRS Package, Public Review Draft

Dear Mr. Pfister:

Paul Lucas of your office has authorized the release of the following document for public review:

- PRS 317 PRS Package, Public Review Draft

Public comment will be accepted through February 22, 2006.

If you or members of your staff have any questions regarding the document, or if additional support is needed, please contact Dave Rakel at 937-865-4203.

Sincerely,

John Lehew
Site Manager

JL/sp

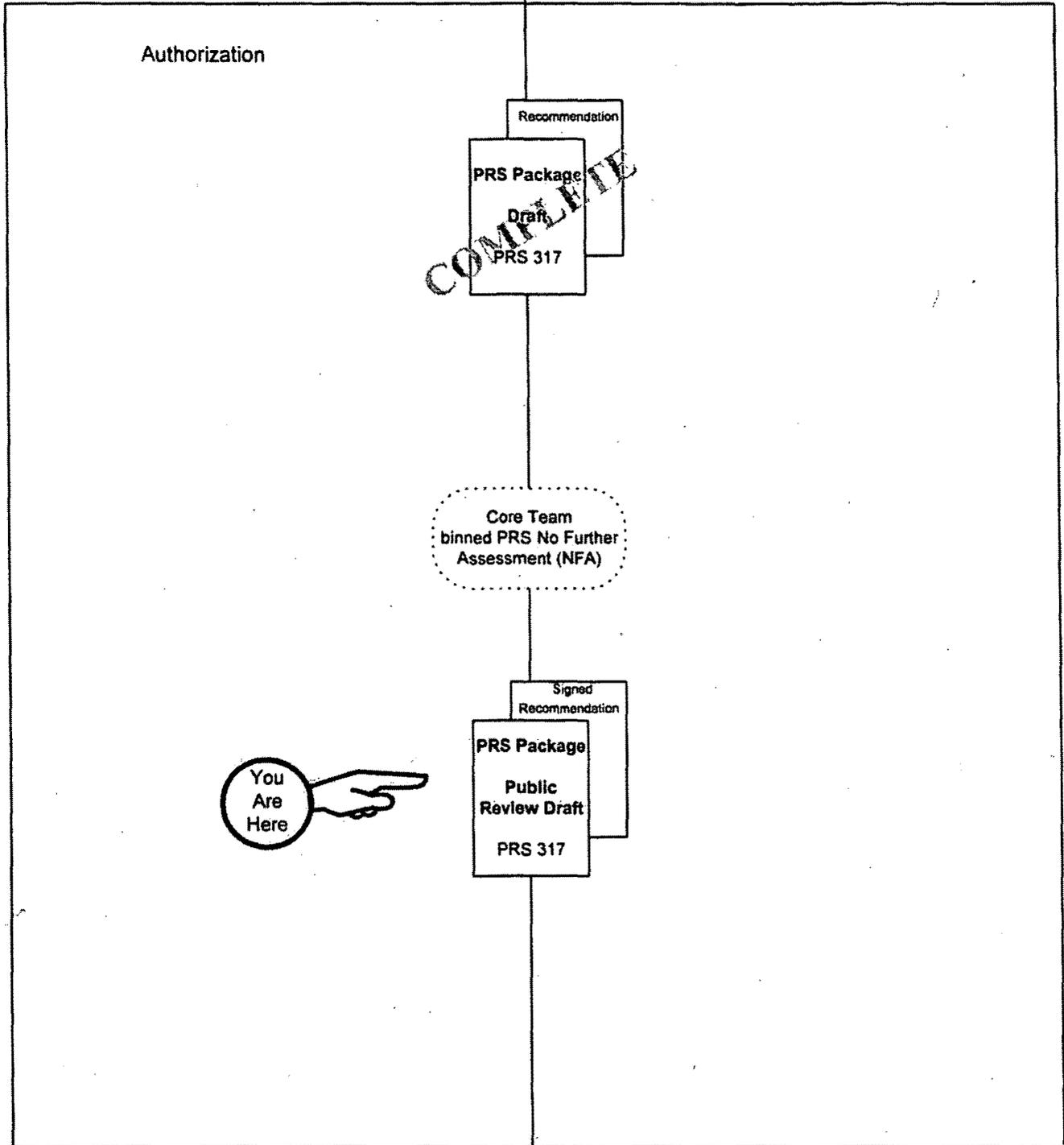
Enclosures

cc: T. Fischer, USEPA, (1) w/attachments
B. Nickel, OEPA, (4) w/attachments
R. Vandegrift, ODH, (1) w/attachments
J. Webb, ODH (1) w/attachments
M. Wojciechowski, Tetra Tech, (1) w/attach
G. Gorsuch, DOE/MCP, (1) w/attachments
R. Tormey, DOE/OH, (1) w/attachments
F. Bullock, MMCIC, (3) w/attachments
Public Reading Room, (1) w/attachments
C. Kline, CH2M Hill, (1) w/attachments
S. Parfitt, CH2M Hill, (1) w/attachmemts

ER Records, CH2M Hill, (1) w/attachs
DCC (1) w/attachments
J. Lehew, CH2M Hill, w/o attachments
J. Stickelman, CH2M Hill, w/o attachments
D. Rakel, CH2M Hill, w/o attachments
K. Armstrong, CH2M Hill, w/o attachments
D. Kramer, CH2M Hill, w/o attachments
MOAT Coordinator
S. Barr, w/o attachments
M. McDougal, w/o attachments
file

