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Fernald Area Office****P. O. Box 538705  
Cincinnati, Ohio 45253-8705  
(513) 648-3155****SEP 26 1997  
DOE-1440-97**

**Mr. James A. Saric, Remedial Project Manager  
U.S. Environmental Protection Agency  
Region V-SRF-5J  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590**

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

**Dear Mr. Saric and Mr. Schneider:**

**NOTIFICATION TO PERFORM REMEDIAL ACTIONS IN PADDYS RUN STREAM TO ADDRESS RECENT EROSION CONDITIONS**

**As a follow-up to our discussions from Tuesday, September 9, 1997, the purpose of this letter is to formally outline the initial steps that the Department of Energy (DOE) and the Fernald Environmental Management Project (FEMP) will be pursuing to address the first phase of erosion and contamination concerns in Paddys Run, near the vicinity of the K-65 Ore Silos. The tasks outlined in this letter, which are Tasks 1 through 7 of the enclosed Task List, represent the first phase of this project. Tasks 8 and 9 will be completed as Phase II; while, Task 10 will be completed as Phase III.**

**As part of Phase I, the FEMP is initiating actions (such as erecting fencing and posting signs to limit access, performing Phase I Archeological survey, and performing land survey of the area) to remove a small quantity of radiologically contaminated steel debris and several downed trees located within the stream bed of Paddys Run. Additionally, at least one tree (located at the top of the escarpment, eastside of Paddys Run Stream) which is in danger of falling will also be removed in an effort to minimize any additional erosion problems. The steel debris and downed trees will be removed from the channel as part of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) soil remedial activities currently being conducted at the site under the Operable Unit 5 (OU5) Record of Decision (ROD). During removal of these items, little, if any, material will be discharged to Paddys Run Stream. For Phase I activities, access to Paddys Run channel will be negotiated from the south (approximately 500 feet south of the K-65 Silos) and the east side of Paddys Run. The construction of this initial temporary access will be conducted in a manner such that**

disturbed soils and vegetation will be staged on the plateau region above and east of Paddys Run Stream. Included in these Phase I efforts is an engineering evaluation to determine the options for the most appropriate long-term measures (to be implemented as Phases II and III) to address the severe erosion and instability concerns with the eastern bank of Paddys Run near the K-65 silos. Upon completion of the engineering assessment, the path forward for performing Phases II and III will be developed and outlined in a letter for your subsequent review and approval.

All contaminated material removed (identified by the Radiological Control Technicians using hand-held beta/gamma friskers) from the stream channel will be returned to the former production area where it will be managed in accordance with existing site procedures until final disposition. Since Radiological Control Technicians have identified detectable contamination (greater than 100 counts per minute above background) associated with both the steel debris and the soils associated with the root ball of the downed tree, care will be taken to minimize any spread of contamination. Plastic sheeting will be placed under the root ball prior to its cutting and removal from the stream bed in order to collect contaminated soil droppings. The steel debris is tentatively anticipated to be dispositioned to either Soil Pile 5 (formerly known as the 3rd Street Dirt Pile) or Soil Pile 3 (located north of the formerly Active Flyash Pile). The root ball and its associated soil are anticipated to be dispositioned to Soil Pile 1 and Operable Unit 1 (OU1), above-Waste Acceptance Criteria designated Soil Pile, respectively. Soil Pile 1 is located northeast of the former Coal Pile. Section 4 (Figure 4-7) of the draft Site-wide Excavation Plan provides a map of the various soil pile locations.

During Phase I all contaminated materials (steel debris, root ball, and soils from the root ball) will be transported in bulk to the former process area through the entrance point to Paddys Run Stream, which represents a convenient topographical egress point. Based on the sampling results obtained during Phase I, remaining contaminated soil will be excavated and properly disposed of during Phase II. Materials will be containerized if found to exceed Resource Conservation and Recovery Act (RCRA) Toxicity Characteristic Leaching Procedure (TCLP) Levels.

