

START

0022108

5

JUL 13 1992

ENGINEERING DATA TRANSMITTAL

Page 1 of 1

1. EDT 156132

2. To: (Receiving Organization) Decommissioning & RCRA Closure Program		3. From: (Originating Organization) Decommissioning Engineering		4. Related EDT No.: 156119	
5. Proj./Prog./Dept./Div.: 81490		6. Cog. Engr.: D. L. Smith		7. Purchase Order No.: N/A	
8. Originator Remarks: NA				9. Equip./Component No.: N/A	
				10. System/Bldg./Facility: 216-B-3 Pond System	
11. Receiver Remarks:				12. Major Assm. Dwg. No.: N/A	
				13. Permit/Permit Application No.: N/A	
				14. Required Response Date: N/A	

15. DATA TRANSMITTED					(F)	(G)	(H)	(I)
(A) Item No.	(B) Document/Drawing No.	(C) Sheet No.	(D) Rev. No.	(E) Title or Description of Data Transmitted	Impact Level	Reason for Trans- mittal	Origi- nator Dispo- sition	Receiv- er Dispo- sition
1	WHC-SD-DD-AP-015		0	216-B-3 Pond System Interim Stabilization Plan	4	1	1	

16. KEY					
Impact Level (F)		Reason for Transmittal (G)		Disposition (H) & (I)	
1, 2, 3, or 4 (see MRP 5.43)		1. Approval 2. Release 3. Information	4. Review 5. Post-Review 6. Dist. (Receipt Acknow. Required)	1. Approved 2. Approved w/comment 3. Disapproved w/comment	4. Reviewed no/comment 5. Reviewed w/comment 6. Receipt acknowledged

17. SIGNATURE/DISTRIBUTION (See Impact Level for required signatures)											
(G)	(H)	(J) Name	(K) Signature	(L) Date	(M) MSIN	(J) Name	(K) Signature	(L) Date	(M) MSIN	(G)	(H)
1	/	Cog. Eng. D. L. Smith	<i>[Signature]</i>	R2-77	7-9-92						
1	/	Cog. Mgr. D. R. Speer	<i>[Signature]</i>	R2-77	7-9-92						
		QA									
		Safety									
		Env.									
1		M. C. Hughes			L4-88						



18. Signature of EDT Originator <i>[Signature]</i> Date: 7-9-92		19. Authorized Representative for Receiving Organization M. C. Hughes Date: _____		20. Cognizant/Project Engineer's Manager <i>[Signature]</i> Date: 7-9-92		21. DOE APPROVAL (if required) Ltr. No. _____ <input type="checkbox"/> Approved <input type="checkbox"/> Approved w/comments <input type="checkbox"/> Disapproved w/comments	
---	--	---	--	--	--	--	--

93127590010

SUPPORTING DOCUMENT

1. Total Pages 26

2. Title

216-B-3 Pond System Interim Stabilization Plan

3. Number

WHC-SD-DD-AP-015

4. Rev No.

0

5. Key Words

Interim stabilization, Pond, Ditch

6. Author

Name: D. L. Smith

D. L. Smith 7/13/92
Signature

Organization/Charge Code 81490/PV21J

7. Abstract

This plan describes the steps necessary to decommission and interim stabilize the 216-B-3-3 ditch, 216-B-3 pond, and 216-B-3A lobe. This work is required to prevent migration of contamination after the ponds are deactivated, and by the Tri-Party Agreement milestone M-17-10, "Cease all liquid discharges to hazardous land disposal units unless such units have been clean closed with the Resource Conservation and Recovery Act."

APPROVED FOR PUBLIC RELEASE *UMB 7/9/92*

8. PURPOSE AND USE OF DOCUMENT - This document was prepared for use within the U.S. Department of Energy and its contractors. It is to be used only to perform, direct, or integrate work under U.S. Department of Energy contracts. This document is not approved for public release until reviewed.

PATENT STATUS - This document copy, since it is transmitted in advance of patent clearance, is made available in confidence solely for use in performance of work under contracts with the U.S. Department of Energy. This document is not to be published nor its contents otherwise disseminated or used for purposes other than specified above before patent approval for such release or use has been secured, upon request, from the Patent Counsel, U.S. Department of Energy Field Office, Richland, WA.

Legends removed per request of Legal 7/9/92
DISCLAIMER - This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, nor any of their contractors, subcontractors or their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or any third party's use or the results of such use of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof or its contractors or subcontractors. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

10. RELEASE STAMP

OFFICIAL RELEASE **5**
BY WHC
DATE JUL 13 1992
Sta. 4

9. Impact Level 4

93127390011

216-B-3 Pond System Interim Stabilization Plan

9 3 1 2 7 9 0 0 1 2



Prepared for the U.S. Department of Energy
Office of Environmental Restoration and
Waste Management



Westinghouse
Hanford Company Richland, Washington

Hanford Operations and Engineering Contractor for the
U.S. Department of Energy under Contract DE-AC06-87RL10930