PRS 317

PRS 317



Authorization

Recommendation

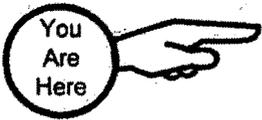
PRS Package
Draft
PRS 317

COMPLETE

Core Team
binned PRS No Further
Assessment (NFA)

Signed
Recommendation

PRS Package
Public
Review Draft
PRS 317



You
Are
Here

Signed
Recommendation

PRS Package
Final
PRS 317

Completion

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MIAMISBURG CLOSURE PROJECT

POTENTIAL RELEASE SITE PACKAGES

The following documents are available (January 23, 2006) for public information in the CERCLA Public Reading Room, 955 Mound Rd., Miamisburg, Ohio.

PRS 112 & 368 Addendum 1: (Paint Shop and Soil Contamination near Paint Shop)

PRS 317: (Ventilation Hoods)

PRS 442: (Soil beneath Asphalt Lined Pond)

Questions can be referred to Paul Lucas at
(513) 246-0071

U.S. Department of Energy
U.S. Environmental Protection Agency
Ohio Environmental Protection Agency

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ACRONYMS

PRS	Potential Release Site
SWMU	Solid Waste Management Units
FFA	Federal Facilities Agreement
CCA	Clean Air Act
RCRA	Resource Conservation and Recovery Act
MEMP	Mound Environmental Management Program
MMCIC	Miamisburg Mound Community Improvement Corporation
NFA	No Further Action
COS	Central Operations Support
MARSSIM	Multi Agency Radiological Survey and Site Investigation Manual

PRS HISTORY:

PRS 317 is assigned to the ventilation hoods in service at various locations at Mound, as indicated in Appendix A, Tables A.1, A.2, and II.1 of the OU 9 Site Scoping Report [1] (relevant sections reproduced in Table 1, page 8). Ventilation hoods were assigned as a potential release site (PRS) due to their designation as solid waste management units (SWMU). The Federal Facilities Agreement (FFA) defines a SWMU as, "areas associated with production processes at facilities which had become contaminated as a result of routine, systematic, and deliberate release of wastes or constituents [1]." The ventilation hoods were designated as an SWMU based on permitting requirements authorized under the Clean Air Act (CAA) and Resource Conservation and Recovery Act (RCRA) [1]. According to the Mound Air Emissions Database and site personnel affiliated with the Mound Environmental Management Program (MEMP) some of the emissions released through ventilations hoods were permitted releases under the CAA [2]. Ventilation hoods serve to accelerate the discharge of gases, fumes, particulates, and vapors over laboratory and process areas and vent them via ducts or through filters, stacks or to roof vents then into the atmosphere. At the time the OU 9 Site Scoping Report Volumes 7 [3] and 12 [1] were released (1993), approximately 570 ventilation hoods were in service at various indoor locations at the Mound Facility [3] (see page 9).

CURRENT STATUS:

As part of the Mound Facility transfer to the Miamisburg Mound Community Improvement Corporation (MMCIC) and the redevelopment of the facility into a commercial/industrial complex, a total of 23 buildings will remain on site. Table 2, pages 10 & 11, provides a list of all buildings to remain on-site, a description of their former use, binning status, year binned, transfer or lease status to MMCIC, present occupancy, whether a ventilation hood is present, description of the process the ventilation hood was used for, and the program the radiological survey was conducted under (either the Generic Process for Disposition of Buildings or the Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM)). The presence of a ventilation hood within a building was determined by searching individual Building Data Packages, the *Environmental Appraisal of the Mound Plant*, and Mound Air Emissions Database. A total of 24 buildings currently reside on-site with one building, Building 128 (containing no fumehoods) slated to be demolished prior to DOE transfer to MMCIC (see Figure 1).

Buildings Binned NFA Containing No Ventilation Hoods

Of the 23 buildings to remain on site, 11 do not contain ventilation hoods (see Table 2, pages 10 & 11) and have been binned No Further Action (NFA) by the Core Team after a thorough review of all environmental issues and data and deemed suitable for commercial/industrial use. As part of the decommissioning process all 11 of these buildings have undergone safe shutdown, which includes removal of wastes and other materials, plus equipment that cannot be released. The buildings binned NFA and containing no ventilation hoods are as follows: Buildings: 45, 100, 102, 126, GH, Magazines 80-84, and SST [4-11].

Buildings Binned NFA Containing Ventilation Hoods

Of the 23 buildings to remain on site, 11 contain ventilation hoods (see Table 2, pages 10 & 11). Eleven of the remaining structures which contain ventilation hoods have been binned NFA by the Core Team after a thorough review of all environmental issues and data and deemed suitable for commercial/industrial use. The buildings binned NFA which contain ventilation hoods are as follows: Buildings 2, 3, 28, 61, 63, 87, 105, COS, GP-1, OSE, and OSW [12-22].

