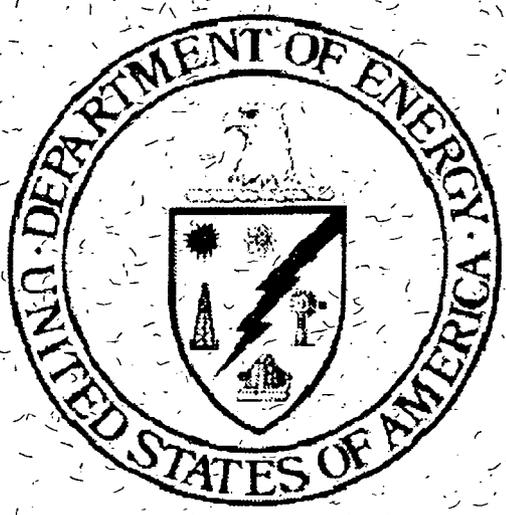


**CERCLA 120(h) SUMMARY
NOTICE OF HAZARDOUS SUBSTANCES
Release Block H,
Mound Plant, Miamisburg, Ohio**



July, 1999



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

JUL 26 1999

REPLY TO THE ATTENTION OF:

SRF-6J

Mr. Richard B. Provencher
Director
U.S. Department of Energy
Miamisburg Environmental Management Project
P.O. Box 3020
Miamisburg, OH 45343-3020

RE: U.S. DOE Mound Plant
Release Block H
Request for Concurrence to Transfer

Dear Mr. Provencher:

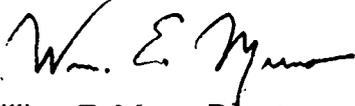
Thank you for your letter dated July 22, 1999, requesting concurrence to transfer Release Block H at the United States Department of Energy (U.S. DOE) Mound Plant in Miamisburg, Ohio.

The United States Environmental Protection Agency (US EPA) has reviewed the *Record of Decision for Release Block H, Mound Plant, Miamisburg, Ohio, Final, July 1999*, which has now been signed by U.S. DOE, U.S. EPA, and the Ohio Environmental Protection Agency, and the *Environmental Summary - Notice of Hazardous Substances for Release Block H, Mound Plant, Miamisburg, Ohio, Final, July 1999*. Based upon this information, U.S. EPA concurs that all remedial action necessary to protect public health and the environment with respect to any substance remaining in Release Block H has been taken, and that transfer of Release Block H may take place.

It is understood that any additional remedial action found to be necessary in the future shall be conducted by U.S. DOE to the extent necessary to protect human health and the environment.

The U.S. EPA fully supports redevelopment and reuse of the structures and other property available at the Mound Plant. However, assurances must be provided that all property and building leases and transfers will be protective of public health and the environment. If you have any questions or concerns about this or future economic development issues at the site, please contact Timothy Fischer, of my staff, at (312) 886-5787.

Sincerely yours,



William E. Muno, Director
Superfund Division
U.S. EPA, Region 5

cc: Ken Tindall, SRF-5J
Tim Thurlow, ORC
Graham Mitchell, Ohio EPA
Brian Nickel, Ohio EPA
Ruth Vandegrift, ODH
Art Kleinrath, US DOE-MEMP
Frank Schmalz, US DOE-MEMP

ACRONYMS

AOC	Area of Concern
ARAR	Applicable or Relevant and Appropriate Requirement
BDP	Building Data Package
BVA	Buried Valley Aquifer
BWO	Babcock and Wilcox of Ohio
CERCLA	Comprehensive Environmental Response, Compensation & Liability Act
COC	Contaminant of Concern
FFA	Federal Facilities Agreement
FOD	Frequency of Detection
GV	Guideline Value
HI	Hazard Index
IDM	Investigative Derived Material
MEMP	Miamisburg Environmental Management Project
MMCIC	Miamisburg Mound Community Improvement Corporation
NCP	National Contingency Plan
NFA	No Further Assessment
NPL	National Priorities List
OEPA	Ohio Environmental Protection Agency
OSC	On-Scene Coordinator
OU	Operable Unit
pCi	picocurie
PAH	Polynuclear aromatic hydrocarbon
PETREX	(trade name for a type of soil sampling)
PRS	Potential Release Site
RB	Release Block
RD/RA	Remedial Design/Remedial Action
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision

Table Of Contents

I.	PROPERTY DESCRIPTION	3
II.	DESCRIPTION OF PROPERTY SUITABLE FOR TRANSFER	3
A.	Description of Property Suitable for Transfer	3
B.	Regional Context of Mound Plant and Transferred Property	4
C.	Historical Uses of Release Block H	4
III.	ENVIRONMENTAL FINDINGS	5
A.	Methodology	5
B.	Results Summary	8
1.	Results of Building Data Analysis	8
a.	Asbestos	8
b.	Lead	9
c.	Radon	9
d.	Radiological Surveys	9
e.	Polychlorinated Biphenyls	9
2.	Results of Potential Release Site Soil Data Analysis	9
C.	Summary of All Soil and Groundwater Contaminants Detected	11
D.	Other Factors Considered	19
1.	Drinking Water	19
2.	Monitoring Equipment	19
3.	Floodplain	19
IV.	FINDINGS OF SUITABILITY TO TRANSFER	24
V.	ENVIRONMENTAL COVENANTS	25
VI.	NOTIFICATION/PUBLIC PARTICIPATION	25

