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#9412210002

EG&G MOUND APPLIED TECHNOLOGIES
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Mr. Arthur W. Kleinrath
Project Engineer,
Team Leader, MB
U. S. Department of Energy
Miamisburg Area Office
P.O. Box 66
Miamisburg, OH 45343

DEC 1 3 1994

Dear Mr. Kleinrath:

**Drainage Control Interim Response Action**

I am requesting the following letter and attached Action Memorandum (Final) be transmitted to the USEPA and OEPA in order to notify them of the DOE's intention to pursue the drainage control interim response action. The EG&G and DOE comments on the Action Memorandum (Working Draft) have been incorporated into the attached final Action Memorandum.

*Mr. Timothy Fischer*
*U.S. Environmental Protection Agency*
*HSRL-6J*
*77 W. Jackson*
*Chicago, IL 60604*

*Mr. Brian Nickel*
*Ohio Environmental Protection Agency*
*40 South Main Street*
*Dayton, Ohio 45402*

*Dear Mr. Fischer and Mr. Nickel:*

*In accordance with section I.D of the Federal Facility Agreement, this letter and the attached Action Memorandum serve as notification to the USEPA and OEPA of the Department of Energy's decision to pursue an interim removal action consisting of intercept drainage control actions located within Operable Unit 5 of the Mound site. This removal action will proceed in accordance with 40 CFR Part 300 - The National Contingency Plan.*

*If you have any questions, please contact me at (513) 865-3597.*

*cc: J. Zahora*
*A. Spesard*
*M. Williams*

If you have any questions, please contact Alan Spesard of my staff at extension 3859.

Sincerely,

Monte Williams
Manager of
Environmental Restoration

ORIGINAL SIGNED BY

Approved: _____

Charles S. Friedman
Vice President
ER & WM

/sdf

cc: A. Spesard
J. Zahora

# ACTION MEMORANDUM/REMOVAL SITE EVALUATION

# DRAINAGE CONTROL INTERIM RESPONSE ACTION

**ENVIRONMENTAL RESTORATION PROGRAM**

**OPERABLE UNIT 5**

**FINAL (Revision 0)**

**U.S. DEPARTMENT OF ENERGY, OHIO FIELD OFFICE**
**EG&G MOUND APPLIED TECHNOLOGIES**

**Mound Plant**
**Miamisburg, Ohio**

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## ACRONYMS

| | |
|---|---|
| AM | Action Memorandum |
| ALARA | As low as reasonably achievable |
| ARARs | Applicable or relevant and appropriate requirements |
| BGS | Below ground surface |
| BVA | Buried Valley Aquifer |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act |
| CFR | Code of Federal Regulations |
| CWA | Clean Water Act |
| DOE | Department of Energy |
| ER | Environmental Restoration |
| FFA | Federal Facilities Agreement |
| IDM | Investigation derived material |
| MAT | Mound Applied Technologies |
| MCL | Maximum Contaminant Level |
| NCP | National Contingency Plan |
| NPDES | National Pollutants Discharge Elimination System |
| NPL | National Priority List |
| OEPA | Ohio Environmental Protection Agency |
| OU | Operable Unit |
| OSC | On-Scene Coordinator |
| ppb | parts per billion |
| ppm | parts per million |
| RA | Remedial Action |
| RCRA | Resource Conservation and Recovery Act |
| RI/FS | Remedial Investigation/Feasibility Study |
| ROD | Record of Discussion |
| RSE | Removal Site Evaluation |
| SARA | Superfund Amendments and Reauthorization Act |
| TBC | To be considered |
| USEPA | United States Environmental Protection Agency |

## ACKNOWLEDGEMENTS

This report was prepared by EG&G Mound Applied Technologies for the U.S. Department Of Energy. The principal author of this document is Mr. Alan Spesard.

Department of Energy, On-Scene Coordinator: Mr. Arthur Kleinrath

Department of Energy (Rust-Geotech), Technical Review: Mr. Richard Neff

EG&G Mound Applied Technologies, Operable Unit Manager: Mr. Alan Spesard

EG&G Mound Applied Technologies, Technical Review: Dr. Dan Carfagno

EG&G Mound Applied Technologies, Technical Review: Mr. Alec Bray

EG&G Mound Applied Technologies, Technical Review: Mr. Keith McMahan

Roy F. Weston, Inc., Technical Review: Mr. Ted Hartfelder & Mr. Gordon Horn

SUBJECT: Documentation of a Removal Action at the Mound Plant - Drainage Control for areas adjacent and upgradient of Building 19 and the Old South Property Boundary.

FROM: Arthur Kleinrath, Remedial Project Manager/On-Scene Coordinator, Mound Plant, U.S. Department of Energy

TO: Administrative Record

## 1.0. PURPOSE

This Removal Site Evaluation (RSE) was performed in accordance with the National Oil and Hazardous Substances Contingency Plan (NCP), 40 CFR Part 300. This RSE has identified a potential threat to human health, welfare, and the environment due to the presence of surface soils contaminated with thorium and plutonium. The contaminated soils are located upgradient of the plant boundary between the Operable Unit 5 Old South Property and New Property, and upgradient of the plant boundary adjacent to Mound Building 19. Thorium and plutonium are hazardous substances as defined by the Mound Plant Federal Facilities Agreement (FFA) (Docket No. OH 890:008 984). During storm events, the existing on-site stormwater collection system cannot prevent the migration of contaminated soils from upgradient areas to the New Property and off site near Building 19.

The Department of Energy (DOE) is the designated lead agency under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Interim response actions at the Mound Plant are implemented as non-Fund Federal lead actions. DOE provides the On-Scene Coordinator (OSC). As a non-Fund Federal lead, removal actions are not subject to United States Environmental Protection Agency (USEPA) limitations on the OSC ($50,000 authority), and are not subject to NCP limitations on removal actions (i.e., $2,000,000 in cost and 12 months in duration).

For interim response actions the Action Memorandum (AM) serves as the funding request mechanism for Superfund actions. Because this RSE refers to a non-Fund Federal lead interim response action, the AM does not serve the above purpose. This AM has been completed to document the RSE and the comparative analysis of alternatives.