The *Environmental Appraisal of the Mound Plant* indicated no ventilation hoods for Buildings 2, 61, OSE, and OSW, however, the Mound Air Emissions Database indicated the presence of ventilation hoods or exhaust systems within these buildings [12, 15, 21-23] and therefore these buildings were assumed to have them. As part of the decommissioning process all 11 buildings have undergone safe shutdown, which includes removal of wastes and other materials, plus equipment that cannot be released. For example, the Building 28 Building Data Package indicated, "at the time the building was leased, there were 3 operational fume hoods. All other fume hoods were tagged as administratively shut down. Fume hoods that were contaminated with methylene chloride were cleaned up under the 1995 safe shutdown program, removed, and disposed of [14]."

The Central Operations Support (COS) Building contains a ventilation hood, and additional miscellaneous equipment exposed to energetic material [19]. The building was leased to MMCIC in 1995. On March 7, 1996 an exemption was granted from the Department of Energy to EG & G from the need to perform any additional cleaning of the equipment in COS exposed to energetic materials. This was due to MMCIC instituting a transfer in place with their industrial clients who wanted to accept the ventilation hood (along with additional equipment), as-is to be used for same end-purposes.

Building T

Building T will be transferred to MMCIC after the completion of all decontamination activities and a final review of all environmental data. The T Building Action Memorandum dated June 2003 stipulates that, "all tritium-contaminated fumehoods (i.e. ventilation hoods) will be removed [25]." Site personnel overseeing decontamination activities in Building T have indicated that all 32 of the ventilation hoods originally present within T Building have been removed [26]. Table 3, page 12, provides the number of ventilation hoods per room, room number where the hood is located, and hood number [23] and the current status of the ductwork associated with these ventilation hoods [26]. The associated ductwork will be MARSSIM (Multi Agency Radiological Survey and Site Investigation Manual) surveyed and left in place or removed based on release criteria outlined in the T Building Verification Sampling and Analysis Plan [26, 27].

REFERENCES:

- [1] Operable Unit 9 Site Scoping Report: Volume 12 – Site Summary Report, Mound Plant, Miamisburg, Ohio, December 1994, Appendix A, Tables A.1, A2, and II.1.
- [2] Personal communication, John Puckett, June 2005.
- [3] Operable Unit 9 Site Scoping Report: Volume 7 – Waste Management, Mound Plant, Miamisburg, Ohio, February 1993, section 3.14 page 3 of 31.
- [4] Miamisburg Closure Project, Building Data Package Building 45, Public Review Draft May 2005, page 5 of 14, and Appendix F page F2 of 46.
- [5] Mound Plant Building Data Page, Building 100, Final August 1997, pages 6, and Appendix F page 1.
- [6] Mound Plant Building Data Package, Building 102, Final August 2002, pages 2 & 3 of 8, and Appendix F pages 1, 8, & 9 of 46.
- [7] Miamisburg Closure Project, Building Data Package Building 126, Public Review Draft October 2004, page 3 of 11.
- [8] Miamisburg Closure Project, Building Data Package Building 128, Final May 2005, page 3 of 11.
- [9] Mound Plant Building Data Package, GH Building Located within Release Block H, Final July 1999, pages 3, and Appendix F pages 1, 2, & 3 of 27.
- [10] Mound Plant Building Data Package, Magazines 80-84, Final June 2002, pages 2 of 8, and Appendix F pages 1, 5, 8, 11, 14.
- [11] Mound Plant Building Data Package, Building SST, Final August 2002, pages 2 of 9, and Appendix F page 1 of 3.
- [12] Mound Plant Building Data Package, Building 2, Final Rev. 1, June 2002, pages 3-4, Appendix F: pages 2, 11, & 12.
- [13] Mound Plant Building Data Package, Building 3, Final, June 2002, pages 2 & 3 of 9, Appendix F page 2.
- [14] Miamisburg Closure Project Building Data Package, Building 28, Final September 2003, pages 3 & 4 of 11, and Appendix F page 1 of 1.
- [15] Miamisburg Closure Project Building Data Package, Building 61, Final September 2003, page 3 of 11, Appendix F pages 7 & 8 of 58.

- [16] Mound Plant, Building Data Package Building 63, Final August 2002, pages 2 & 3 of 9, and Appendix F page F2 of 46.
- [17] Mound Plant Building Data Page, Building 87, Final August 1997, Appendix F page 1, 2 & 3 of 27.
- [18] Mound Plant Building Data Package, Building 105, located within Release Block D, Final August 1997, pages 1 & 12, Appendix 7.2 Phase 1, Environmental Assessment EG&G Mound Plant Building 105, January 1994 page 3.5.
- [19] Mound Plant Building Data Package, COS Building, Final January 2001, Appendix F page 1, & Appendix P pages 45-11.
- [20] Mound Plant Building Data Package, GP-1 Guard Post 1, Firing Range located within Release Block N, Final July 1999, page 3, Appendix F: pages 1, 2, & 3 of 27.
- [21] . OSE Building, Building Data Package, Final January 2004, pages 3 & 5 of 13, and Appendix F 1, 8 & 9 of 50.
- [22] OSW Building, Building Data Package, Final January 2004, pages 3 & 4 of 12, and Appendix F: 2 of 51, 8 of 51, & 9 of 51.
- [23] Mound Air Emissions Database, June 2005, pages 1-6 pertaining to Building T..
- [24] Personal communication, Frank Bullock, June 2005.
- [25] Action Memorandum T Building Removal Action, Final June 2003, page 8 of 16.
- [26] Personal communication, Mary Sizemore, June 2005.
- [27] T Bldg VSAP, Draft Proposed Final, August 2004.