ACRONYMS (continued)

RRE	Residual Risk Evaluation
RREM	Residual Risk Evaluation Methodology
SM/PP	Special Metallurgical/Plutonium Processing
SOF	Statement of Finding
TPR	Technical Position Report in Support of Release Block H Residual Risk Evaluation
US DOE	United States Department of Energy
US EPA	United States Environmental Protection Agency
UTL	Upper Tolerance Limit

**CERCLA 120(h) SUMMARY
FINDING OF SUITABILITY TO TRANSFER
RELEASE BLOCK H
MOUND PLANT, MIAMISBURG, OHIO**

I. PURPOSE

The information contained in this notice is required under the authority of regulations promulgated under section 120 (h) of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA). This summary is intended to support a transfer by deed to new ownership for economic development by documenting that the U.S. Department of Energy's (US DOE) Mound Plant has met the requirements of CERCLA 120 (h) for Release Block H (RB H). A copy shall be provided to all future owners.

II. PROPERTY DESCRIPTION

A. Description of Property Suitable for Transfer

Situated in the State of Ohio, County of Montgomery, being in the City of Miamisburg, being part of Section 30, and Section 36, Range 5, Township 2, lying in the Miami Rivers Survey (M.R.S.), and being part of city lots numbered 2258 and 2259 within the Corporation Limits of the City of Miamisburg, and being more particularly bounded and described with bearings referenced to the Ohio State Coordinate System, South Zone, as follows:

Beginning at a concrete monument, being the North East corner of Section 36 and the North West corner of Section 30, and being the point of beginning for the land herein described, thence S 5° 47' 45" W 130.89 feet to an iron pin being the TRUE POINT OF BEGINNING; thence S 85° 03' 12" E 1023.90 feet to a concrete monument, thence N 6° 54' 59" E 231.00 feet to a concrete monument, thence S 84° 36' 50" E 30.00 feet to a iron pin, thence S 6° 54' 54" W 100.00 feet to a iron pin, thence S 84° 36' 37" E 193.40 feet to a concrete monument, thence S 5° 34' 19" W 571.986 feet along the center line of Mound Road to a point, thence S 90° 0' 0" W 72.86 feet to a point, thence S 51° 28' 1.6" W 48.51 feet to a point, thence S 83° 32' 4" W 97.29 feet

to a point, thence S 63° 48' 53" W 98.67 feet to a point, thence N 89° 55' 58" W 173.02 feet to a point, thence N 83° 49' 39" W 244.21 feet to a point, thence along the arc of a curve to the right having a radius of 360.67 feet for a distance of 353.12 feet to a point, thence N 25° 03' 02" W 214.48 feet to a point, thence S 64° 03' 10" W 37.94 feet to a point, thence N 64° 35' 31" W 56.61 feet to a point, thence N 25° 43' 03" 160.76 feet to a point, thence N 65° 33' 00" E 35.05 feet to a point, thence N 5° 31' 01" E 57.67 feet to a iron pin being the true point of beginning containing 14.29 acres more or less, and subject to all legal highways and easements of record.

B. Regional Context of Mound Plant and Transferred Property

The Mound Plant occupies an approximately 306 acre site in Montgomery County within the City of Miamisburg, Ohio. The northern boundary of the plant is approximately 0.13 miles south of Mound Avenue in Miamisburg. Benner Road forms the southern boundary of the plant, and the Conrail Railroad roughly parallels the western boundary at a distance of 50-200 feet. The Mound Plant consists of the Operational Area and the New Property (also referred to as the South Property). Approximately 130 buildings with a total of 1.4 million square feet of floor space existed at one time at the Mound Plant (although the number of buildings is constantly diminishing as buildings are decommissioned and demolished); all of which were located in the Operational Area.

C. Historical Uses of Release Block H

The primary use of most of the area making up Block H, has been as a parking area for Mound employee vehicles. Occasional uses have included recent use as a staging area for empty trailers and staging for dismantled modular office structures. Release Block H, through the early 1950's, included office structures that housed the construction related crews involved in construction of the plant. No other uses of the area of the Mound facility referred to as Release Block H are known.