As part of a CERCLA remedial action, the first phase of the proposed project is exempt from the requirement to obtain administrative permit approval pursuant to Section 121(e) of CERCLA and 40 CFR Part 300. Based upon a review of the Applicable or Relevant and Appropriate Requirements (ARAR) listed in Appendix B of the OU5 ROD, DOE has determined that the permits/notification listed in the enclosed table would have been required to remove the material from the channel in absence of the CERCLA Section 121(e) permit exemption described above. In addition to listing applicable permits and notifications, the enclosed table also describes the manner in which the substantive requirements of these permits/notifications will be addressed during the performance of the project. The enclosed figure shows the project location and proposed limit of disturbance within the channel of Paddys Run. The engineering assessment will include an evaluation of whether the performance of the future, long-term actions to address the erosion and instability concerns associated with Paddys Run should also be exempt from CERCLA 121(e).

Should you have any questions or require additional information, please contact Robert Janke at (513) 648-3124.

Sincerely,



**Johnny W. Reising  
Fernald Remedial Action  
Project Manager**

FEMP:R.J. Janke

Enclosure: As Stated

cc w/enc:

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G. Jablonowski, USEPA-V, 5HRE-8J  
R. Beaumier, TPSS/DERR, OEPA-Columbus  
M. Rochotte, OEPA-Columbus  
T. Schneider, OEPA-Dayton (total 3 copies of enc.)  
F. Bell, ATSDR  
D. S. Ward, HSI GeoTrans  
R. Vandegrift, ODOH  
F. Barker, Tetra Tech  
D. Carr, FDF/52-5  
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J. Harmon, FDF/90  
AR Coordinator, FDF/78

cc w/o enc:

R. Heck, FDF/2  
S. Hinnefeld, FDF/2  
EDC, FDF/52-7

**PLANNED TASKS TO PROTECT PADDYS RUN STREAM FROM FURTHER EROSION  
IN THE AREA ADJACENT TO THE K-65 SILOS**

**PHASE I**

- TASK 1:** Notify the Regulatory Agencies
- TASK 2:** Post signs to restrict heavy equipment in the immediate area east of the fence
- TASK 3:** Remove the downed trees in the Paddys Run channel
- TASK 4:** Remove the metal debris in the Channel
- TASK 5:** Remove the tall tree currently standing on top of the bank (east side of Paddys Run Stream) but in danger of falling
- TASK 6:** Conduct radiological survey and soil sampling along eastern bank (sampling will be performed in Phase I with soils removal being performed, if necessary, in Phase II)
- TASK 7:** Implement weekly walk through inspection of the Paddys Run Channel

**PHASE II**

- TASK 8:** Construct appropriate short-term protective measures to protect the eastern bank from further erosion and reroute the Paddys Run flow to the west within the existing channel
- TASK 9:** Excavate and remove contaminated soil in the channel

**PHASE III**

- TASK 10:** Design and construct appropriate long-term protective measures to protect the eastern bank from further erosion and support future construction activities in the silo area

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**Substantive Permitting Cross-Walk**

| Condition  | Substantive Requirement  | Compliance Plan   |
|--|--|---|
| <b>Nationwide Permit 38 - Cleanup of Hazardous and Toxic Waste<sup>1</sup></b> |  |   |
| <b>Navigation</b>  | <b>No activity may cause more than a minimal effect on navigation.</b>   | <b>Paddys Run is a small intermittent stream. Work will be limited to periods when no flow exists within the channel. No temporary and/or permanent structures or fills will be placed below the ordinary high water mark of the stream. Therefore, the proposed activity will not have an adverse impact on navigation.</b>                                      |
| <b>Proper Maintenance</b>  | <b>Any structure or fill authorized shall be maintained to ensure public safety.</b>   | <b>Public access to the project area is restricted by the site perimeter fence. The project area will be staffed and inspected on a daily basis while work is being conducted to ensure workers and the public are protected. No temporary and/or permanent fills or structures requiring long-term inspection are currently planned as part of this project.</b> |
| <b>Erosion and Siltation Controls</b>  | <b>Appropriate erosion and siltation controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date.</b> | <b>Heavy equipment will be limited to the immediate vicinity of the debris. Due to the intermittent nature of Paddys Run, work within the channel will be limited to periods when no flow exists. Silt fence and/or other appropriate methods of sedimentation and erosion control will be used to minimize potential erosion and sediment transport.</b>         |