APPENDIX:

[A] Building T, Air Emissions Database records.

PREPARED BY:

Stephanie Parfitt, CH2MHill, CERCLA documentation

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Jan-12-2006 05:21pm From-

T-778 P 002/033 F-247

PRS 317 Package

**MIAMISBURG CLOSURE PROJECT
PRS 317**

RECOMMENDATION:

PRS 317 is assigned to the ventilation hoods in service at various locations at Mound. Ventilation hoods were assigned as a PRS due to their designation as SWMUs. The ventilation hoods were designated as SWMUs based on permitting requirements authorized under the CAA and RCRA.

Based on a review of the individual Building Data Packages, the *Environmental Appraisal of the Mound Plant*, and Mound Air Emissions Database of the 23 buildings to remain at the Mound Complex, only 11 contain ventilation hoods. These 11 buildings have all undergone safe shut down which included either the decontamination or removal of all ventilation hoods deemed unsuitable for release. Further, all 11 buildings are binned NFA, signifying that no environmental issues remain, and that the buildings and equipment are suitable for commercial/industrial use.

All 32 ventilation hoods within Building T have been removed. The associated ductwork will be MARSSIM surveyed and left in place or removed prior to transfer of the structure to MMCIC.

Therefore the Core Team recommends No Further Assessment.

CONCURRENCE:

DOE/MCP:	<u>Paul Lucas</u>	1/12/06
	Paul Lucas, On-Scene Coordinator	(date)
USEPA:	<u>Timothy J. Fischer</u>	1/12/06
	Timothy J. Fischer, Remedial Project Manager	(date)
OEPA:	<u>Brian K. Nickel</u>	1/11/06
	Brian K. Nickel, Project Manager	(date)

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Table 1: Identification and Assignment of PRS 317, taken from Appendix A: OU 9 Site Scoping Report

Description of History and Nature of Waste Handling						Hazardous Conditions and Incidents			Environmental Data		
No.	Site Name	Location	Status	Potential Hazardous Substances	Ref	Releases	Media	Ref	Analytes ^a	Results	Ref
317	Ventilation Hoods	SITE-WIDE	In service	Paint fumes, Acidic and caustic gases	4, 5, 18	None Suspected			No Data		

No.	Site Name	Location	Status	Operational Jurisdiction			SWMU	Historic Activities		Further Action Recommended	FFA OU
				Regulated Units	Regulatory Authority	Spill Response		Evidence Of Release	Response Authority		
317	Ventilation Hoods	SITE-WIDE	In service	PBR	CAA/RCRA		SWMU	No	NA	OM	

ER Program Sites	RCRA Facility Assessment (SWMU's and Other Areas of Concern)	CEARP Phase I (Category-Site)							
Ventilation Hoods	AP-11 Ventilation hoods								

Acronyms and References

- AP - air pollution control units
- CAA - Clean Air Act
- RCRA - Resources Conservation and Recovery Act
- PBR - permit by rule
- SWMU - Solid waste Management unit
- OM - Action to be taken by Mound Plant operations and maintenance
- NA - Not applicable

- 4. DOE 1993a - "Site Scoping Report: Volume 7 - Waste Management (Final)."
- 5. EPA 1988a - "Preliminary Review/Visual Site Inspection for RCRA Facility Assessment of Mound Plant"
- 18. DOE 1992a - "Remedial Investigation/Feasibility Study, Operable Unit 9, Site-Wide Work Plan (Final)."

Analytes^a

- 3 - Target Analyte List
- 4 - Target Compound List (VOC)
- 5 - Target Compound List (SVOC)
- 6 - Target Compound List (Pesticides/Polychlorinated Biphenyl)
- 16 - Tritium

and a tanker truck. The hand carts are used indoors to transport drummed hazardous wastes over short distances. The step van and box van transport explosive wastes in containers from various on-plant locations to Area H. Step and box vans are completely enclosed to prevent exposure of pyrotechnic waste containers to sunlight or precipitation. Drummed hazardous wastes are transported by a stake-bed truck and a cargo-bed truck to the hazardous waste storage area inside Building 72. Mixed wastes are transported to Building 23 (Klingler 1991). Drums are restrained on the bed of the stake-bed truck by removable sidewalls. Low-level wastewater from the SM/PP complex collects in a 10,000-gallon tank on the west side of Building 38 and is hauled from the tank to the WD Building by a 5,000-gallon tanker truck. Sources of this wastewater include floor drains, shower water, sinks, and laboratory drains. The wastewater may contain acetone, nitric acid, sulfuric acid, sodium hydroxide, and acetic acid, as well as plutonium and heavy metals as described in other sections in this report.

Historically, the plant used an old flat-bed truck for moving wastes around the plant site. This truck was used in the 1950s and 1960s for transporting casks of polonium from their unloading area along the railroad siding to T Building, moving radioactive wastes from HH Building to the Old Bunker site, moving drums from the Old Bunker site to Warehouse 15, and moving thorium drums around the plant to various areas and Building 21. This truck was eventually buried in the upper valley area, now known as Area 7 (DOE 1992g).