III. ENVIRONMENTAL FINDINGS

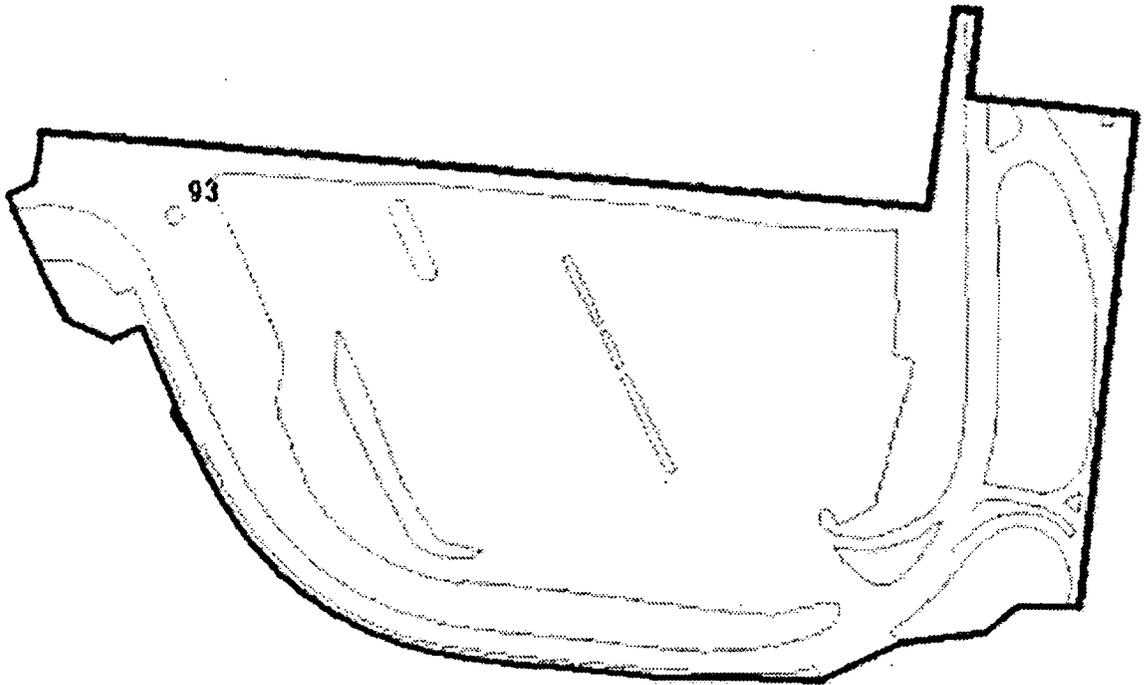
A. Methodology

In accordance with Section 120 (h)(3) of CERCLA, to the extent that information is available based on a complete search of DOE files, the following shall be placed in deeds: (1) a notice of the type and quantity of hazardous substances stored, disposed of, or released; (2) a notice of the time at which such storage, disposal, or release took place; and (3) a description of any remedial action taken. Information sources reviewed to obtain the information include:

- ▶ Federal Government records
- ▶ Recorded chain of title documents
- ▶ Reasonably obtainable aerial photographs
- ▶ Visual inspection of the property and adjacent properties
- ▶ Reasonably obtainable records of releases on adjacent properties
- ▶ Interviews with current or former employees
- ▶ Sampling, if appropriate under the circumstances.

RB H includes one Potential Release Site or PRS that has undergone previous investigations. This PRS was identified on the basis of potential radiological and chemical (non-radioactive) contamination using knowledge of historical land use or on actual measurements of contaminants. Before transfer of a release block can be completed, all buildings and PRSs must be evaluated for protectiveness or remediated to be protective. Any residual risks associated with remaining contamination in RB H have been evaluated.

FIGURE 3-1 PRS Within Release Block H



A Core Team with representatives from the US DOE, US Environmental Protection Agency (US EPA), and Ohio EPA (OEPA) performs a joint agency evaluation of each of the potential contamination problems and recommends the appropriate response. The Core Team uses process knowledge, site visits, and existing data to determine whether or not any action is warranted concerning the possible problem area.

This summary is a result of a thorough analysis of information contained in the following reference documents:

1. The Potential Release Site (PRS) Data Package for the PRS located within Release Block H. The location of the PRS in RB H is shown on Figure 3-1. The rationale for designation of this PRS is outlined in Table 3-1.

This PRS was identified on the basis of potential radiological and chemical (non-radioactive) contamination using knowledge of historical land use or on actual measurements of contaminants.

TABLE 3-1 Release Block H PRSs/Buildings and Conclusions

PRS	TITLE	DATE
93	Main Hill Seep Number 0603 - radiological/non-radiological.	Recommendation for NFA with continued monitoring signed by Core Team on 03/04/96.

2. Residual Risk Evaluation, Release Block H, Final, August 7 1997. *Provides the evaluation of human health risks associated with any residual contamination that may remain in the block after all remedies within a parcel have been completed. The evaluation ensures that future users of the land will not be exposed to contamination levels that would pose unacceptable health risks. This document should be used in conjunction with item 4.*
3. Proposed Plan for Release Block H, Mound Plant, Miamisburg, Ohio, Public Review Draft, Revision 0, May, 1999. *Identifies the preferred option for addressing the contamination at the Mound Site, Release Block H, to the public by briefly summarizing the*

alternatives studied and highlighting the key factors that led to identifying the preferred alternative.