## 2.0. SITE CONDITION AND BACKGROUND

### 2.1. SITE DESCRIPTION

As a result of operational incidents at Mound involving radioactive materials, a portion of the site has been contaminated. The following areas are being assessed by the Mound Environmental Restoration/CERCLA group. with regard to the need for future action:

1. Areas adjacent and upgradient to Building 19:

The Mound site survey project analyzed soil samples collected from the areas of concern adjacent to Building 19. Several samples showed elevated levels of plutonium-238 and unspecified isotopes of thorium (see DOE 1993a for sampling locations and detailed results). The plutonium contamination may have resulted from runoff caused by the rupture of the waste transfer system (WTS) line between the Waste Disposal (WD) Building and the SM/PP area in 1969 or by the clean-up operations that followed the rupture. This event resulted in contamination of the off-site area, known as the runoff hollow, west of the property fence line near Building 19. Thorium contamination may have resulted from thorium redrumming and storage operations in nearby areas.

2. Areas adjacent and upgradient to the South Boundary separating the New Property from the Old:

The Mound site survey project analyzed soil samples collected from the areas of concern upgradient of the fenced boundary separating the old property from the new. The primary area of concern, designated as Area 1, is located near building 21 and the contaminated soil boxed storage area. Area 1 was used for storage of plutonium-238 waste packages in the mid-1960s and for storage and repackaging of thorium sludge from 1966 to 1974. Several soil samples showed elevated levels of plutonium-238 and thorium (see DOE, 1993a for sampling locations and detailed results). The maximum plutonium-238 and thorium concentrations in the surface soil samples were 34,000 pCi/g and 54.3 pCi/g, respectively.

### 2.2. REMOVAL SITE EVALUATION

A Removal Site Evaluation is incorporated into this AM/RSE.

## 2.3. PHYSICAL LOCATION

The Mound Plant is a 306-acre facility located on the border of the city of Miamisburg in Montgomery County, Ohio (Figure 2.1). The facility is approximately 10 miles south-southwest of Dayton and 45 miles north of Cincinnati.

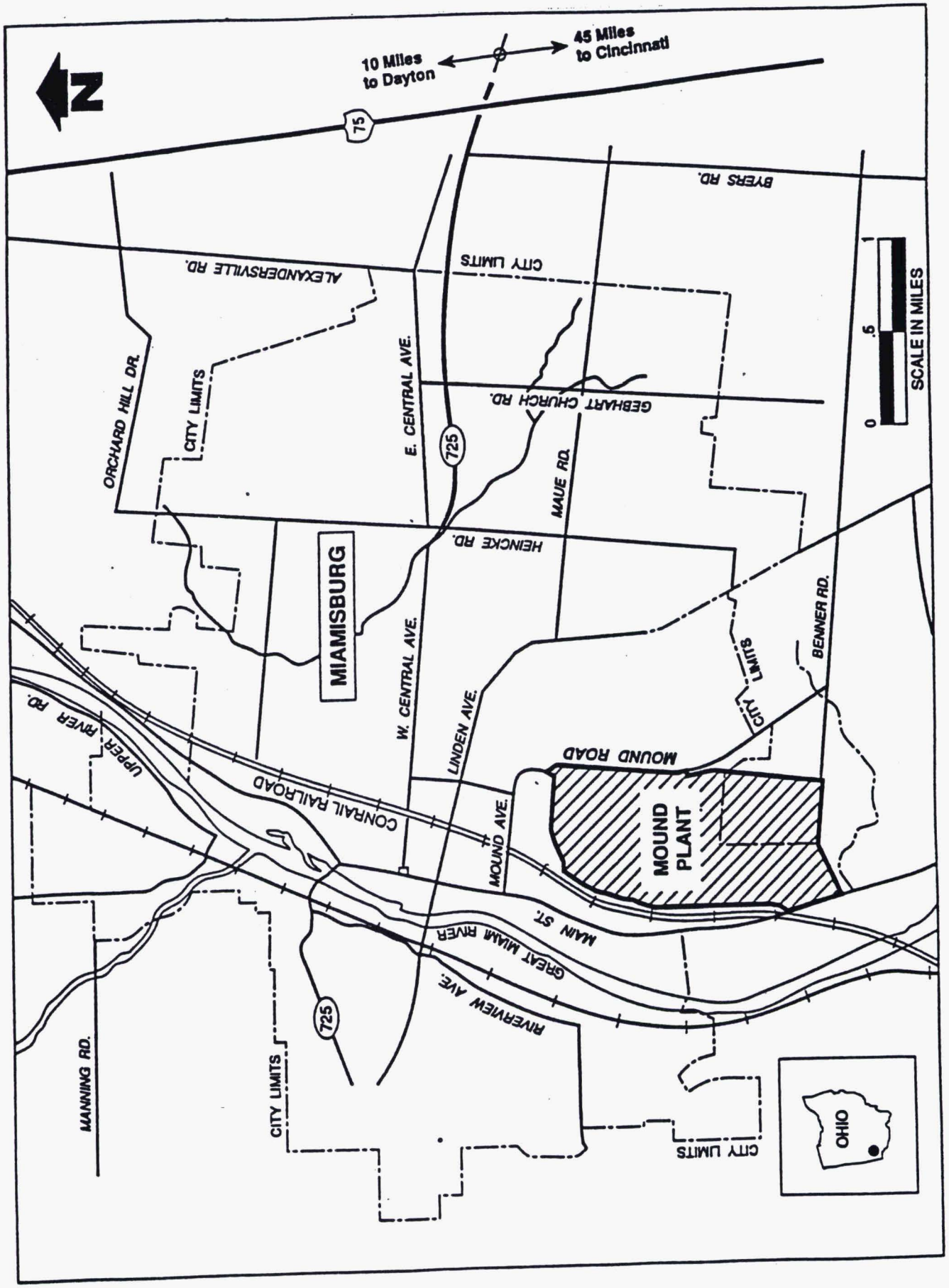
The Drainage Control Areas are located near the following potential release sites identified at the Mound Plant (DOE 1993b):

- Area 1, Bulk transfer of thorium
- Area 22, Orphan soil area
- Area 3, Thorium drum storage; Building 72 Hazardous Waste Storage Area
- Building 19 surface soils

One drainage control action is located in the west-central portion of the Mound Plant near Building 19, and the other is located at the southern boundary of the Operable Unit 5 Old Property (Figure 2.2).