Approved for Public Release

**216-B-3 POND SYSTEM INTERIM
STABILIZATION PLAN**

D. L. Smith

June 1992

Westinghouse Hanford Company
P. O. Box 1970
Richland, Washington 99352

93127590013

CONTENTS

1.0	GENERAL	4
2.0	FACILITY DESCRIPTION	4
2.1	THE HANFORD SITE	4
2.2	THE 216-B-3 POND SYSTEM	6
3.0	OBJECTIVES	13
4.0	SITE STABILIZATION ACTIVITIES.	14
4.1	PREPARATORY ACTIVITIES.	14
4.1.1	Work Procedures Preparation	14
4.1.2	Civil Surveys	14
4.1.3	Surface Contamination Zone Reduction Surveys.	14
4.1.4	Eradicating Woody Vegetation.	15
4.1.5	Completion of 216-B-3A Lobe Bypass.	15
4.2	ISOLATION AND DISMANTLING OF STRUCTURES	15
4.2.1	FM-216-B-3-3 Flowmeter and Flume.	15
4.2.2	The 216-B-351, -352, -353, and -354 Flow Control and Spillway Structures	16
4.2.3	Concrete and Piping at Entrance of 216-B-3-3 Ditch	17
4.2.4	The 216-B-3 Pond and 216-B-3A Pond Dikes.	17
4.3	INTERIM STABILIZATION	18
4.3.1	Phase 1 - Drawdown and Interim Stabilization of Pond Sediments.	18
4.3.2	Phase 2 - Placement of Clean Soil in Deepest Portion of Pond	20
4.3.3	Phase 3 - Topsoil Placement, Revegetation, and Marker Post Placement	21
4.4	INTERIM STABILIZATION OF THE 216-B-3A POND.	21
4.4.1	Phase 1 - Drawdown and Interim Stabilization of Pond Sediments	23
4.4.2	Phase 2 - Backfill of the Trench with Clean Soil.	23
4.4.3	Phase 3 - Topsoil Placement, Revegetation, and Marker Post Placement	23
4.5	POST STABILIZATION.	24
5.0	PROJECT DOCUMENTATION.	24
6.0	REFERENCES	25

93127 90014

LIST OF FIGURES

1. Map of the Hanford Site.	5
2. Map of the 216-B-3 Pond System Location.	7
3. Aerial Photograph of the 216-B-3 Pond System Looking East-Southeast	8
4. Aerial Photograph of the 216-B-3 Pond System Looking West-Northwest	9
5. Topographical Map of the 216-B-3 Pond System Showing the Interim Stabilized 216-A-29 Ditch.	10
6. Contour Map of 216-B-3 Pond Bottom	12
7. Profile View of 216-B-3 Pond Illustrating Three Phases of Interim Stabilization.	19
8. Profile View of 216-B-3A Illustrating Three Phases of Interim Stabilization.	22

9 3 1 2 7 : 9 0 0 1 5

216-B-3 POND SYSTEM INTERIM STABILIZATION PLAN**1. GENERAL**

This report has been prepared to provide a general description of the activities required to interim stabilize the 216-B-3 Pond System. The 216-B-3 pond is to be removed from service as part of the Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) milestone M-17-10 ("Cease all liquid discharges to hazardous land disposal units unless such units have been clean closed in accordance with the Resource Conservation and Recovery Act") (Ecology, et al. 1989). Interim stabilization is required to maintain the 216-B-3 pond in a stable configuration until final closure actions have been determined and initiated.

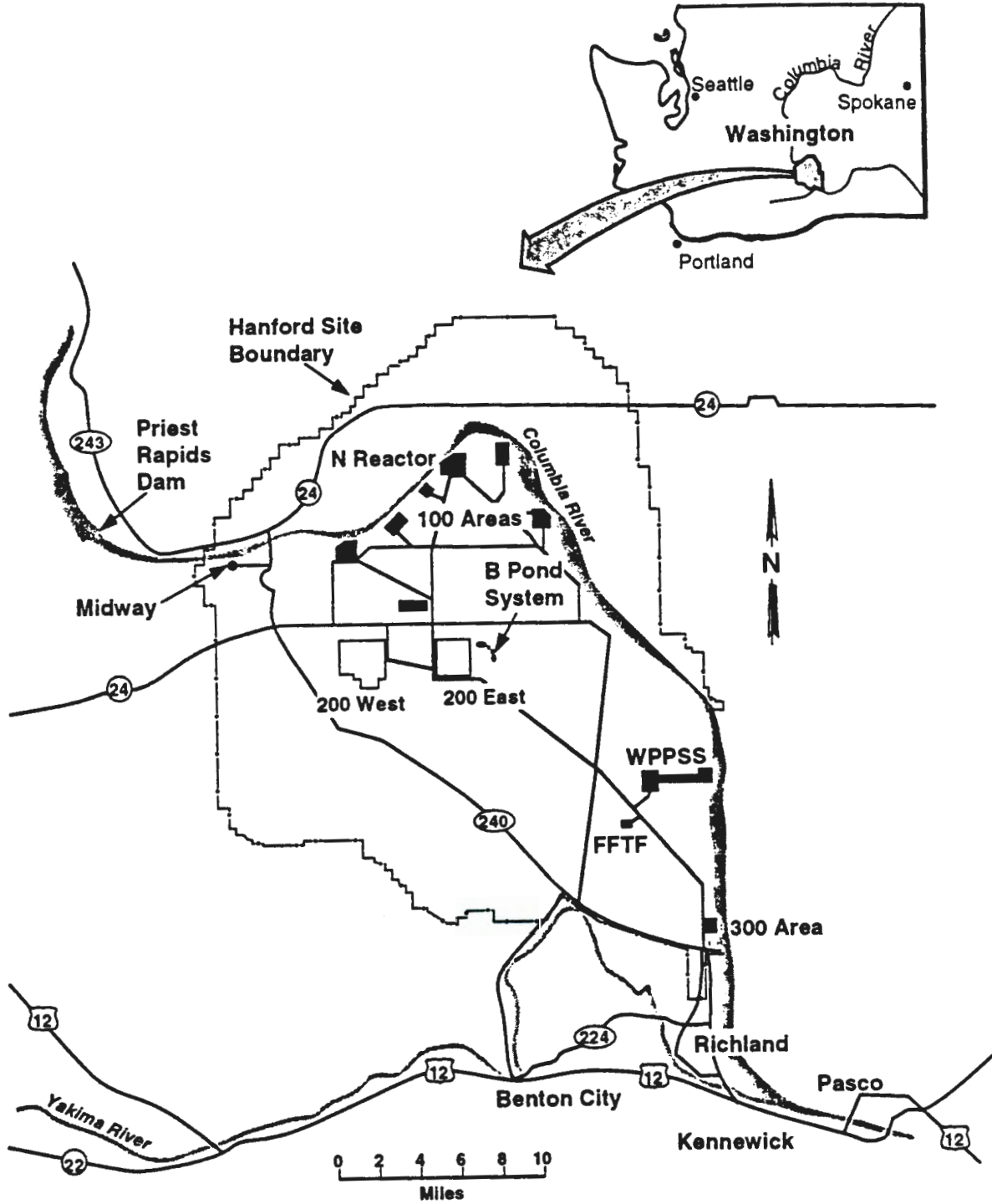
2. FACILITY DESCRIPTION**2.1. THE HANFORD SITE**