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| Condition                   | Substantive Requirement   | Compliance Plan   |
|-----------------------------|---|---|
| Aquatic Life Movement       | No activity may substantially disrupt the movement of those species of aquatic life indigenous to the water body, including those species which normally migrate through the area, unless the activity's primary purpose is to impound water. | No disruption in the movement of aquatic species is anticipated as a result of the project. No temporary and/or permanent fills or structures will be placed below the ordinary high water mark of Paddys Run. Given the intermittent nature of flow within the stream, work will be limited to periods when no flow exists within the channel. |
| Equipment                   | Heavy equipment working within wetlands must be placed on mats, or other measures must be taken to minimize soil disturbance.   | Not applicable. The project area is not located within a jurisdictional wetland. Heavy equipment will be limited to the immediate vicinity of the contaminated debris to avoid and minimize impacts to the stream bed of Paddys Run.  |
| Regional and Case-by-Case   | Activities must comply with any regional or case-by case conditions added by the Army Corps of Engineers (ACOE).  | Not applicable. No regional or case-specific conditions have been added by the ACOE.  |
| Wild and Scenic Rivers      | No activity may occur in a component of the National Wild and Scenic River System.  | Not applicable. Paddys Run is not a part of the National Wild Scenic River System.  |
| Tribal Rights               | No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.   | Not applicable. No tribal water, fishing, or hunting treaty rights have been granted for Paddys Run.  |
| Water Quality Certification | Section 401 State Water Certification must be obtained or waived.   | Ohio EPA issued its corresponding Section 401 State Water Quality Certification for NWP 38 in January, 1992. The citation for this certification and Ohio EPA's implementing regulations for its Section 401 Program (OAC 3745-32) are identified in the OU5 ARARs.   |
| Coastal Zone Management     | State coastal zone management consistency concurrence must be obtained or waived.   | Not applicable. Paddys Run is not regulated under state coastal management regulations or statues.  |

| Condition            | Substantive Requirement  | Compliance Plan   |
|----------------------|--|---|
| Endangered Species   | No activity is authorized under any Nation-Wide Permit (NWP), which is likely to jeopardize the continued existence or modify the critical habitat of a threatened or endangered species or species proposed for such designation. | No known federally listed threatened or endangered species or critical habitat will be impacted by the project. Surveys for state-listed Sloan's Crayfish ( <i>Orconectes sloani</i> ) were conducted in Paddys Run in 1993-1994. No known individuals of the species were encountered in the immediate project area during these surveys.                      |
| Historic Properties  | No activity which may affect historic properties listed, eligible of listing, in the National Register of Historic Places is authorized.   | No impacts to historic properties are anticipated. The project area will be surveyed prior to disturbance in accordance with the Programmatic Agreement Regarding Archaeological Investigations at the Fernald Environmental Management Project (March 6, 1997). Any unanticipated discoveries will be addressed in accordance with the Programmatic Agreement. |
| Notification         | When required by the terms of a NWP, the permittee must notify the ACOE in accordance these provisions.  | Not applicable. ACOE notification is not required for CERCLA remedial actions regulated by USEPA. (See NWP - 38 terms and conditions, Appendix A to 33 CFR Part 330).   |
| Water Supply Intakes | No discharges of dredged or fill material may occur in the proximity of a public water supply intake except where the discharge is for repair of the public water supply intake structure or adjacent bank stabilization.          | Not applicable. No public water supply intakes are located on Paddys Run.   |
| Shellfish Production | No discharge of dredged or fill material may occur in areas of concentrated shellfish production, unless the discharge is directly related to shellfish harvesting authorized by NWP.  | Not applicable. Paddys Run is not used for shellfish production.  |