Figure 2.1

Physical Location of the Mound Plant



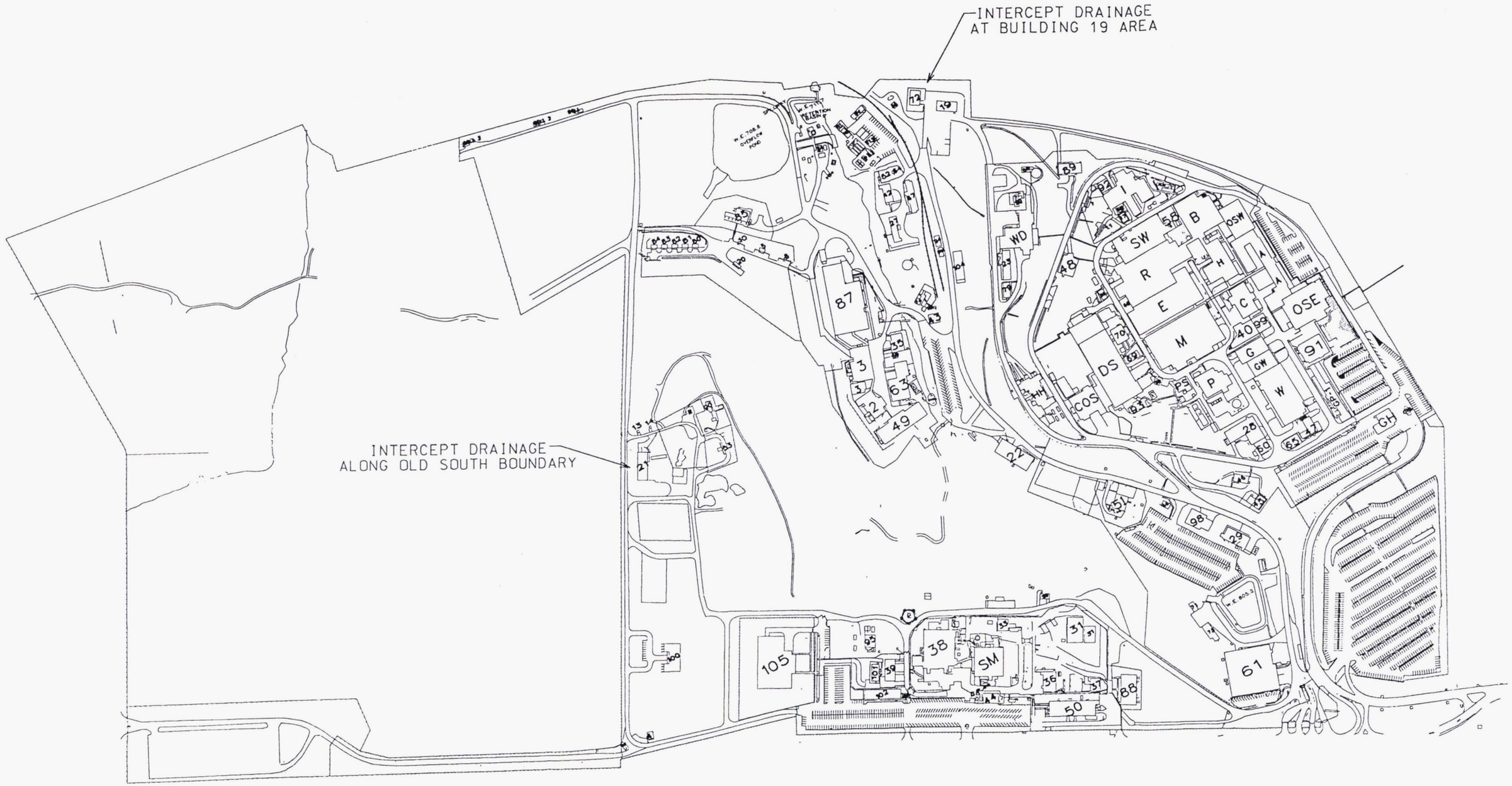

INTERCEPT DRAINAGE
AT BUILDING 19 AREA
INTERCEPT DRAINAGE
ALONG OLD SOUTH BOUNDARY
87
3
2
63
49
WD
48
SW
R
E
M
B
OSW
H
A
C
OSE
40
99
91
G
GW
W
DS
COS
P
PS
28
60
65
17
GH
22
98
29
105
38
SM
31
51
36
37
88
50
61

FIGURE 2.2

## 2.4. RELEASE INTO THE ENVIRONMENT

Releases of radionuclide contamination into the environment occurred in the areas upgradient of this proposed action as a result of operational incidents. The releases occurred in the 1960s and 1970s, as described in section 2.0.

## 2.5. NATIONAL PRIORITIES LIST STATUS/FEDERAL FACILITIES AGREEMENT

The USEPA placed the Mound Plant in Miamisburg, Ohio on the National Priorities List (NPL), as listed in 40 CFR Part 300, Appendix B, by publication in the Federal Register on November 21, 1989.

A Federal Facilities Agreement under Section 120 was executed between DOE, USEPA Region V in 1990 and modified to include the Ohio Environmental Protection Agency (OEPA) on July 15, 1993 (USEPA Administrative Docket No. OH 890:008 984). The general purposes of this agreement are to:

- Ensure that the environmental impacts associated with past and present activities at the site are thoroughly investigated and appropriate remedial action taken as necessary to protect the public health, welfare, and the environment

- Establish a procedural framework and schedule for developing, implementing, maintaining, and monitoring appropriate response actions at the site in accordance with CERCLA, the Superfund Amendments and Reauthorization Act (SARA), the NCP, Superfund guidance and policy, and Resource Conservation and Recovery Act (RCRA) guidance and policy

- Facilitate cooperation, exchange of information, and participation of the parties in such actions

## 2.6. SITE ACTIONS TO DATE

The DOE has prepared this RSE under authority delegated by Executive Order 12580 under Section 104 of CERCLA, consistent with Section 40 CFR 300.410 of the NCP. This RSE provides an assessment of the potential exposure to radionuclide contaminants by migration during a storm event from known on-site contaminated source areas. As such, it provides a basis for the need for a removal action to mitigate potential radionuclide migration off site or onto the New Property, and thus exposure to human or animal populations. The NCP defines a "removal action" as "...the appropriate extent of action to be taken in response to a given release..." [40 CFR 300.415 (a) (1)].