4. Technical Position Report In Support of the Release Block H Residual Risk Evaluation, Final, Revision 0, July, 1999. *This report is a review of key risk data for soil and groundwater related pathways. This document should be used in conjunction with Item 2.*
5. Record of Decision (ROD) for Release Block H, Mound Plant, Miamisburg, Ohio, Final, July, 1999. *Documents the remedial action plan for a site and serves the following three functions: (1) certifies the remedy selection process was carried out in accordance with CERCLA, (2) describes the technical parameters of the remedy, specifying the treatment, engineering, and institutional components as well as clean up levels, and (3) provides the public with a consolidated summary of information about the site and the chosen remedy, including the rationale behind the selection.*

B. Results Summary

1. Results of Building Data Analysis

There are no DOE owned buildings within this release block. Consequently, there is no building related contamination warranting remedial action or environmental concern. Lease or sale of RB H for commercial/industrial use is protective of human health and the environment.

a. Asbestos

Asbestos material in buildings can be found in five forms: sprayed or troweled on ceilings and walls (surfacing materials); insulation around pipes, ducts, boilers and tanks (pipe and boiler insulation); transite (in ground piping); and in roofing materials (roofing felts); other products such as ceiling and floor tiles and wall boards (miscellaneous materials).

There are no DOE owned structures within Release Block

H, therefore, there are no areas requiring repair prior to transfer.

b. Lead Paint

Lead based paint was used almost exclusively in the U.S. prior to the 1970's. Congress established maximum lead concentrations in residential paint in 1978.

There are no DOE owned structures within Release Block H, therefore, there are no areas requiring repair prior to transfer.

c. Radon

Radon studies are presented in a 1989-90 Mound Indoor Radon study for buildings. There are no DOE owned structures within Release Block H, therefore, there are no areas requiring abatement prior to transfer.

d. Radiological Surveys

There were no radiological processes performed in the Release Block H Area.

e. Polychlorinated Biphenyls

There are no areas within Release Block H requiring Polychlorinated Biphenyls (PCB) cleanup.

2. Results of Potential Release Site Soil Data Analysis

The US DOE, US EPA and OEPA have jointly decided that no additional remedial action for PRS 93 is necessary with the placement of Institutional Controls in the form of deed restrictions on future land use for RB H upon transfer. Monitoring of PRS 93 groundwater seep will continue.

Risks are quantified for both carcinogenic and non-carcinogenic contaminants. The risk associated with the intake of a known or suspected carcinogen is reported in terms of the incremental

lifetime cancer risk presented by that contaminant of concern (COC), as estimated using the appropriate slope factor and the amount of material ingested. Residual levels of contamination that remain on RB H for carcinogens indicate a probability or likelihood of one chance in 10,000 to one chance in 1,000,000 of an individual developing cancer based on an industrial use scenario. This probability or likelihood is consistent with the US EPA target risk range.

Potential human health hazards from exposure to non-carcinogenic contaminants are evaluated by using a Hazard Quotient (HQ). The HQ is the ratio of the intake of a COC to a reference dose or concentration for the COC that is believed to represent a no-observable effect level. The COC-specific HQs are then summed to provide an overall Hazard Index (HI). US EPA guidance sets a limit of 1.0 for the Comprehensive HI. The HIs for the future groundwater scenarios, however, are near or above the 1.0-limit. This is based on the bedrock groundwater contaminants flowing directly to the BVA that supplies drinking water for the plant. As a result, the selected remedy prohibits the use of bedrock groundwater. This institutional control, in the form of a deed restriction, will ensure that the residual risks associated with RB H remain acceptable.

Evaluation of residual contaminants within RB H have resulted in a determination that future users of the land will not be exposed to contaminant levels that would pose unacceptable risks as long as compliance with the deed restrictions described in the RB H Record of Decision are maintained. Remediation activities and additional assessment activities are nearing completion for adjacent property to the west. Remediation activities and additional assessment activities are scheduled in the future for adjacent properties to the south. Each removal action will be designed with containment methods to prevent migration via air pathways, surface water pathways and groundwater pathways. Stormwater management and sediment erosion control will be outlined in each of the decontamination and/or demolition project work plans. DOE believes that no additional contamination of RB H is likely from adjacent activities.

A brief summary of the history of PRS 93 and its measurements follows. For a more detailed description of PRS 93, refer to the

PRS data package as identified in Section III.A.1 of this report:

PRSs at Mound were identified based on either knowledge of historical land use that was considered potentially detrimental, or an actual sampling result showing elevated concentrations of contaminants. The location of PRS 93 is shown in Figure 3.1.

The rationale for designation of PRS 93 is outlined as follows:

Potential Release Site (PRS) 93 was historically identified as seep 603 and is located on-site, adjacent to the large parking lot. The investigation for seeps on the Main Hill was initiated in the spring of 1986. The investigation stemmed from the discovery of a groundwater seep on the western hillside below SW Building. Water from the seep was sampled and a laboratory analysis showed elevated tritium detected at low concentrations, i.e., in the range of 1,000 to 3,000 pCi/L. Flow was intermittent in the past and continues to be even recently. The latest data seem to indicate an increase in tritium concentrations but is most likely related to much diminished flow.

Soil was sampled at seep 603 as part of OU9, Regional Soils Investigation (OU9 Regional Soils Investigation Report, Rev 2, August, 1995). All radionuclide concentrations for seep 603 were at background. All other contaminants at seep 603 were in the range of background. Radiological Site Survey data from the vicinity of seep 603 shows a maximum concentration of Pu-238 of 3.46 pCi/g, which is less than Mound's ALARA guideline of 25 pCi/g. Thorium concentrations were all below the detection limit of 2 pCi/g.