| Condition                                | Substantive Requirement  | Compliance Plan  |
|--|--|--|
| <b>Suitable Material</b>                 | No discharge of dredged or fill material may consist of unsuitable material (e.g. trash, debris, car bodies, asphalt, etc.) and material discharged must be free from toxic pollutants in toxic amounts.                               | All contaminated debris (steel and trees w/ root mats) will be removed from the channel as part of the project. To minimize potential sediment transport, work will be limited to periods when no flow exists within the channel. Appropriate erosion and sedimentation controls will also be used to minimize sediment transport. |
| <b>Mitigation</b>                        | Discharges of dredged or fill material into waters of the United States must be minimized and avoided to the maximum extent practicable at the project site.   | Disturbances within the stream bed of Paddys Run will be limited to the immediate vicinity of the contaminated debris. Work will be limited to periods when no flow exists within the channel.   |
| <b>Spawning Areas</b>                    | Discharges in spawning areas during spawning seasons must be avoided to the maximum extent practicable.  | Work will be limited to periods when no flow exists within the channel. No adverse impacts to spawning areas is anticipated.   |
| <b>Obstruction of High Flows</b>         | To the maximum extent practicable, discharges must not permanently restrict or impede the passage of normal or expected high flows or cause the relocation of the water (unless the primary purpose of the fill is to impound waters). | No temporary and/or permanent structures or fills will be placed below the ordinary high water mark of Paddys Run as part of this project. No restrictions or impediments to normal or expected high flows will result from removal of the contaminated debris.  |
| <b>Adverse Effects From Impoundments</b> | If the discharge creates an impoundment of water, adverse effects on the aquatic system caused by the accelerated passage of water and/or the restriction of its flow shall be minimized to the maximum extent practicable.            | Removal of the debris will not result in the impoundment of water. No temporary or permanent impoundments or structures will be placed as part of this project.  |
| <b>Waterfowl Breeding Areas</b>          | Discharges into breeding areas for migratory waterfowl must be avoided to the maximum extent practicable.  | Not applicable. Paddys Run is a small intermittent stream that is not used extensively by water fowl during the breeding season. Impacts associated with debris removal will be temporary and will be conducted when no flow exists within the channel of Paddys Run.  |

| Condition  | Substantive Requirement   | Compliance Plan   |
|--|---|---|
| Removal of Temporary Fills   | Any temporary fills must be removed in their entirety and the affected areas returned to their preexisting elevation.   | Not applicable. No temporary fills will be placed as part of the project.   |
| <b>Clean Water Act Section 401 State Water Quality Certification<sup>2</sup></b> |   |   |
| Bank Stabilization   | Steps shall be taken, upon completion of the project, to ensure bank stability. This may include, but is not limited to, the placement of riprap or bank seeding.   | Disturbed soils associated with construction of the temporary access point will be restabilized upon completion of the project.   |
| Mitigation   | Any damages to the immediate environment of the project by equipment for construction or hauling will be repaired immediately.  | The movement of heavy equipment will be limited to the immediate project area. Disturbed soils associated with construction of the temporary access point will be restabilized upon completion of the project.  |
| Adverse Impacts to Water Quality and Aquatic Life                                | Care must be employed throughout the course of the project to avoid the creation of unnecessary turbidity which may degrade water quality or adversely affect aquatic life outside of the project area.               | All contaminated debris (steel and trees w/ root mats) will be removed from the channel as part of the project. The movement of heavy equipment will be limited to the immediate vicinity of the debris and will only occur during periods when no flow exists within the channel. Appropriate erosion and sedimentation controls will also be used to minimize sediment transport. |
| Notification   | The ACOE shall provide copies of the pre-discharge notifications to both the Ohio EPA and the Ohio Department of Natural Resources pursuant to the notification procedures outlined in Appendix A to 33 CFR Part 330. | ACOE notification will not be needed for Phase I activities.  |
| <b>10 CFR 1022 - Notification of Floodplain Involvement<sup>3</sup></b>          |   |   |