3.14. VENTILATION HOODS

Approximately 570 ventilation hoods are in service at various indoor locations at Mound. The start-up dates vary. Ventilation hoods are located over laboratory and process areas at the facility and are equipped with fans to accelerate discharge. Metal ducts convey the exhaust from the hoods through filters to the roofs of the buildings. The hoods are designed to collect and vent gases, fumes, and other particulate matter to the atmosphere. Many processes allow liquids to evaporate before disposing of towels and rags into proper containers. According to the site inspection, ventilated wastes include explosive gases, paint fumes, dust, acid gases, asbestos, and other chemicals (EPA 1988). Hazardous constituents of these waste streams include acetone, trichloroethene, benzene, trichloromethane (chloroform), toluene, dichloromethane (methylene chloride), hydrofluoric acid, hydrochloric acid, sulfuric acid, nitric acid, 2-butanone, and asbestos (EPA 1988). Air releases are registered with the Regional Air Pollution Control Authority.

Excerpt from Operable Unit 9 Site Scoping Report: Volume 7 - Waste Management, Mound Plant, Miamisburg, Ohio, February 1993, section 3.14 page 3 of 31

Table 2: List of Buildings Remaining on Mound Facility

Building ID	Description of former use.	Binning Status	Year Binned	Transfer or Lease Status	Occupancy	Ventilation hoods present based on Mound Env. Appraisal (1996) and/or BDP	Ventilation hoods present based on the Mound Air Emissions Database	Process Ventilation Hood used for.	Program the Radiological Survey was Conducted Under
Containing No Ventilation Hood									
45	Radioisotope Thermoelectric Generator (RTG) Program and Health Physics Support. Various others.	NFA	May-05	DOE	Vacant	No air emission sources in building.	0		NA
100	Security facility	NFA	Aug-97	Transferred to MMCIC	CH2M Hill	Not addressed in appraisal*	0		NA
102	Former office facility (Process Support Building)	NFA	Aug-02	DOE	Occupied by CH2M Hill	0	0		NA
126	Administrative office building.	NFA	Sep-04	DOE	Legacy Mgt.	No air emission sources in building.	0		NA
128	Housed boilers and circulation pump for the hot water heating system for Bldg 126.	NFA	Oct-05	DOE	Vacant	No appraisal performed**	0	Bldg to be demolished	NA
GH	Former visitor control point and office space.	NFA	Feb-99	Transferred to MMCIC	Leased to DOE/Mound Museum	0	0		NA
Mag 80-84	Storage bunkers for energetic materials	NFA	Dec-02	Leased by MMCIC	Perkin Elmer	Not addressed in appraisal.*	0		NA
SST	Former storage facility for road salt	NFA	Aug-02	DOE	Vacant	0	0		NA
Containing Ventilation Hoods									
2	Former energetic materials destructive testing facility.	NFA	Mar-02	DOE	Vacant	0	Exhausts	Overpressure exhaust from 2 R.M.C test cells	Generic Process for Disposition of Buildings.~
3	Former energetic materials destructive test fire and environmental lab.	NFA	Feb-02	Leased by MMCIC	Perkin Elmer	Not addressed in appraisal.*	2	Exhaust from 4 test cells	Generic Process for Disposition of Buildings.~
28	Former: Maintenance shop, plastics development, fire protection, W76 processes, ceramics production, & machine shop.	NFA	Jul-03	Leased by MMCIC	Subleased to Mound Manufacturing Center	3	3	Exact use is unknown. Most likely used to vent fumes from degreasing parts.	MARSSIM #
61	Warehouse/Logistical support	NFA		DOE	Occupied	0	Exhaust	Chemical storage vault, Rm 113 & 114	MARSSIM #
63	(63 W) Non destructive spin test facility for energetic material containing components.(63E) Offices and small machine shop.	NFA	Aug-02	Leased by MMCIC	QuadCo	Not addressed in appraisal*	1	Exact use is unknown.	Generic Process for Disposition of Buildings.~

Table 2: List of Buildings Remaining on Mound Facility									
Building ID	Description of former use.	Binning Status	Year Binned	Transfer or Lease Status	Occupancy	Ventilation hoods present based on Mound Env. Appraisal (1996) and/or BDP	Ventilation hoods present based on the Mound Air Emissions Database	Process Ventilation Hood used for.	Program the Radiological Survey was Conducted Under
87	Component test facility. Used for destructive testing of explosives and fabrication of electronic test systems. Contains office space, cafeteria, 3 large explosive test cells, and environmental chambers.	NFA	Mar-97	Leased by MMCIC	Perkin Elmer	Jan-00	1 Rm 104	The appraisal lists rms 127, 126, 130, 143, 153, only rm 153 is active & part of the user facility. Used for component testing.	Generic Process for Disposition of Buildings.~
							1 Rm 127		
							1 Rm 129		
							1 Rm 137		
						1 Rm 152			
105	Former parts machining facility.	NFA	Aug-97	Transferred to MMCIC	Thaler Machine Co.	No permitted air emissions.	Exhaust	Welding booth, parts cleaning, or grinding.	Generic Process for Disposition of Buildings.~
COS	Explosives lab, standards lab, and robotics lab.	NFA	Sep-00	Leased by MMCIC	Subleased to 12 tenants	1	Exhaust	Exact use is unknown.	Generic Process for Disposition of Buildings.~
GP-1	Mound Plant communications center.	NFA	Feb-99	Transferred to MMCIC	Vacant	2 sources	Exhausts	Exhaust to firing range.	Generic Process for Disposition of Buildings.~
OSE	Former DOE Ohio Field Office & DOE's computer center.	NFA	Sep-03	DOE	Vacant	0	1	Medical specimens/photo processing	MARSSIM #
OSW	Former office and administrative area. Offices for DOE's Miamisburg Closure Project (MCP), Ohio Field Office's Records Management Group, and DOE's computer center	NFA	Sep-03	Leased by MMCIC	QuadCo	0	1	Film processing	MARSSIM #
T	Tritium processing, offices, and labs.	Awaiting completion of decontamination then transfer to MMCIC.	TBD	DOE		As per the Action Memo all 32 fumehoods have been removed. Verified by M. Sizemore.	See Table 3		MARSSIM #