C. Summary of All Soil and Groundwater Contaminants Detected

The COCs for RB H were identified by reviewing all of the sampling data for the release block. Based on that review, contaminants were eliminated for further evaluation based on criteria established in the Residual Risk Evaluation Methodology (RREM) (Residual Risk Evaluation Methodology, 1/6/97, Final, Rev 0). Specifically, only contaminants exceeding (1) background, (2) a base level of potential health concern, and (3) certain frequency of detection (FOD) criteria were carried through the Residual Risk Evaluation (RRE) (Residual Risk Evaluation - Release

Block H, Final, Rev 0, August, 1997 and Technical Position Report In Support of the Release Block H Residual Risk Evaluation, Final, Rev 0, July, 1999). The COCs established for RB H are listed in Tables 3-2, 3-3, and 3-4.

Exposures to the specific concentrations of COCs were evaluated assuming intake rates for soil and groundwater. Once the intakes were estimated, the human health implications of those intakes were evaluated by reviewing toxicological data for the COCs. For the special case of groundwater, the possible exposures to current and future COCs are evaluated. This approach ensures that the cumulative and long-term impacts of the COCs are adequately characterized. The risks to a theoretical site worker and to a theoretical site construction worker in RB H are listed in Table 3-5. Pursuant to the RREM, the risks were quantified for both carcinogenic and non-carcinogenic contaminants. The risks to a theoretical site worker and to a theoretical site construction worker in RB H are listed in Table 3-5. The overall risk values are in the acceptable range of 10^{-4} to 10^{-6} . The HIs for the future groundwater scenarios, however, are near or above the 1.0-limit. This is based on the bedrock groundwater contaminants flowing directly to the BVA that supplies drinking water for the plant. As a result, the selected remedy prohibits the use of bedrock groundwater. This institutional control, in the form of a deed restriction, will ensure that the residual risks associated with RB H remain acceptable.

Because the scope of the RRE was limited to industrial use, the soils within RB H have not been evaluated for unrestricted release (e.g., residential use). Disposition of RB H soils without proper handling, sampling and management could create an unacceptable risk to human health and the environment.

Table 3-2. Soil Contaminants of Concern for RB H

Soil Constituent	CAS Numbers	Maximum Concentration Any Depth	Maximum concentration Shallow (<2' deep)	Screening Concentration (either Bkgd or G.V.) ¹
ORGANICS (mg/kg)				
Acenaphtene	83329	0.18	0.18	
Acenaphthylene	208968	0.7	0.7	
Aldrin	309002	0.0031	0.0031	
Benzo(a)pyrene	50328	1.115	1.115	0.41 ²
Benzo(g,h,i) perylene	191242	1.0625	1.0625	
delta-BHC	319868	0.00025	0.00025	
Carbazole	N/A	0.5875	0.5875	
alpha Chlordane	57749	0.01	0.01	
gamma Chlordane	57749	0.0074	0.0074	
4-chloro-3-methyl phenol	59507	0.047	0.047	
Dibenzo(a,h)anthracene	53703	0.78	0.78	0.41 ²
Dibenzofuran	132-64-9	1.035	1.035	
Fluorene	86737	1.45	1.45	
Heptachlor epoxide	1024573	0.0022	0.0022	
2-Methylnaphthalene	91576	0.92	0.92	
Naphthalene	91203	2.625	2.625	
Phenanthrene	3.75	3.75	3.75	

Soil Constituent	CAS Numbers	Maximum Concentration Any Depth	Maximum concentration Shallow (<2' deep)	Screening Concentration (either Bkgd or G.V.) ¹
1,1,2-Trichloro-1,2,2-trifluoroethane	N/A	0.002	0.002	
INORGANICS (mg/kg)				
Arsenic (total)	7440382	10.9	10.9	8.6 ³
Bismuth	7440-69-9	58.6	58.6	
Copper (total)	7440508	26.4	22.1	26 ³
Lead (total)	7439921	163	163	48 ³
Lithium	7439-69-9	40.2	19	26 ³
RADIONUCLIDES (pCi/g)				
Cesium-137	N/A	1.9	1.9	0.42 ⁴
Plutonium-238	N/A	56	56	0.13 ³
Plutonium-242	N/A	0.0143	0.0143	
Potassium-40	N/A	45.4	21	37 ³
Radium-226	N/A	3.15	3.15	0.13 ⁴

Note: Blanks indicate background or Guideline Value not available. The more restrictive GV was used to determine which contaminants were carried through the RRE.

- ¹ - Guideline values (GVs) are decision-making tools for the Core Team. GV help the Core Team determine if contaminants are present at levels that warrant evaluation.
- ² - GV corresponds to a total risk of 10^{-6} for the ingestion pathway.
- ³ - Background Value. When adequate numbers of measurements are available, background values are based on the 95% upper tolerance limit.
- ⁴ - GV corresponds to a total risk 10^{-8} for the ingestion, inhalation and external pathways.