The Hanford Site covers approximately 560 square miles of semiarid land that is owned and operated by the U.S. Government and managed by the U.S. Department of Energy-Richland Field Office. The Hanford Site is located northwest of the city of Richland, Washington, in the Columbia Basin (Figure 1). The city of Richland adjoins the southernmost portion of the Hanford Site boundary and is the nearest population center. In early 1943, the U.S. Army Corps of Engineers selected the Hanford Site as the location for reactor, chemical separation, and related facilities and activities for the production and purification of plutonium.

Activities at the Hanford Site are centralized in numerically designated areas. The reactor facilities are located along the Columbia River in what are known as the 100 Areas. The reactor fuel processing and waste management facilities are in the 200 Area, which are on a plateau approximately seven miles from the Columbia River. The 300 Area, located adjacent to Richland, contains reactor fuel manufacturing facilities and the research and development laboratories. The 400 Area, 5 miles northwest of the 300 Area, contains the Fast Flux Test Facility used in testing of liquid metal reactor systems. The 600 Area covers all locations not specifically given an area designation. Adjacent to north Richland, the 1100 Area contains facilities associated with administration, maintenance, transportation, and distribution. The 3000 Area, located between the 1100 Area and 300 Area, contains engineering and administrative offices. Administrative buildings are also located in the 700 Area, which is in downtown Richland.

9 3 1 2 7 5 9 0 0 1 6

Figure 1. Map of the Hanford Site.



93127-90017

2.2. THE 216-B-3 POND SYSTEM

The 216-B-3 Pond System consists of a series of four earthen, unlined, interconnected ponds and the 216-B-3-3 ditch that receives waste water from various 200 East Area operating facilities. These four ponds are designated the 216-B-3, 216-B-3A (3A), 216-B-3B (3B), and the 216-B-3C (3C) ponds. These ponds were placed in service in 1945, 1983, 1984, and 1985, respectively.

The locations of the 216-B-3, 3A, 3B, and 3C ponds and the 216-B-3-3 ditch, all of which are part of the 200-BP-11 Operable Unit, are shown in Figure 2. Also shown in the figure is the interim stabilized 216-A-29 ditch, which is part of the 200-PO-5 Operable Unit, and the 216-B-3-1 and -2 interim stabilized ditches, which are also part of the 200-BP-11 Operable Unit. Aerial photographs of this area are presented in Figures 3 and 4. A topographic map of the area is presented in Figure 5.

The 216-B-3 pond, in service since 1945, is located in a natural topographic depression. From 1945 through 1964, waste water was discharged to the 216 B-3 pond via the unlined, earthen 216-B-3-1 ditch. The ditch widened toward the inlet of the pond, and as a result, the ditch covered a fairly large swampy area that terminated in a small shallow pond.

In 1955, the 216-A-29 ditch was placed in service to receive the Plutonium-Uranium Extraction (PUREX) Plant chemical sewer water. The 216-A-29 ditch discharged directly into the 216-B-3-1 ditch. The 216-B-3-1 ditch was decommissioned and backfilled with soil in 1964 after an accidental release of mixed fission products from the PUREX Plant. This release was discharged to the 216-B-3-1 ditch via the PUREX Plant cooling water line rather than the 216-A-29 ditch.

The unlined earthen 216-B-3-2 ditch was excavated in 1964 to replace the 216-B-3-1 ditch. The 216-A-29 ditch discharged to the 216-B-3-2 ditch approximately 1,000 ft west of the 216-B-3 pond. The 216-B-3-2 ditch was decommissioned and backfilled with soil in 1970 after an accidental release of strontium-90 from B-Plant. As a result of this release, the contaminated 216-B-3 pond bank soil was dozed into the pond, and the north, south, and west shorelines were diked with 3 ft of sand and gravel.