The Mound Plant initiated a CERCLA program in 1984. Currently this effort is guided by a FFA between the USEPA, OEPA and DOE that became effective on July 15, 1993. The CERCLA program is assessing and evaluating, as necessary, the current risks for potential release sites. These potential release sites have been grouped into various operable units (OUs).

The Operable Unit 9 (OU-9), Volume 3, Radiological Site Survey Report consist of summaries of preliminary investigations which include several areas near and upgradient of Building 19 and the Old South Boundary. Table 2.1 summarizes significant contamination levels upgradient of the proposed actions. Additional data may be found in DOE 1993a. These preliminary investigations, provide the basis for determining the need for further action.

The areas of concern (source areas) are currently being assessed under the CERCLA program for future disposition.

Table 2.1.

Historic Sample Summary Data

| Sample Location | Sample Number | Matrix | Date Sampled | Sample Interval (ft BGS) | Contaminate of Concern | Validated Result | Regulatory & DOE Action Levels |
|---|---|---|---|---|---|---|---|
| AREA 1 | S0992 | soil | 01-84 | 0.0 | Plutonium - 238 | 637.9 pCi/g | DOE: 100 pCi/g 25 pCi/g (ALARA) |
| AREA 1 | C0208 | soil | 12-82 | 0.0-1.5 | Total Thorium | 36.87 pCi/g | 5 pCi/g |
| AREA 1 | S1002 | soil | 12-83 | 0.0 | Total Thorium | 54.3 pCi/g | 5 pCi/g |
| AREA 1 | S0997 | soil | 03-83 | 0.0 | Plutonium - 238 | 34000 pCi/g | DOE: 100 pCi/g 25 pCi/g (ALARA) |

Sampling Data - Area Upgradient of Building 19:
Historical information indicates that the area's surface soil is contaminated with plutonium-238 & thorium at levels greater than their respective action level. In March 1994, a gamma (FIDLER) survey of the area was performed by Mound Plant personnel and elevated readings were recorded.

Sampling Data - Area Upgradient of Old South Boundary Between the Operational and New Properties:
Historical information indicates that the upgradient area's surface soil is contaminated with thorium and plutonium-238 at levels greater than their respective action levels. In March 1994, a gamma (FIDLER) survey of the existing drainage ditch and fence line was performed by Mound Plant personnel and elevated readings were recorded. See Area 1 sample data above (Re. DOE, 1993a).

### 2.6.1. Evaluation by Public Health Agencies

No evaluation has been formally conducted by any State or local health agency.

### 2.6.2. Evaluation of Potential Exposure and Determination of the Need for a Removal

The NCP defines eight criteria for determining the appropriateness of a removal action (40 CFR 300.415(b)(2)). These criteria have been applied to the surface soils and sediments upgradient of the proposed intercept drainage control areas:

| Criteria | Comment |
|---|---|
| (i) "...potential exposure to nearby human populations..." | Sediments on ground surface; inadvertent exposure to workers is possible. |
| (i) "...(potential exposure) to animals..." | Contamination at the surface can result in exposure to animals. |
| (i) "...(potential exposure) to the food chain..." | Possible but unlikely at this location, due to its current land use controls. |
| (ii) "Actual or potential contamination of drinking water supplies..." | Possible but unlikely, due to the slow migration of the contaminants through soil. The radionuclide contamination overlies a groundwater system connected with the Buried Valley Aquifer (BVA), which USEPA has designated as Class 1 for groundwater protection. |
| (iii) "Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release;" | Not applicable. |

| Criteria | Comment |
|---|---|
| iv) "High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate;" | Contamination is at the surface. During storm events the existing stormwater control system is inadequate and stormwater may be discharged offsite. Since this occurs several times each year, there is a potential for surface contaminant migration offsite. |
| (v) "Weather conditions that may cause hazardous substances to migrate or be released;" | Contamination is at the surface. During storm events the existing stormwater control system is inadequate and stormwater may be discharged offsite. since this event occurs several times each year, there is a potential for surface contaminant migration offsite. |
| (vi) "Threat of Fire or explosion;" | Not Applicable. |
| (vii) "The availability of other appropriate federal or state response mechanisms to respond to the release;" | State mechanisms, no non-DOE mechanisms (DOE is the designated lead agency under CERCLA) and no other DOE programs applicable. |
| (viii) "Other situations or factors that may pose threats to public health or welfare or the environment;" | The DOE is currently evaluating alternative land uses for the Mound Plant, including commercial uses. Although currently undetermined, land development for commercial uses could include the New Property portion of OU5. If so, the presence of contamination could hinder development. |

Based on several of the above criteria, a removal action is appropriate to minimize migration of contaminants offsite or onto the New Property.

## 3.0. THREAT TO PUBLIC HEALTH OR WELFARE OF THE ENVIRONMENT

Section 300.415 of the NCP (40 CFR 300.415) lists the factors to be considered in determining the appropriateness of an interim response action. Paragraphs (b) (2) (i), (iv), (v) and (viii) of Section 300.415 directly apply as follows to the conditions at the site:

300.415 (b) (2) (i) "Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants."

Sediments/surface soils are at grade; off-site access is unrestricted and inadvertent exposure is possible. There is a potential exposure to animals within the Plant boundaries as well as off-site.

300.415 (b) (2) (iv) "High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate."

300.415 (b) (2) (v) "Weather conditions that may cause hazardous substances to migrate or be released;"

During 10 year storm events and during storm events which occur over consecutive days, the existing stormwater control system is undersized and stormwater may be discharged off site or onto the New Property. Thus, there is a potential for surface contaminant migration off site or onto the New Property.