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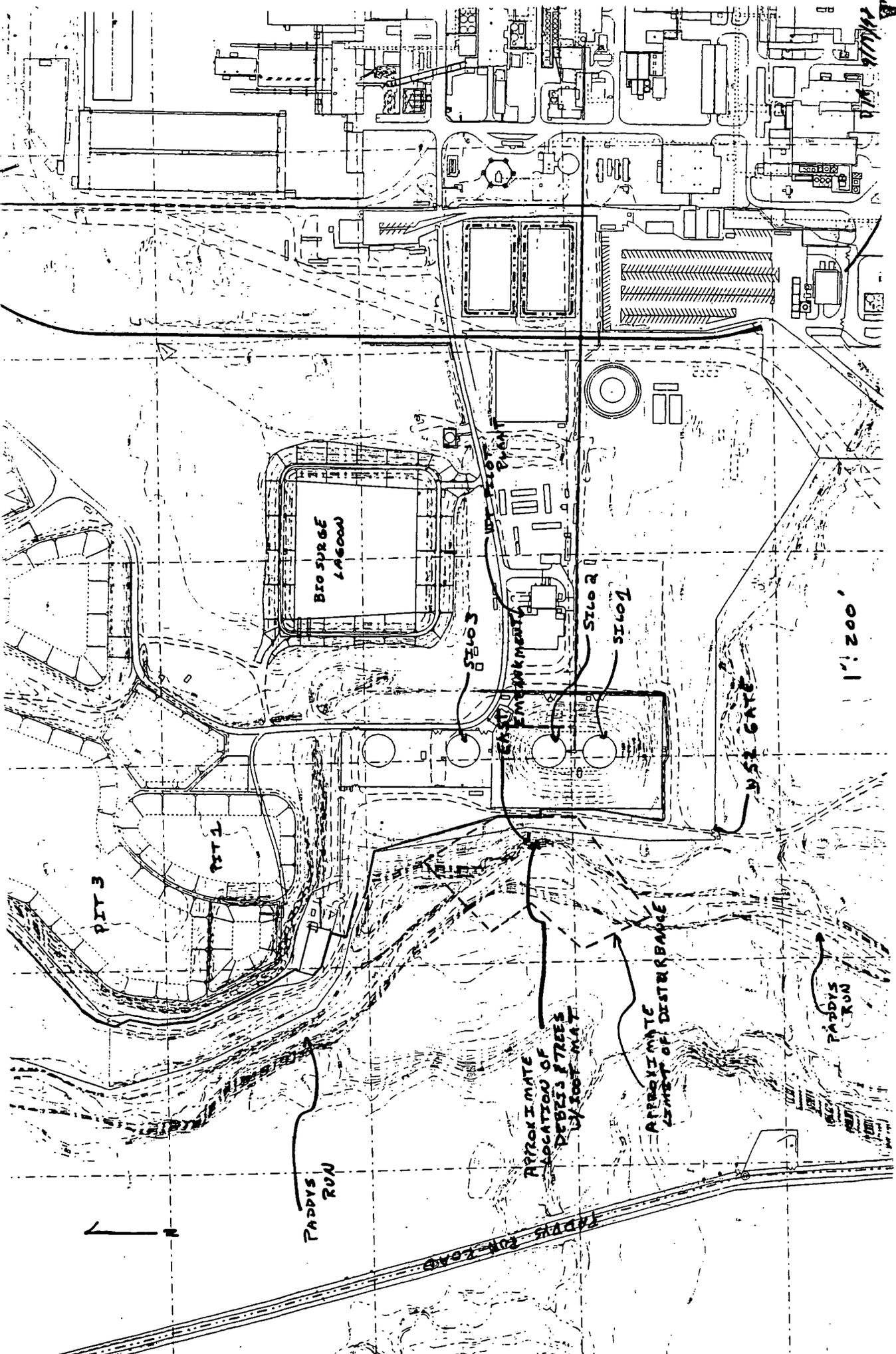
| Condition  | Substantive Requirement   | Compliance Plan  |
|--|---|--|
| <p><b>Avoidance and Minimization of Floodplain Impacts</b></p> | <p><b>Federal agencies undertaking actions within floodplains must take appropriate steps to avoid and minimize potential floodplain impacts.</b></p> | <p><b>Floodplain impacts associated with the OU5 remedial action were previous described in the OU5 Feasibility Study. The removal of the contaminated debris and downed trees will not cause any short- or long-term impacts to the floodplain of Paddys Run. No change to the 100-yr flood pool elevation will result. Impacts will be minimized by restricting the movement of heavy equipment to the immediate project area. No temporary and/or permanent structures or fills will be associated with removal of the contaminated material.</b></p> |

<sup>1</sup> See Appendix A to 33 CFR Part 330 and Appendix B of the OU5 ROD for additional detail.

<sup>2</sup> Ohio EPA granted Section 401 State Water Quality Certification for NWP - 38 on January 17, 1992. See OAC 3745-32 and Appendix B of the OU5 ROD for additional details.

<sup>3</sup> See OU5 Feasibility Study and Appendix B of the OU5 ROD for additional detail.

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BIO SPURGE LAGOON

SILO 1

SILO 2

WEST GATE

1' 200'

PIT 3

PIT 2

PADDYS RUN

APPROXIMATE LOCATION OF PEBBLES TREES BY ROOT MAT

APPROXIMATE LIMIT OF DISTURBANCE

PADDYS RUN

PADDYS RUN ROAD



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