The unlined, earthen 216-B-3-3 ditch was excavated in 1970 to replace the 216-B-3-2 ditch, and the 216-A-29 ditch was routed to its present intersection with the 216-B-3-3 ditch approximately 1,500 ft west of the inlet to the 216-B-3 pond. The 216-B-3-3 ditch is approximately 3,700 ft long, 30 ft wide at ground level, 6 ft wide at the bottom, and 4 to 8 ft deep. A fiberglass-reinforced polyester flume and flowmeter were installed downstream of the 216-A-29 ditch and 216-B-3-3 confluence. Flow rates are recorded on a strip chart and flow recordings are taken daily.

In December 1970, the dike along the eastern shore of the 216-B-3 pond failed, and in 1971, major construction work was initiated to extend and raise the earthen dike. The dike now is approximately 1,380 ft long and 42 ft wide near the top, with basalt riprap added for erosion protection.

931279018

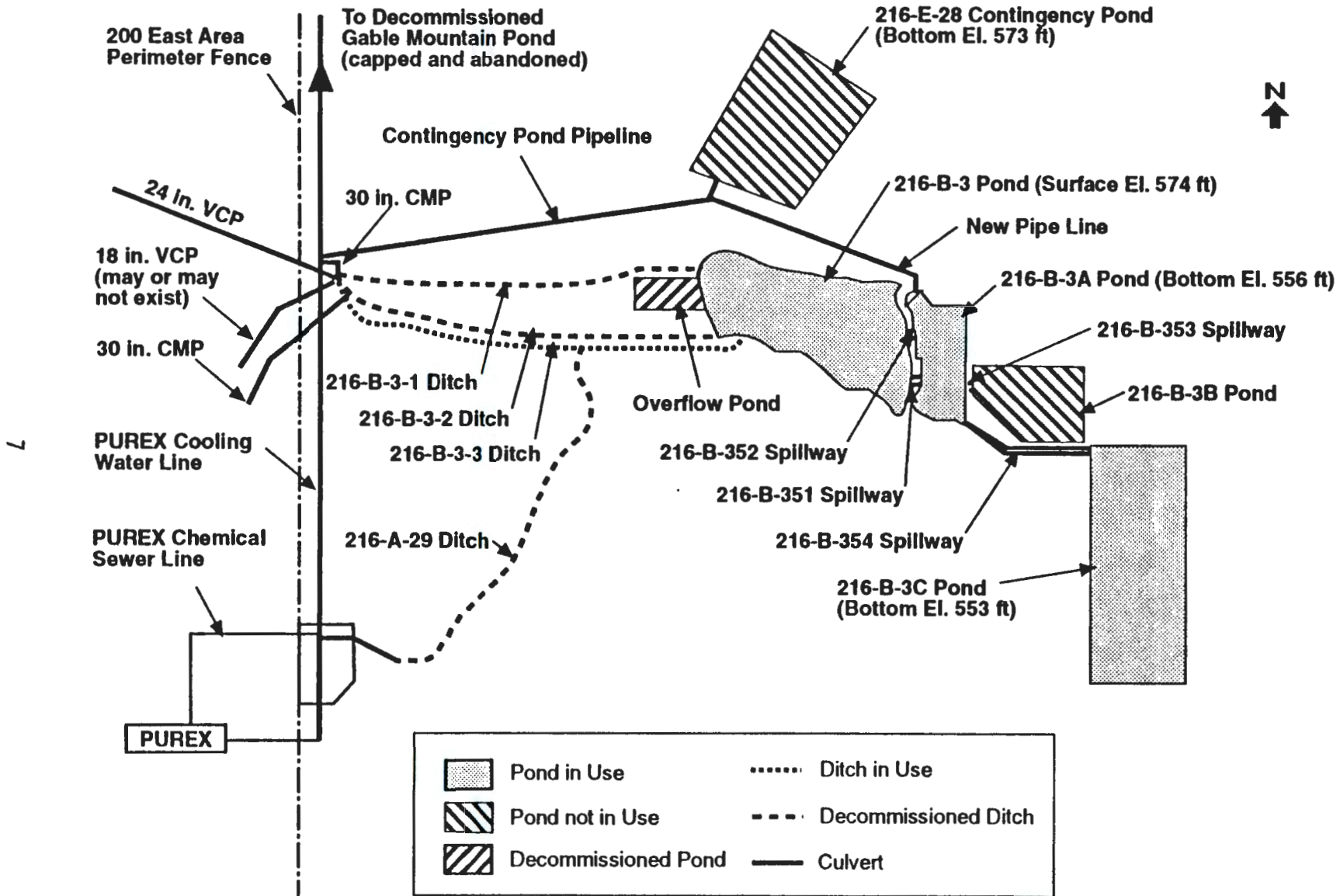


Figure 2. Map of the 216-B-3 Pond System Location.