Reference: "Technical Position Report in Support of the Release Block H Residual Risk Evaluation", Public Review Draft Rev 2, April, 1999.

Table 3-3. Current Mound Plant Groundwater Contaminants of Concern Based on the Plant Water Supply

Groundwater Constituent	Maximum concentration	Screening Concentration (either background or G.V.) ¹
ORGANICS (mg/L)		
1,1-Dichloroethene	0.0017	---
1,1,1-Trichloroethane	0.0018	0.0007 ⁴
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0087	---
INORGANICS (mg/L)		
Cadmium	0.0077	0.051 ²
Copper	0.593	0.0012 ⁴
Lead	0.040	0.0101 ⁴
RADIONUCLIDES (pCi/L)		
Actinium-227	0.335	0.26 ³
Bismuth-210	0.39	---
Plutonium-239/240	2.0	0.125 ⁴
Thorium-228	2.17	0.69 ³
Tritium	7200	1485 ⁴
Uranium-234	8.14	0.792 ⁴
Uranium-238	8.25	0.688 ⁴

¹ - Guideline values (GVs) are decision-making tools for the Core Team. GV's help the Core Team determine if contaminants are present at levels that warrant evaluation.

² - Hazard Quotient for ingestion, dermal and inhalation. Decision made on 0.1xGV.

³ - GV corresponds to a total risk of 10⁻⁶ for ingestion only.

⁴ - Background value. When adequate numbers of measurements are available, background values are based on the 95th% upper tolerance limit.

Table 3-4. Future Mound Plant Groundwater Contaminants of Concern

Groundwater Constituent	Estimated Maximum concentration	Screening Concentration (either background or G.V.) ¹
ORGANICS (mg/L)		
1,1-Dichloroethene	0.0017	---
1,1,1-Trichloroethane	0.0065	0.0007 ⁴
1,1,2-Trichloro-1,2,2-trifluoroethane	0.0087	---
INORGANICS (mg/L)		
Beryllium	0.0001	0.000066 ⁵
Bismuth	0.0016	---
Cadmium	0.0077	0.051 ²
Chromium	0.4961	0.0061 ⁴
Cobalt	0.0039	---
Copper	0.5964	0.0012 ⁴
Lead	0.040	0.010 ⁴
Molybdenum	0.0096	0.0056 ⁴
RADIONUCLIDES (pCi/L)		
Actinium-227	0.355	0.26 ³
Bismuth-210	0.39	---
Plutonium-239/240	2.02	0.125 ⁴
Thorium-228	2.17	0.69 ³
Tritium	10427	1485 ⁴
Uranium-234	8.14	0.792 ⁴
Uranium-238	8.25	0.688 ⁴

- ¹ - Guideline values (GVs) are decision-making tools for the Core Team. GV's help the Core Team determine if contaminants are present at levels that warrant evaluation.
- ² - Hazard Quotient for ingestion, dermal and inhalation. Decision made on 0.1xGV.
- ³ - GV corresponds to a total risk of 10⁻⁶ for ingestion only.
- ⁴ - Background value. When adequate numbers of measurements are available, background values are based on the 95th% upper tolerance limit.
- ⁵ - Total Risk 10⁻⁶ for ingestion, dermal and inhalation

Reference: "Technical Position Report in Support of the Release Block H Residual Risk Evaluation", Public Review Draft Rev 2, April, 1999.

Table 3-5. Current and Future Residual Risks for Release Block H

Construction Worker						
	Soil	Air	Groundwater Current	Groundwater Future	Sum of Soil, Air and Groundwater Current	Sum of Soil, Air and Groundwater Future
Non-carcinogenic Hazard Index for Organics & Inorganics	4.0E-02	N/A	3.7E-02	1.6E+00	HI = 7.7E-02	HI = 1.7E+00
Carcinogenic Risks for Organics & Inorganics	4.7E-06	N/A	N/A	N/A	Risk = 4.7E-06	Risk = 4.7E-06
Carcinogenic Risks for Radionuclides	1.7E-05	2.0E-07	2.5E-06	2.9E-06	Risk = 2.0E-05	Risk = 2.3E-05
			Construction Worker			
			Overall HI =		7.7E-02	1.7E+00
			Overall Risk =		2.5E-05	2.8E-05

Site Employee						
	Soil	Air	Groundwater Current	Groundwater Future	Sum of Soil, Air and Groundwater Current	Sum of Soil, Air and Groundwater Future
Non-carcinogenic Hazard Index for Organics & Inorganics	4.0E-03	N/A	3.7E-02	1.6E+00	HI = 4.1E-02	HI = 1.6E+00
Carcinogenic Risks for Organics & Inorganics	2.0E-06	N/A	N/A	N/A	Risk = 2.0E-06	Risk = 2.0E-06
Carcinogenic Risks for Radionuclides	1.8E-05	9.9E-07	1.3E-05	1.4E-05	Risk = 3.2E-05	Risk = 4.6E-05
Site Employee						
Overall HI =					4.1E-02	1.6E+00
Overall Risk =					3.4E-05	4.8E-05