300.415 (b) (2) (viii) "Other situations or factors that may pose threats to public health or welfare or the environment."

The DOE is currently evaluating alternative land uses for the Mound Plant, including commercial uses. Although currently undetermined, land development for commercial uses could include the New Property. If so, the presence of contamination could hinder development and would be detrimental to public welfare.

## 4.0. ENDANGERMENT DETERMINATION

All Action Memos must contain an Endangerment Determination (US EPA 1990). Actual or threatened releases of pollutants and contaminants from this site, if not addressed by implementing the response action selected in this AM, may present a threat to public health or welfare or the environment. Radionuclides are hazardous substances which are known to have a carcinogenic risk associated with them and are known to have an adverse affect on human and animal health. This determination is based on the existing plutonium and thorium source areas located near the proposed action and the potential for the migration of contamination to nearby human or animal populations.

## 5.0 PROPOSED ACTIONS

AMs for Fund Federal-lead sites include a discussion of costs since expenditure of Superfund money must be authorized for removals. Since this is a non-Fund Federal lead action and authorization of Superfund money is not required, conceptual cost estimates have not been included in the discussion of the remediation options.

### 5.1. REMEDIATION OPTIONS

#### 5.1.1 Option 1 - Intercept Drainage Control

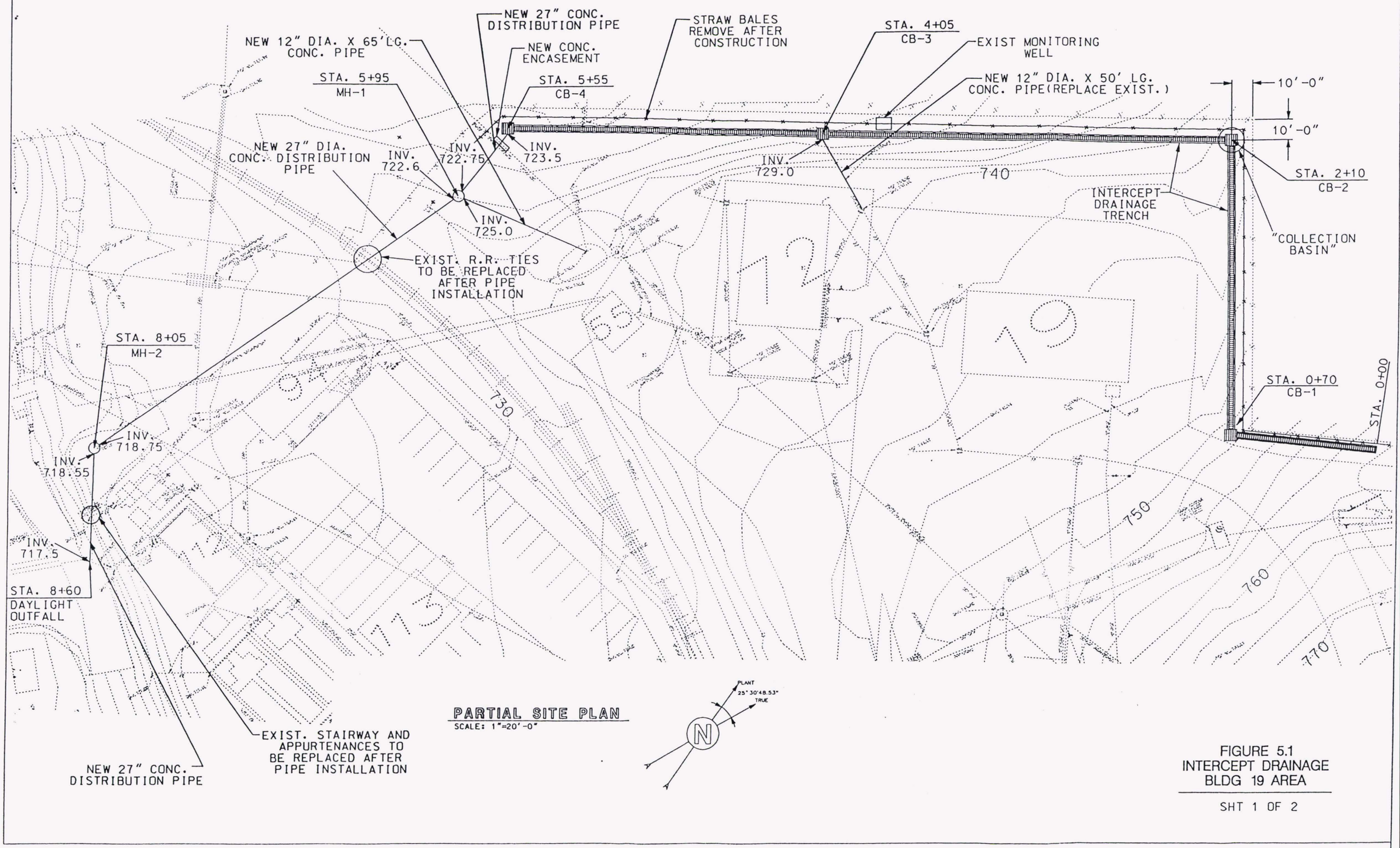
The NCP (40 CFR 300.415 (d)(2)) specifically lists "... drainage controls, for example, run-off or run-on diversion" as an appropriate removal action. The proposed drainage improvements will permit the effective control of stormwater to prevent the spread of radionuclide contaminants to areas off site or onto the OU5 new property.

##### 5.1.1.1 Drainage Improvements for Building 19 Area:

During a storm event, rainwater may transport contaminated soil directly off site. The action will remove radionuclide contaminated soil in the areas where drainage control structures are required. The proposed stormwater diversion structures (lined trench, catch basins, piping) will redirect stormwater to the main drainage channel upstream of the overflow pond. This will allow on site control of the stormwater and prevent migration off site (see figure 5.1).