9 3 1 2 7 - 9 0 0 2 0

8

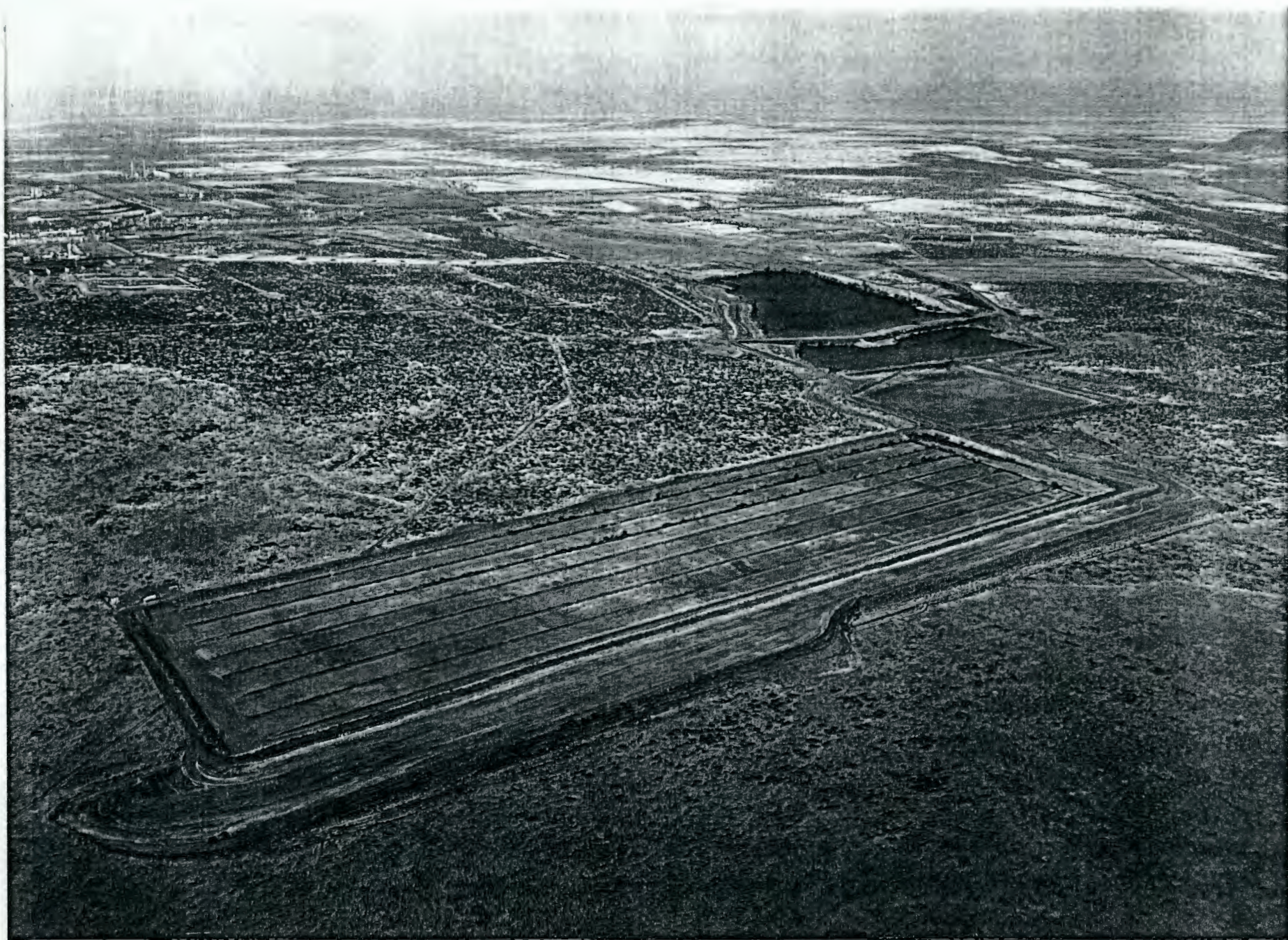
91102567-22cm



MHC-SD-DD-AP-015 Rev. 0

Figure 3. Aerial Photograph of the 216-B-3 Pond System Looking East-Southeast.