D. **Other Factors Considered**

DOE developed a generic checklist of the issues to be considered in evaluating property to be transferred. The list was modified from those used by the Department of Defense in releasing property for sale. The list includes environmental problems from Mound Plant that are likely to concern a potential purchaser as well as items relating to the operational concerns from ongoing and future remedial actions. Table 3.6 contains a brief summary and references for all factors considered. Results of only those factors which affect RB H are presented as follows:

1. **Drinking Water**

Mound Plant has exceeded the action levels for lead and copper due to the corrosiveness of the water distribution system. When the action level for lead is exceeded, EPA regulations require corrosion control and public education programs. These programs are in place at Mound. Information on the steps being taken to reduce lead concentrations in the Mound Plant water system, and on the hazards associated with ingesting lead are available to all Mound drinking water users.

2. **Monitoring Equipment**

An easement will be executed between the US DOE and MMCIC prior to transfer of RB H to maintain access for continued monitoring and maintenance on one air monitoring station (Air Station 212) and at Seep 603 (PRS 93). Questions regarding terms and conditions should be directed to the DOE Realty Officer, Ohio Field Office. Ohio EPA will have access for continued monitoring and maintenance of its air monitors and Seep 603.

3. **Floodplain**

A small portion of the northeast corner of RB H lies within the 100-year floodplain, i.e., the area is subject to a 1% chance per year of inundation from a tributary of the Great Miami River. In accordance with 10 CFR 1022.5(d), DOE has identified those

uses that are restricted under Federal, state, and local floodplain regulations. Via this environmental summary, DOE is fulfilling its obligation to inform future owners of the applicability of those regulations to RB H.

The restrictions are listed in the Floodplain Assessment for the Transfer of Parcel H, December 21, 1998. A Notice of Floodplain Involvement was published in the Federal Register on January 12, 1999 (Volume 64, Number 7, pp. 1797 - 1798). The Statement of Findings (SOF) for the proposed action appeared in the Federal Register on April 26, 1999. The SOF indicated that the transfer of RB H conforms to floodplain protection standards in so much as any future land owner will be subject to the applicable codes governing development activities on property that lies within a floodplain.

TABLE 3.6 Summary of Other Factors Considered for Release Block D, Mound Plant

FACTOR CONSIDERED	AFFECTS RB	AFFECTS RB	RECOMMENDATION/CONCLUSION	REFERENCE
	H7 YES	H7 NO		
Cultural Resources	✓		There are no historic or cultural resources within RB H. None of the areas within this Release Block would fall under a Memorandum of Agreement (MOA) or require deed restrictions to be put in place prior to transfer to limit alterations to the structures.	Correspondence From Mark J. Epstein, Department Head, Resource Protection and Review, Ohio Historic Preservation Office dated July 31, 1998.
Drinking Water Quality	✓		Mound Plant has exceeded the action levels for lead and copper due to the corrosiveness of the water distribution system. When the action level for lead is exceeded, EPA regulations require corrosion control and public education programs. These programs are in place at Mound. Information on the steps being taken to reduce lead concentrations in the Mound Plant water system, and on the hazards associated with ingesting lead will be made available to all Mound drinking water users.	Miamisburg Environmental Management Project, Annual Site Environmental Report for Calendar Year 1997, September 1998.
Endangered Species	✓		Two state protected species were found, the dark-eyed junco (<i>Junco hyemalis</i>) and the inland rush (<i>Juncus interior</i>). Because only one individual inland rush was located, it is not considered a viable breeding population at the Mound facility. The dark-eyed junco is not known to breed in southwestern Ohio. It has also been determined that the plant site is in the habitat range of the federally endangered species of Indiana Bat (<i>Myotis sodalis</i>), however, the Mound site does not provide a suitable habitat for the Indiana Bat. Neither the solitary sitings of the rush and the junco, nor the potential habitat for the Indiana bat, are expected to affect ongoing or future activities at the site.	Operable Unit 9 Hydrogeologic Investigation: Wetlands Determination Report, Technical Memorandum, Revision 1, January 1994.
Fragment Arcs	✓		No fragment arcs and clearance zones due to explosive hazards at onsite operations exist in Release Block H.	Drawing FSD 970058, "Clearance Zones and Fragment Arcs" Building 100 Technical Review, Appendix 7.3 - Lease Agreement for Building (Extract)

FACTOR CONSIDERED	AFFECTS RB	AFFECTS RB	RECOMMENDATION/CONCLUSION	REFERENCE
	H YES	H NO		
Monitoring Equipment	✓		An easement has been executed between the US DOE and MMCIC to maintain access for continued monitoring of air sampling station 212 and at seep 603 (PRS 93).	Groundwater Monitoring Program and Groundwater Protection Management Program Plan, April 1997, Revision 1.
National Environmental Policy Act (NEPA)	✓		A Finding of No Significant Impact (FONSI) was issued on October 27, 1994 for the commercialization of the Mound Plant.	Mound Plant Environmental Monitoring Plan dated July 1997. The Mound Plant EA for Commercialization of the Mound Plant, DOE/EA-1001 dated October, 1994 and FONSI for the Commercialization of the Mound Plant EA dated October 27, 1994.
Resource Conservation and Recovery Act (RCRA)		✓	DOE has found no RCRA regulated units within Release Block H warranting a RCRA closure action. It has been determined that the closest facility boundary from Buildings 23 and 72 will not change with the sale of Release Block H. Therefore, the risk assessment information in the RCRA Part B Permit will not change.	RCRA Part B Permit Application, Volume I, Section A, September 1995 (as amended) Responses to Information Requested by the Ohio HWFB Technical Staff transmitted to Bob Brown of the State of Ohio Hazardous Waste Facility Board dated March 12, 1996.