##### 5.1.1.2 Drainage Improvements Along Old South Boundary Between the Operational and New Properties:

During a storm event, rainwater from contaminated areas has been observed to overflow the existing roadway and migrate onto the New Property. The action will remove radionuclide contaminated soil in the areas where drainage control structures are required.This rainwater may carry contaminated soil directly onto the New Property. The proposed stormwater collection structures (lined trench and piping) will direct stormwater to the overflow pond. This will allow on site control of the stormwater and prevent migration onto the New Property (see figure 5.2).




PARTIAL SITE PLAN
SCALE: 1"=20'-0"

FIGURE 5.1
INTERCEPT DRAINAGE
BLDG 19 AREA

SHT 1 OF 2

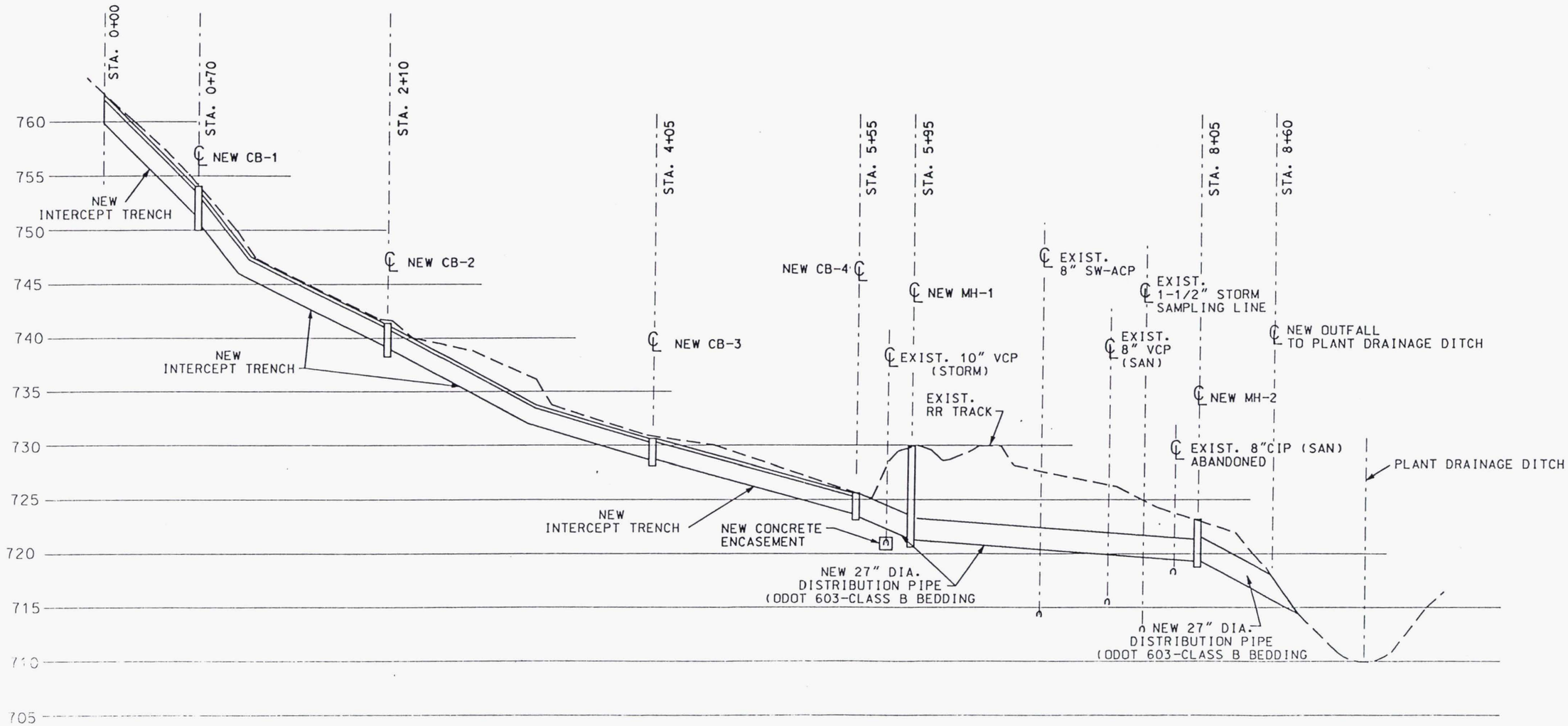



FIGURE 5.1
INTERCEPT DRAINAGE PROFILE

SHT. 2 OF 2

## DRAWING NOTES:

1. CENTERLINE OF NEW INTERCEPT DITCH.
2. NEW INTERCEPT TRENCH AT DRIVEWAY.
3. NEW SEDIMENT CONTROL SILT FENCE, REMOVE AFTER DITCH/TRENCH CONSTRUCTION.
4. NEW STRAW BALES (SINGLE LAYER @ 100'O.C.)- USED AS SEDIMENT CONTROL, REMOVE AFTER DITCH AND TRENCH CONSTRUCTION.

## LEGEND

- NEW ASPHALT PAVEMENT
- NEW CONCRETE
- EXISTING CONTOUR
- EXISTING GRADE (SEE PROFILE), SEE NOTE 3
- NEW INTERCEPT DITCH FLOWLINE (DIRECTION OF FLOW)
- NEW INTERCEPT TRENCH GRATE - NTS
- NEW EROSION CONTROL SILT FENCE
- NEW EROSION CONTROL STRAW BALES
- EXISTING GRADE (SEE SHT. 3 OF 3)