* Not addressed in appraisal because the General Purpose Lease between the DOE and City of Miamisburg requires the sub-lessee to obtain and comply with regulatory agency permits.

** The Environmental Appraisal of the Mound Plant was performed in late 1995 through early 1996. Building 128 was constructed in 2001, after the Environmental Appraisal was completed.

~ Ohio Federal Facilities Issues and Challenges" Cleanup Standards Committee, Generic Process For Disposition of Buildings That Have Potential or Actual Radiological Contamination.

Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM)

Table 3: Disposition of Ventilation Hoods & Associated Duct Work in T-Building

Number of Hoods	Room number where ventilation hood is located.	Hood Number	Disposition of Ventilation Hood	Disposition of Associated Duct Work	Fan#
1	008	T00801	Removed	To be MARSSIM surveyed.	E-11B
3	011	T0110001, T0110002, T0110003	Removed	To be MARSSIM surveyed.	E-22
1	016	T0160001	Removed	To be MARSSIM surveyed.	E-22
1	037	T0370002	Removed	MARSSIM surveyed and removed.	E-22
1	041	T04110001	Removed	MARSSIM surveyed and removed.	E-22
2	050	T0501, T0502	Removed	MARSSIM surveyed and removed.	E-22
1	058	T0580001	Removed	MARSSIM surveyed and removed.	E-22
1	059	T0590001	Removed	MARSSIM surveyed and removed.	E-22
2	061	T0610001, T610001	Removed	To be MARSSIM surveyed.	E-31B
1	078A	T078A0001	Removed	To be MARSSIM surveyed.	E-12
1	215	T21501	Removed	MARSSIM surveyed and removed.	HE-23
1	215C		Removed	MARSSIM surveyed and removed.	E-23
1	218	T21801	Removed	MARSSIM surveyed and removed.	HE-23
1	244	T24401	Removed	To be MARSSIM surveyed.	E-31A
1	246	T24602	Removed	To be MARSSIM surveyed.	E-31A
3	266	T2660001, T2660002, T2660003	Removed	To be MARSSIM surveyed.	E-22
1	274	T2740001	Removed	To be MARSSIM surveyed.	E-22
4	307	T30701, T30702, T30703, T30704	Removed	To be MARSSIM surveyed.	E-3
1	315	T3150001	Removed	To be MARSSIM surveyed.	HE-12B
3	323	T3230001, T3230002, T3230003	Removed	To be MARSSIM surveyed.	HE-12A
1	63	T630001	Removed	To be MARSSIM surveyed.	E-31B

Information taken from the Mound Air Emissions Database and the T-Building decontamination point of contact Mary Sizemore (June & July 2005).

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APPENDIX A

BUILDING T AIR EMISSIONS DATABASE RECORDS

Information relevant to PRS 317

Room No.	Hood No.	Actual Usage/Yr	Chemical	ER	AE(lb/yr)	PE(lb/yr)
18 GAL			particulates	0.0431	0.7758	43.1
Potential Use/Yr			sulfur dioxide	0.0403	0.7254	40.3
1000			VOCs	0.05	0.9	50
			nitrogen oxides	0.6129	11.0322	612.9
			carbon monoxide	0.132	2.376	132
					0	0
					0	0
					0	0

Room No.	Hood No.	Actual Usage/Yr	Chemical	ER	AE(lb/yr)	PE(lb/yr)
0 GAL			particulates	0.0431	0	43.1
Potential Use/Yr			sulfur dioxide	0.0403	0	40.3
1000			VOCs	0.05	0	50
			nitrogen oxides	0.6129	0	612.9
			carbon monoxide	0.132	0	132
					0	0
					0	0
					0	0

Room No.	Hood No.	Actual Usage/Yr	Chemical	ER	AE(lb/yr)	PE(lb/yr)
2080 HR	1-6		hydrochloric acid	0.12	249.6	1051.2
Potential Use/Yr			nitric acid	0.0666	138.528	583.416
8760			ammonium hydroxide	0.0534	111.072	467.784
			toluene	0.001	2.08	8.76
			hydrogen peroxide	0.0036	7.488	31.536
			alcohol	0.0018	3.744	15.768
					0	0
					0	0