9 3 1 2 7 5 9 0 0 2 1



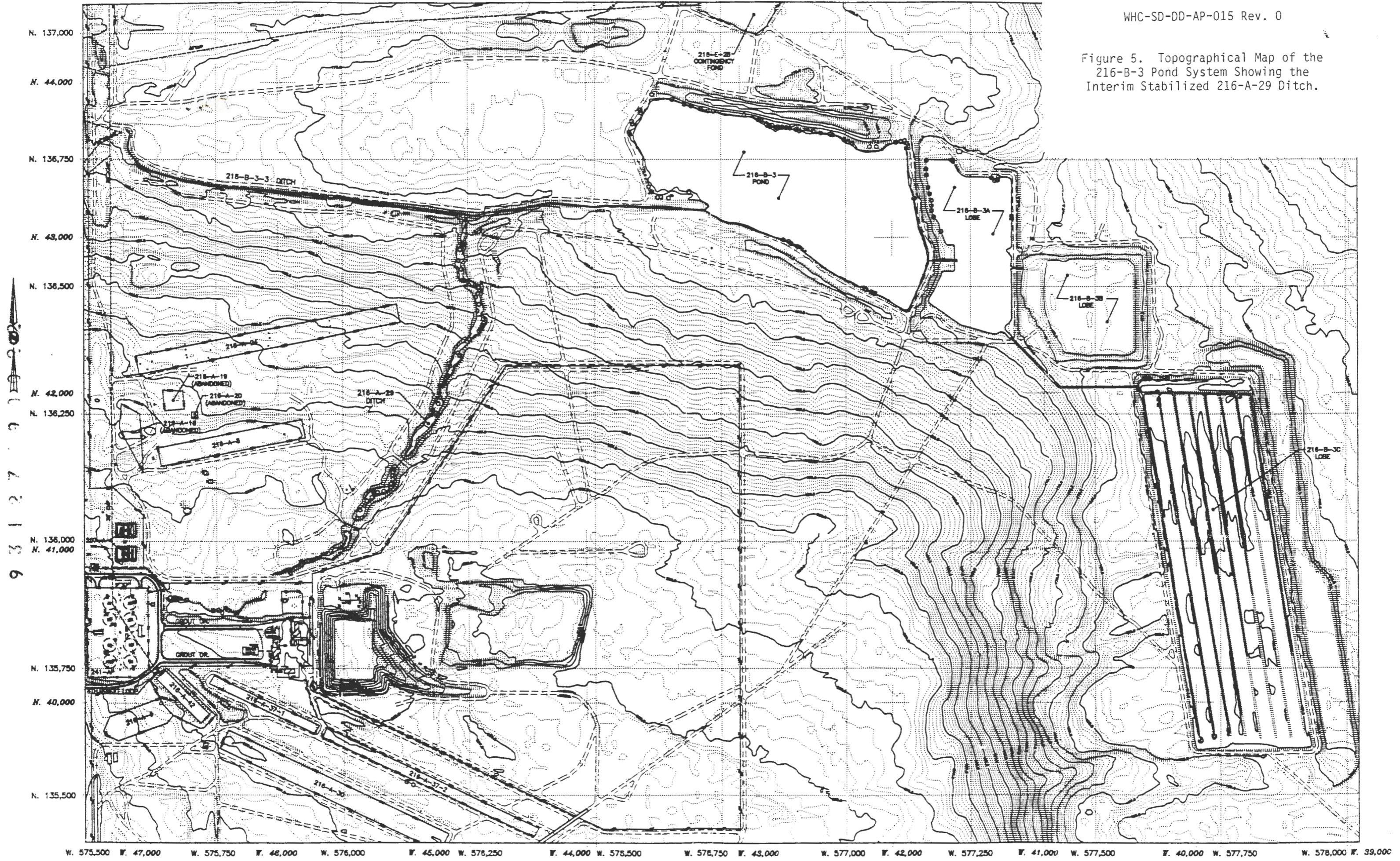
9

91102567-24cn

MHC-SD-DD-AP-015 Rev. 0

Figure 4. Aerial Photograph of the 216-B-3 Pond System Looking West-Northwest.

Figure 5. Topographical Map of the 216-B-3 Pond System Showing the Interim Stabilized 216-A-29 Ditch.



9 3 1 2 7

An area of approximately 4.1 acres immediately west of the 216-B-3 pond was diked during the 1970s to provide an overflow area for the 216-B-3 pond. This overflow area was decommissioned and backfilled in 1985.

The 216-B-3 pond currently covers a surface area of approximately 35 acres and is between 2 to 18 ft deep (Figure 6). Historical records indicate that the surface area of the pond has varied from 19 to 46 acres.

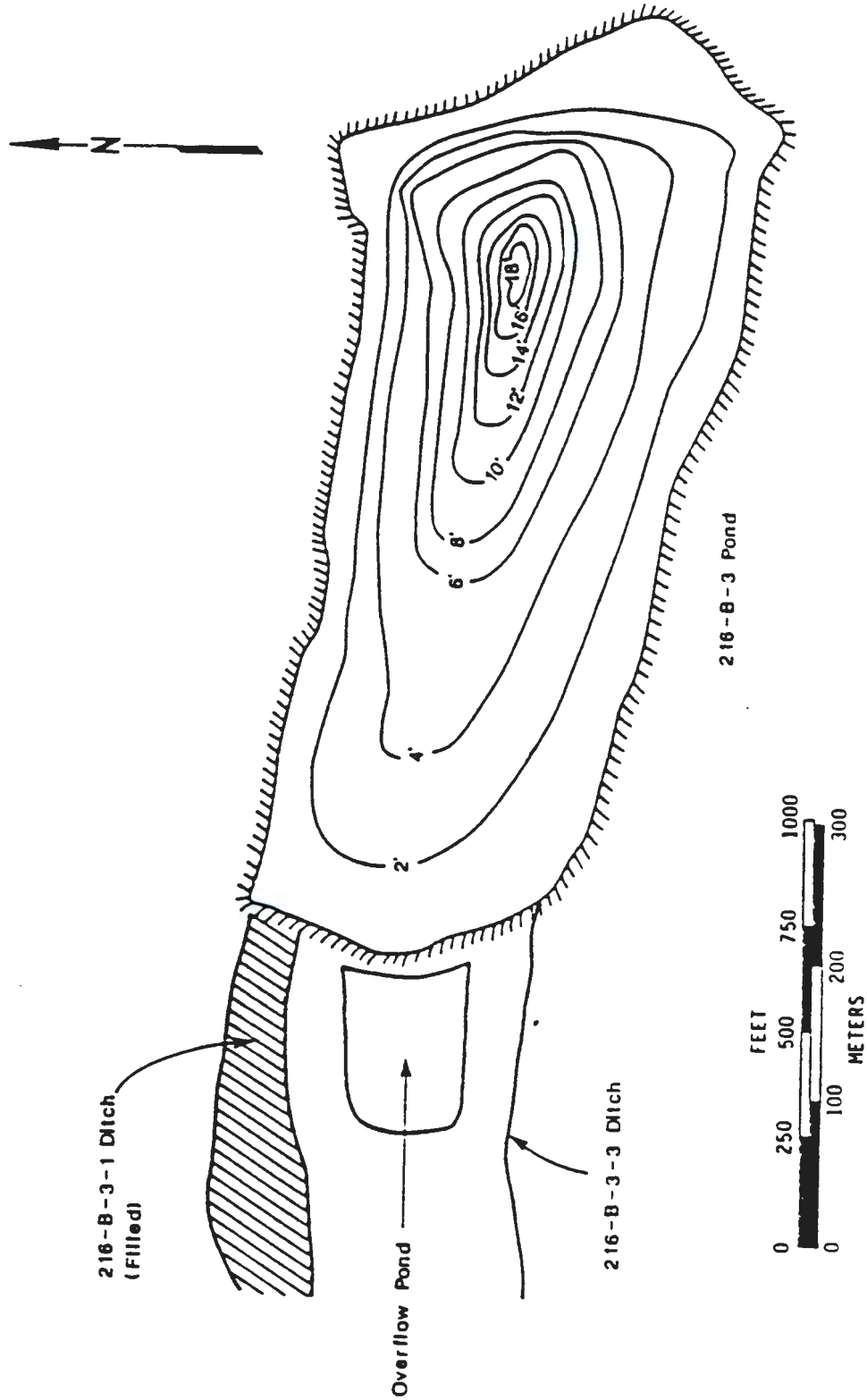
Most of the 200 East Area waste water was discharged to both the B Pond and Gable Mountain Pond (216-A-25) until 1987, when decommissioning of Gable Mountain Pond was completed (Hayward 1986). Prior to 1991, most of the waste water from the 200 East Area exclusive of the PUREX Plant chemical sewer (which discharged to the 216-A-29 ditch) and a few other facilities, was routed to the cooling water line that runs parallel to the 200 East Area perimeter fence. This line was plugged approximately 50 ft downstream of the 216-B-3-3 ditch during the decommissioning of Gable Mountain Pond. From the cooling water line, waste water was diverted to B Pond. After the 216-A-29 ditch was decommissioned in 1991 (Smith 1991), all waste water, exclusive of a few facilities, is now discharged to the 216-B-3-3 ditch.