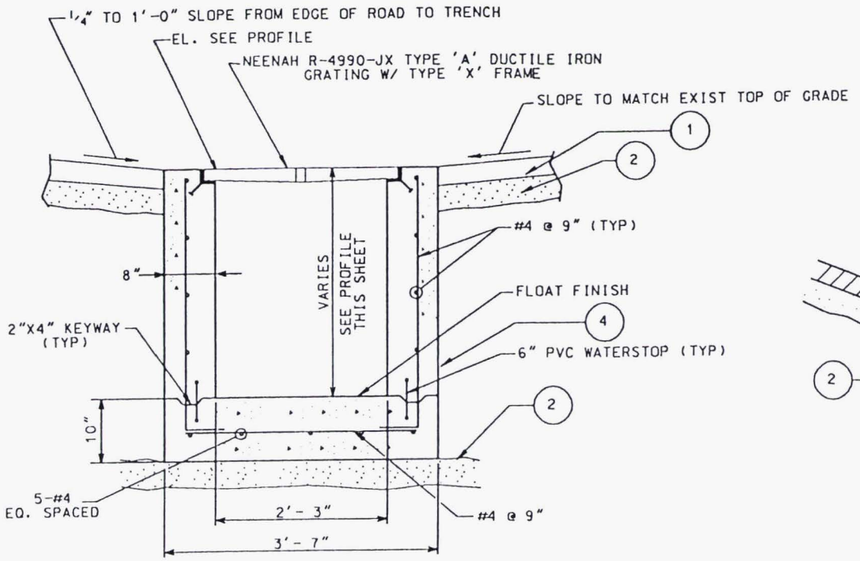
N
PLANT
25°30'48.53"
TRUE

# PLANVIEW
# FIGURE 5.2
SHEET 1 OF 2

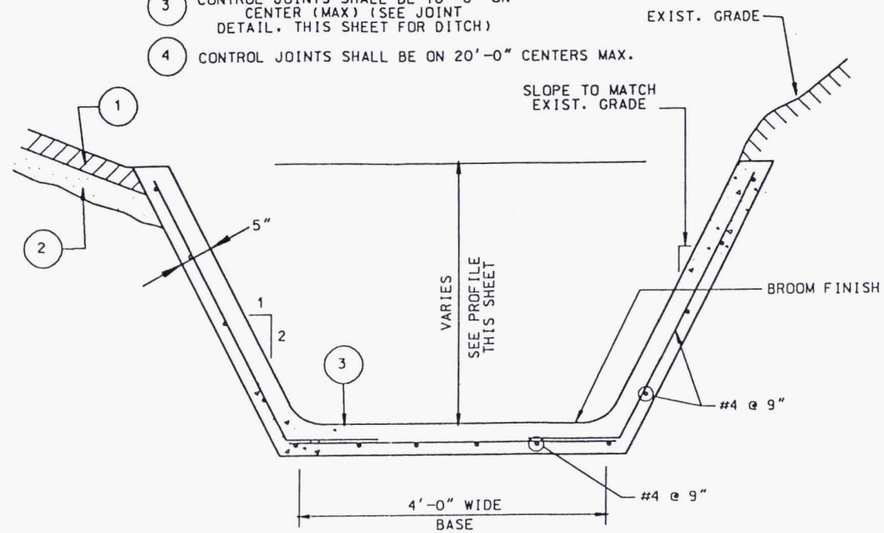
# INTERCEPT DRAINAGE ALONG OLD SOUTH BOUNDARY

## NOTES: SECTION 1&2

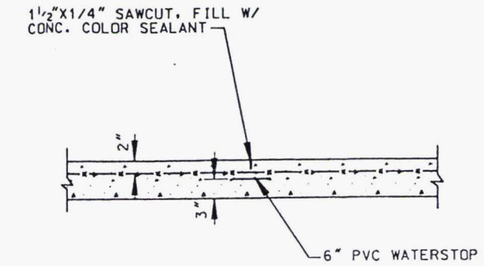
1. NEW O.D.O.T. 404 - 3" THICK
2. NEW O.D.O.T. 304 - 4" THICK (COMPACTED)
3. CONTROL JOINTS SHALL BE 10'-0" ON CENTER (MAX) (SEE JOINT DETAIL. THIS SHEET FOR DITCH)
4. CONTROL JOINTS SHALL BE ON 20'-0" CENTERS MAX.



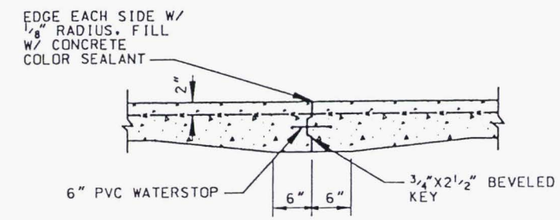

INTERCEPT TRENCH AT VEHICLE ACCESS WAY
SECTION 1
SCALE: 1"=1'-0"



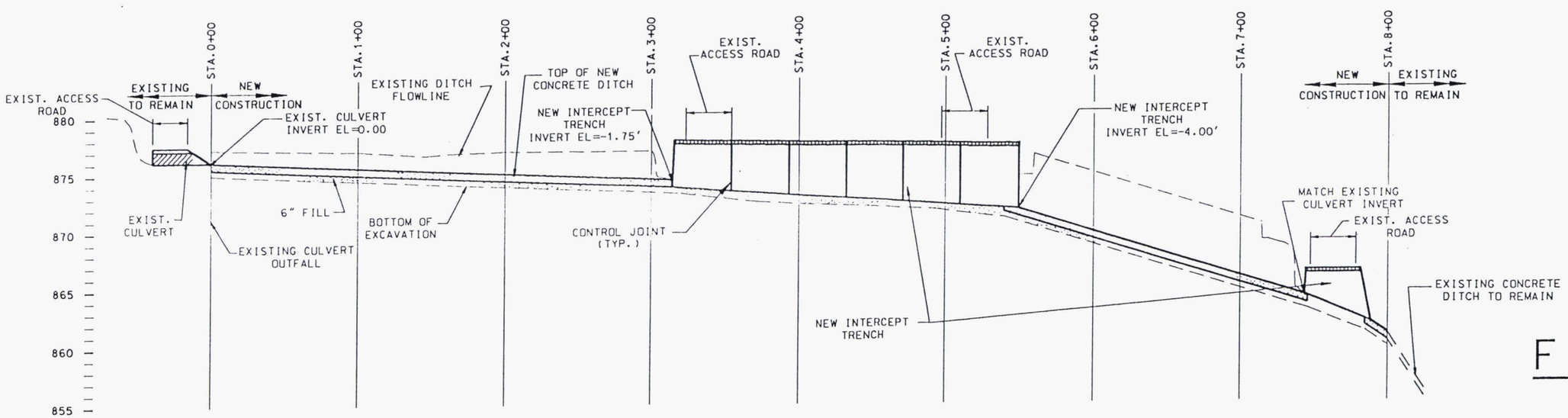

INTERCEPT DITCH
SECTION 2
SCALE: 1"=1'-0"