Room No.	Hood No.	Actual Usage/Yr	Chemical	ER	AE(lb/yr)	PE(lb/yr)
0	T00201				0	0
Potential Use/Yr					0	0
8760					0	0
					0	0
					0	0
					0	0
					0	0
					0	0

Room No.	Hood No.	Actual Usage/Yr	Chemical	ER	AE(lb/yr)	PE(lb/yr)
0	T00801				0	0
Potential Use/Yr					0	0
8760					0	0
					0	0
					0	0
					0	0
					0	0
					0	0

A1/G

Bldg	Room No.	Hood No.	Actual Usage/Yr	Chemical	ER	AE(lb/yr)	PE(lb/yr)
T	011	T0110001,2	0 HR	citrus cleaner		0	0
Process			Potential Use/Yr			0	0
Stack	T-west stack	Permit No.				0	0
Status						0	0
inactive		VER				0	0
Info		<u>8/11/97</u>				0	0
Original PTO app 4/92						0	0

Bldg	Room No.	Hood No.	Actual Usage/Yr	Chemical	ER	AE(lb/yr)	PE(lb/yr)
T	011	T0110003	8760	uranium hexafluoride		0	0
Process			Potential Use/Yr			0	0
Stack	T-west	Permit No.	8760			0	0
Status						0	0
DM		VER				0	0
Info		<u>8/11/97</u>				0	0
Original PTO app 4/92						0	0

Bldg	Room No.	Hood No.	Actual Usage/Yr	Chemical	ER	AE(lb/yr)	PE(lb/yr)
T	016	T0160001	0 HR	citrus cleaner		0	0
Process			Potential Use/Yr			0	0
Stack	T-west stack	Permit No.				0	0
Status						0	0
inactive		VER				0	0
Info		<u>12/10/96</u>				0	0
Original PTO app 4/92						0	0

Bldg	Room No.	Hood No.	Actual Usage/Yr	Chemical	ER	AE(lb/yr)	PE(lb/yr)
T	037	T0370002	250 HR	micro cleaner	0.0213	5.325	186.588
Process			Potential Use/Yr			0	0
Stack	T-west stack	Permit No.	8760			0	0
Status						0	0
active		VER				0	0
Info		<u>4/10/03</u>				0	0
Original PTO app 4/92						0	0

Bldg	Room No.	Hood No.	Actual Usage/Yr	Chemical	ER	AE(lb/yr)	PE(lb/yr)
T	041	T0410001	750 HR			0	0
Process			Potential Use/Yr			0	0
Stack	T-west	Permit No.	8760			0	0
Status						0	0
active		VER				0	0
Info		<u>8/11/97</u>				0	0
Original PTO app 4/92						0	0

A2/6

dg	Room No.	Hood No.	Actual Usage/Yr	Chemical	ER	AE(lb/yr)	PE(lb/yr)
	050	T0501,02	0 HR	microcleaner		0	0
Process Components			Potential Use/Yr 8760			0	0
Back T-west		Permit No.				0	0
Status						0	0
Active		VER				0	0
to		<u>7/24/02</u>				0	0
Original PTO app 4/92						0	0
dg	Room No.	Hood No.	Actual Usage/Yr	Chemical	ER	AE(lb/yr)	PE(lb/yr)
	058	T0580001	0 HR	acetone	0.009	0	0
Process Components			Potential Use/Yr 0	window cleaner		0	0
Back T-west		Permit No.				0	0
Status						0	0
Active		VER				0	0
to		<u>4/10/03</u>				0	0
Original PTO app 4/92; hood gone						0	0
dg	Room No.	Hood No.	Actual Usage/Yr	Chemical	ER	AE(lb/yr)	PE(lb/yr)
	059	T0590001	0 HR	micro cleaner	0.0213	0	0
Process Components			Potential Use/Yr 0			0	0
Back T-west		Permit No.				0	0
Status						0	0
Active		VER				0	0
to		<u>4/10/03</u>				0	0
Original PTO app 4/92						0	0
dg	Room No.	Hood No.	Actual Usage/Yr	Chemical	ER	AE(lb/yr)	PE(lb/yr)
	061	T0610001	0 HR	citrus cleaner		0	0
Process Components			Potential Use/Yr 8760			0	0
Back T-west		Permit No.				0	0
Status						0	0
Active		VER				0	0
to		<u>8/11/97</u>				0	0
Original PTO app 4/92						0	0
dg	Room No.	Hood No.	Actual Usage/Yr	Chemical	ER	AE(lb/yr)	PE(lb/yr)
	078A	T078A0001	80 HR	thoriated tungsten	0.0008	0.064	7.008
Process Components			Potential Use/Yr 8760			0	0
Back T-East head		Permit No.				0	0
Status						0	0
Active		VER				0	0
to		<u>4/10/03</u>				0	0
M						0	0

A3/6

Bldg	Room No.	Hood No.	Actual Usage/Yr	Chemical	ER	AE(lb/yr)	PE(lb/yr)
T	215	T21501	0			0	0
Process			Potential Use/Yr			0	0
Stack	T-east stack	Permit No.				0	0
Status						0	0
active		VER				0	0
Info		<u>12/31/96</u>				0	0
Terry Halderman						0	0