The 216-B-3 Pond System currently receives the majority of its waste water from the PUREX Plant and the 221-B Building (B Plant). Specifically, the largest contributing streams are B-Plant cooling water, PUREX Plant cooling water, and PUREX Plant chemical sewer. Effluents entering the 216-B-3 pond consist primarily of rain and snow melt, cooling water, sanitary water, and steam condensate. Miscellaneous sources of waste water include purge water from groundwater well development, construction activities, and operational discharges from temporary sources such as new tank farm and grout vault hydrotests. Historically, B-Plant steam condensate, chemical sewer, 242-B evaporator, 244-BXR vault, 241-BY Tank Farm, and the 244-CR vault waste water were routed to the 216-B-3 pond. Cooling water and steam condensate discharged to the 216-B-3 Pond System have the potential to become radioactive if there is a breach in the barriers separating the cooling water or steam from the process solutions. Equipment failure has led to some of the larger, well documented radionuclides releases to the 216-B-3 Pond System. Waste streams that may become contaminated are monitored for radionuclides content. These streams are monitored for radiation and will automatically divert to a basin when a predetermined radiation level is reached. Very little data are available concerning chemical releases before the late 1980s. Of all the waste discharged to the 216-B-3 Pond System, B Plant, and PUREX Plant chemical sewers were most likely to contain dangerous waste. The B Plant chemical sewer has not been discharged to the 216-B-3 Pond System since 1970. Administrative and physical controls have been instituted to eliminate dangerous waste discharges via the PUREX Plant waste streams. There is no dangerous waste currently discharged to the pond system.

Because of the presence of water, there is moderately heavy vegetation along the shores of the 216-B-3-3 ditch, 216-B-3 pond, and 3A and 3C lobes, including approximately 100 trees, of which approximately half are 4 in. in diameter or greater. Vegetation is particularly heavy where the 216-B-3-3 ditch enters the 216-B-3 pond. Willows and cottonwoods constitute the majority of the trees. Except for the immediate banks of the 216-B-3, -3-3, 3A, and 3B, the majority of the surrounding area is characterized by highly

9312790033

Figure 6. Contour Map of the 216-B-3 Pond Bottom.



9 3 1 2 7 9 7 0 2 4

disturbed land. Vegetation consists of grasses and Russian Thistle. The area west of the 216-B-3 pond has been previously interim stabilized (216-B-3-1 and -2 ditches) and is planted in perennial grasses. The areas south of the 216-B-3 pond and west of the 3C lobe are relatively undisturbed land characterized by sagebrush, grasses, and other desert vegetation. The vegetation and water are attractive to wildlife. However, no species currently on the Federal List of Threatened or Endangered Species are known to use or inhabit the pond system.

A cultural resources review was conducted within the 216-B-3 Pond System area. No cultural or historic properties were found in areas that have been previously disturbed. Further review of the undisturbed areas will occur.

As part of the B Pond Influent Control Upgrade Project, a control structure has been installed that allows water to be routed away from the 216-B-3-3 ditch to the 3A pond and then into the 3C pond. This bypass also allows water to be diverted into the 216-E-28 Contingency Pond. This bypass is necessary to discontinue use of the 216-B-3 pond and 216-B-3-3 ditch.

A post and chain fence bearing warning signs (Caution Radiation Area Surface Contamination) surrounds the 216-B-3 Pond System, excluding the 216-B-3B lobe, which is posted as a hazardous area. Access roads between the lobes or across the dike are not posted. These signs are required by Westinghouse Hanford Company (Westinghouse Hanford) radiation protection standards because of the potential for radioactive contamination. Approximately 87 acres are encompassed by the surface contamination posting.