TYPICAL INTERCEPT DITCH
CONTROL JOINT
SCALE: 1"=1'-0"




TYPICAL INTERCEPT DITCH
CONSTRUCTION JOINT
SCALE: 1"=1'-0"




DRAINAGE ALONG SOUTH BOUNDARY
PROFILE AT CENTERLINE NEW DRAINAGE INTERCEPT DITCH
HORIZONTAL SCALE: 1"=40'
VERTICAL SCALE: 1"=5'

# DETAILS
# FIGURE 5.2
SHEET 2 OF 2

# INTERCEPT DRAINAGE ALONG OLD SOUTH BOUNDARY

### 5.1.2. Option 2 - Removal of Contaminated Soils

The removal of radionuclide contaminated soils within the identified areas would eliminate the need for drainage control. Due to the complexity and volume of contaminated soil the removal is estimated to extend to the year 2005. This is not a timely response to the problem of potential interim migration of contaminants.

### 5.1.3. Option 3 - Administrative Controls

This response action is required by CERCLA to be considered when evaluating the need for a removal. It provides a baseline against which other approaches can be measured.

The administrative controls alternative include physical controls (fencing, capping, and warning signs) to prevent accidental intrusion by humans and animals and to prevent physical dispersion of the contamination. Administrative controls could increase the stability and safety of the site until the investigation of Operable Unit 5 RI/FS is completed, a ROD is prepared, and a final remedy is implemented. However, administrative controls as described would not prevent migration of contamination off-site or onto the New Property.

## 5.2. PROPOSED ACTIONS

Option 1 is the preferred action on the basis of effectiveness and implementability. It includes an intercept drainage control system with the ability to control stormwater onsite by diverting it to the existing on site stormwater collection system.

## 5.3. CONTRIBUTION TO REMEDIAL PERFORMANCE

This drainage control interim action is located within Mound Plant Operable Unit 5, which includes 52 potential release sites (DOE 1993a) and covers more than half of the Mound Plant. A work plan has been written for Operable Unit 5 and provides a plan for a multiple year RI/FS. It is anticipated that the RI/FS will lead to a Record of Discussion (ROD) and that the 52 potential release sites will include sites recommended for no further action and sites with similar contamination. The final remedy for the upgradient areas of contamination will include consolidation of sites with similar characteristics in the vicinity of the drainage control areas. For cost effectiveness, the final remedy would be executed concurrently for the aggregated sites.

The proposed Remedial Action (RA) is consistent with the Operable Unit 5 remedial objectives and accepted removal practices and is expected to meet the NCP removal criteria and mitigate the threat posed to the public health and welfare and the environment.

## 5.4. COMPLIANCE WITH APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS (ARARs)

The proposed removal actions set forth in this memorandum will comply with all Federal and State ARARs and to be considered (TBCs) to the extent practicable considering the exigencies of the situation. A summary of these ARARs is presented in Table 5.1.

**TABLE 5.1**

**ARARs & TBCs**

| Admin. Code & Reg.s | Title or Subject of Regulation | Description & Application of Regulation | ARAR Type |
|---|---|---|---|
| Uniform Building Code | National Building Code specifications | Pertains to any facility design modification. Material specifications. | Action |
| Ohio Dept. of Transp. | State recommendations for the design of Storm Water Control Systems | Pertains to any facility design modification. Design storm frequency is 10 year minimum. | Action |
| Dept. of Energy Orders | DOE Order 6430.1a - USDOE requirements for the design of facilities. | Pertains to any facility design modification. Design storm frequency is 25 year minimum. CWA & NPDES requirements for point source discharges. | Action |
| Dept. of Energy Orders | DOE Order 5500.3 - Requirements for a DOE site to assure hazardous substances will not migrate off-site and potentially to navigable waters. | Pertains to any DOE facility. Requirements for a DOE site to ensure that hazardous substances will not migrate offsite and potentially to navigable waters. | Action |

## 6.0 EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED

No action or delay in action at this Site would increase the probability of migration of contamination off site or onto the New Property. The off-site migration would be to an area near human and animal populations. The New Property is targeted for future commercial development and thus will contain human and animal populations.

## 7.0. OUTSTANDING POLICY ISSUES

The DOE is currently evaluating alternative land uses for the Mound Plant, including commercial uses. Although currently undetermined, land development for commercial uses could include the New Property. If so, the presence of contamination could hinder development and would be detrimental to the public welfare.

## 8.0. ENFORCEMENT

The DOE is the designated lead agency under CERCLA and is required by the FFA to ensure that the environmental impacts associated with past and present activities at the site are thoroughly investigated, and the appropriate removal/remedial actions are taken to protect the public health, and welfare and the environment.

## 9.0. RECOMMENDATION

This decision document represents the selected removal action for the Drainage Control Intercept Sites, located on the Mound Plant NPL Site in Miamisburg, Ohio, developed in accordance with CERCLA as amended by SARA, and consistent with the NCP. This decision is based on the administrative record for the site.

Because conditions at the proposed drainage control areas meet the NCP criteria (40 CFR 300.415) for a removal action, and because of the nature of the threat described herein, I recommend initiation of response actions

APPROVED_____DATE_____

Arthur Wm. Kleinrath, DOE DAO, On-Scene Coordinator

DISAPPROVED_____DATE_____

Arthur Wm. Kleinrath, DOE DAO, On-Scene Coordinator

## 10.0. REFERENCES

DOE, 1993a. Operable Unit 9 Site Scoping Report: Volume 3 - Radiological Site Survey [Final]. Department of Energy, Albuquerque Operations Office, June 1993.

DOE, 1993b. Operable Unit 9 Site Scoping Report: Volume 12 - Site Summary Report [Draft, Revision 0].Department of Energy, Albuquerque Operations Office, October 1993.

USEPA, 1990. Superfund Removal Procedures Action Memorandum Guidance, EPA/540/P-90/004, Office of Solid Waste and Emergency Response, December 1990.