FACTOR CONSIDERED	AFFECTS RB H YES	AFFECTS RB H NO	RECOMMENDATION/CONCLUSION	REFERENCE
Underground Storage Tanks (USTs)		✓	There are no USTs located within RB H.	EG&G Mound Applied Technologies, Active Underground Storage Tank Plan, November 1994.
Wetlands		✓	Three characteristics must be present to be classified as jurisdictional wetlands: (1) hydrophytic vegetation, (2) hydric soils, and (3) wetlands hydrology. Absence of any one of these characteristics removes an area from consideration. None of the sites examined within Release Block H constitute jurisdictional wetlands	Operable Unit 9 Hydrogeologic Investigation: Wetlands Determination Report, Technical Memorandum, Revision 1, January 1994.
Floodplains	✓		A small portion of the northeast corner of Release Block H lies within the 100-year floodplain. Consistent with 10 CFR 1022, the applicability of floodplain regulations to the property must be disclosed to the new owner.	SOF for the Floodplain Assessment for the Transfer of Parcel H, April 26, 1999.

III. FINDING OF SUITABILITY TO TRANSFER

In accordance with the provisions of CERCLA Section 120 (h), contaminated property can only be transferred if one of the following applies:

- (1) a remedial action has been taken that protects human health and the environment and EPA deems this condition to be satisfied if a remedy has been constructed and is operating successfully,
- (2) a decision has been made that no remedial action is necessary.

This future industrial use of the Mound Plant has been determined based upon agreement among US DOE, US EPA and OEPA, and interested stakeholders. This land use is reflected in the Mound Comprehensive Reuse Plan of the Miamisburg Mound Community Improvement Corporation (MMCIC) and is currently codified in the City of Miamisburg Zoning Ordinance for industrial use.

A joint agency decision among the US DOE, US EPA and OEPA has been made that a remedial action has been taken that protects human health and the environment. EPA deems this condition to be satisfied if the Institutional Controls are implemented and operating successfully. Institutional controls in the form of deed restrictions on future land use will be placed on RB H upon transfer as part of the remedy. The objective of these institutional controls is to prevent an unacceptable risk to human health and the environment by restricting the use of RB H, including RB H soils, to that which is consistent with assumptions in the RB H RRE. DOE or its successors will retain the right and responsibility to monitor, maintain, and enforce these institutional controls. The following property deed restrictions and requirements will be imposed on the property to maintain protection of human health and the environment in the future:

1. Ensure that industrial land use is maintained;
2. Prohibit the use of bedrock ground water;
3. Provide site access for federal and state agencies for the purpose of taking response actions, including sampling and monitoring; and
4. Prohibit removal of RB H soils from the DOE Mound property (as owned in 1998) boundary without approval from ODH and OEPA, or their successor agencies.

V. ENVIRONMENTAL COVENANTS

DOE is committed to include a covenant in accordance with Section 120 (h)(3) of CERCLA in the deed for the sale or transfer of the property that warrants that:

- A. All remedial action necessary to protect human health and the environment has been taken as long as the deed restrictions limiting land and ground water use are in effect and enforced.
- B. Any additional response action or corrective action found to be necessary after the date of sale or transfer shall be conducted by the United States [Section 120(h)(4)(D)(i)]. The requirements of the covenant shall not apply in any case in which the person or entity to whom the property is transferred is a potentially responsible party with respect to the property.
- C. A clause granting the United States access to the property in any case in which a response action or corrective action is found to be necessary or such access is necessary to carry out a response action or corrective action on the adjoining property [Section 120 (h)(4)(D)(ii)]

VI. NOTIFICATION/PUBLIC PARTICIPATION

The community has been an active participant in this process to date. Comments from the public on the PRS recommendation have been incorporated as part of the remedy evaluation. DOE believes all comments have been resolved with the commentor and the documents, comments, and responses have been placed in the CERCLA Public Reading Room.

Table 6.1 lists the RB H PRS package, RB H RRE, and RB H Proposed Plan along with the dates they were made available for public comment.

Table 6.1 Release Block H Documents and Public Comment Periods

DOCUMENT/PRS	COMMENT PERIOD (BEGIN)	COMMENT PERIOD (END)
PRS 93	March 18, 1996	April 1, 1996
RB H Residual Risk Evaluation	April 30, 1997	June 16, 1997
Technical Position Report in Support of Release Block H Residual Risk Evaluation	May 5, 1999	June 5, 1999
Proposed Plan for RB H	May 5, 1999	June 5, 1999