Bldg	Room No.	Hood No.	Actual Usage/Yr	Chemical	ER	AE(lb/yr)	PE(lb/yr)
T	215C		0			0	0
Process			Potential Use/Yr			0	0
Stack		Permit No.	8760			0	0
Status						0	0
inactive		VER				0	0
Info		<u>8/11/97</u>				0	0
Drop vent						0	0

Bldg	Room No.	Hood No.	Actual Usage/Yr	Chemical	ER	AE(lb/yr)	PE(lb/yr)
T	218	T21801	0			0	0
Process			Potential Use/Yr			0	0
Stack		Permit No.	8760			0	0
Status						0	0
inactive		VER				0	0
Info		<u>8/11/97</u>				0	0

Bldg	Room No.	Hood No.	Actual Usage/Yr	Chemical	ER	AE(lb/yr)	PE(lb/yr)
T	244	T24401	0			0	0
Process			Potential Use/Yr			0	0
Stack		Permit No.	8760			0	0
Status						0	0
inactive		VER				0	0
Info		<u>8/11/97</u>				0	0

Bldg	Room No.	Hood No.	Actual Usage/Yr	Chemical	ER	AE(lb/yr)	PE(lb/yr)
T	246	T24602	0			0	0
Process			Potential Use/Yr			0	0
Stack		Permit No.	8760			0	0
Status						0	0
inactive		VER				0	0
Info		<u>8/11/97</u>				0	0

A4/6

Idg	Room No.	Hood No.	Actual Usage/Yr	Chemical	ER	AE(lb/yr)	PE(lb/yr)
	266	T2660001,2,3	10 HR	citrus cleaner	0.0213	0.213	186.588
Process Components			Potential Use/Yr	alcohol	0.01	0.1	87.6
Stack T-west stack		Permit No.	8760	window cleaner		0	0
Status						0	0
Inactive		VER				0	0
for		<u>4/10/03</u>				0	0
Original PTO app 4/92						0	0

Idg	Room No.	Hood No.	Actual Usage/Yr	Chemical	ER	AE(lb/yr)	PE(lb/yr)
	274	T2740001	10 HR	citrus cleaner	0.0213	0.213	186.588
Process Components			Potential Use/Yr			0	0
Stack T-west stack		Permit No.	8760			0	0
Status						0	0
Inactive		VER				0	0
for		<u>4/10/03</u>				0	0
Original PTO app 4/92						0	0

Idg	Room No.	Hood No.	Actual Usage/Yr	Chemical	ER	AE(lb/yr)	PE(lb/yr)
	307	T30701,2	0			0	0
Process			Potential Use/Yr			0	0
Stack		Permit No.	8760			0	0
Status						0	0
Inactive		VER				0	0
for		<u>8/11/97</u>				0	0

Idg	Room No.	Hood No.	Actual Usage/Yr	Chemical	ER	AE(lb/yr)	PE(lb/yr)
	307	T30703	0			0	0
Process			Potential Use/Yr			0	0
Stack		Permit No.	8760			0	0
Status						0	0
Inactive		VER				0	0
for		<u>8/11/97</u>				0	0
California hood						0	0

Idg	Room No.	Hood No.	Actual Usage/Yr	Chemical	ER	AE(lb/yr)	PE(lb/yr)
	307	T30704	0 HR	ethanol	0.0153	0	0
Process Components			Potential Use/Yr			0	0
Stack T-east stack		Permit No.	0			0	0
Status						0	0
Inactive		VER				0	0
for		<u>4/10/03</u>				0	0
gone						0	0

A5/6

Bldg	Room No.	Hood No.	Actual Usage/Yr	Chemical	ER	AE(lb/yr)	PE(lb/yr)
T	315	T3150001	0 HR	acetone	0.001	0	8.76
Process	Components		Potential Use/Yr			0	0
			8760			0	0
Stack	T-West head	Permit No.				0	0
Status						0	0
inactive		VER				0	0
Info		<u>4/10/03</u>				0	0
DM						0	0
Bldg	Room No.	Hood No.	Actual Usage/Yr	Chemical	ER	AE(lb/yr)	PE(lb/yr)
T	323	T3230001,2,3	0 HR	ethanol	0.0004	0	3.504
Process			Potential Use/Yr			0	0
			8760			0	0
Stack	T-West head	Permit No.				0	0
Status						0	0
inactive		VER				0	0
Info		<u>4/10/03</u>				0	0
DM						0	0
Bldg	Room No.	Hood No.	Actual Usage/Yr	Chemical	ER	AE(lb/yr)	PE(lb/yr)
T	61	T610001	0 HR	window cleaner		0	0
Process	Components		Potential Use/Yr			0	0
			8760			0	0
Stack	T-West	Permit No.				0	0
Status						0	0
inactive		VER				0	0
Info		<u>7/24/02</u>				0	0
DM						0	0
Bldg	Room No.	Hood No.	Actual Usage/Yr	Chemical	ER	AE(lb/yr)	PE(lb/yr)
T	63	T630001	0 HR	window cleaner		0	0
Process	Components		Potential Use/Yr			0	0
			8760			0	0
Stack	T-West	Permit No.				0	0
Status						0	0
inactive		VER				0	0
Info		<u>7/24/02</u>				0	0
DM						0	0

AE/6

FIGURE 1: Locations of Buildings Pertaining to PRS 317