3. OBJECTIVES

The interim stabilization of the 216-B-3 Pond System will achieve several objectives. The major objective is placing the 216-B-3 pond and the 216-B-3-3 ditch in a configuration which will maintain the environmental control of any radioactive or hazardous sediments after the influent is rerouted away from these facilities. Of primary concern is the period of time between the rerouting of the influent and the initiation of closure actions. Interim stabilization is necessary to support the closure of the B-Pond System and to meet the Tri Party Agreement milestone M-17-10. The date associated with this is June 1995.

The second objective is to reduce the size of the radiologically posted zones around the 216-B-3 Pond System and reclassify the remainder as underground radioactive material. The 216-B-3 pond and 216-B-3-3 ditch will be interim stabilized and posted as underground radioactive material. The 3A lobe will no longer be operational at the conclusion of the interim stabilization and will either have all radioactive and/or hazardous posting removed or be interim stabilized and posted as underground radioactive material. Interim stabilization or decontamination work is not anticipated for the 3B or 3C lobes since both will likely be clean closed according to the Resource Conservation and Recovery Act (RCRA). However, if work is required to allow clean closure, it will proceed similar to the description found in the B Pond Closure Plan.

5
6
0
C
6
7
2
1
2
6

4. SITE STABILIZATION ACTIVITIES

This section describes the activities that will be performed to accomplish the stated objectives. These include preparatory activities, interim stabilization, and post stabilization.

4.1. PREPARATORY ACTIVITIES

The preparatory activities are those which need to be performed prior to the initiation of earth moving operations. These activities range from engineering and administrative tasks to field work preparation of the site. The significant preparatory activities are described below.

4.1.1. Work Procedure Preparation

A written work plan which provides the field personnel with the instructions necessary to safely and efficiently perform the interim stabilization will be prepared. The work plan will identify explicitly or, by reference, radiological, industrial, environmental, safety, and training requirements, as well as appropriate quality assurance, administrative, and operational procedures.

4.1.2. Civil Surveys

Prior to earth moving activities, civil surveys will be performed to record the boundaries of the current surface contamination zone for the entire 216-B-3 Pond System, as well as the hazardous material area around the 216-B-3B lobe. This will provide accurate reference points for defining areas as underground radioactive and/or hazardous materials. Survey records will also record the surrounding topography, the 216-B-3-3 streambed, structures associated with the pond system, and potentially the 216-B-3 pond bottom. This will provide an accurate description and record of the job site prior to interim stabilization and will allow determination of soil volumes required during interim stabilization. Additional surveys will be performed as required during the interim stabilization to record the exposed 216-B-3-3 ditch, 216-B-3 pond, and potentially 3A lobe sediments, the final locations of any decommissioning rubble, and to control earth moving operations. Post stabilization surveys will be performed after interim stabilization completion and are described in that section.

4.1.3. Surface Contamination Zone Reduction Surveys

Radiological surveys will be performed by Health Physics Technicians (HPT) with the objective of reducing the size of the area currently posted as "Surface Contamination." The areas of interest are the spoil piles located on the north bank of the 216-B-3 pond and the south bank of the 216-B-3-3 ditch. The portions of these spoil piles facing the pond or ditch are currently posted. Where possible, this zone will be moved back to the edge of the pond or ditch. The lobes will be surveyed, and where possible, the radiological posting will be removed.

9 3 1 2 7 9 0 0 2 6

4.1.4. Eradicating Woody Vegetation

The trees inhabiting the banks of the 216-B-3 pond, 216-B-3-3 ditch, and 3A lobe system will be treated with an herbicide at the appropriate time of the year. This will help assure that no regrowth occurs after the trees are cut. The herbicide selected will be one properly labeled for use in the situation and will be applied under the direction of a licensed Westinghouse Hanford Commercial Pesticide Applicator.

Because of the small number of large trees associated with the pond system, it will be permissible to dispose of the trees in the pond. However, the trees will be sampled as necessary to determine if they are radiologically contaminated. If the trees can be handled as nonradioactive, they will be removed from the pond system and disposed of as appropriate. This will reduce the chance of future voids and subsidence. The majority of the trees inhabiting the pond system are small and will be readily incorporated into the soil by the mechanical action of the earth moving equipment.

4.1.5. Completion of 216-B-3A Lobe Bypass

Currently, a bypass is installed that allows waste water to be routed away from the 216-B-3-3 ditch to the 3A lobe, and then into the 3B or 3C lobes. Since the 216-B-3 pond is to be interim stabilized, and the 3A lobe may not be used in the future regardless of contamination levels, a bypass is needed to route water away from the 3A lobe and into the 3B and/or 3C lobe. This bypass is currently planned to be constructed in calendar year 1993.

4.2. ISOLATION AND DISMANTLING OF STRUCTURES

Structures associated with the 216-B-3 Pond System will be removed as required to allow successful interim stabilization. All sampling necessary to determine dangerous waste contaminant levels will occur as part of the 216-B-3 Pond Closure.

4.2.1. FM-216-B-3-3 Flowmeter and Flume

The FM-216-B-3-3 recording flowmeter and flume is located in the 216-B-3-3 ditch below the confluence with the 216-A-29 ditch. The structure consist of a fiberglass flume and recording flowmeter, with concrete wingwalls at the inlet and outlet sections of the flume, a metal handrail, and fiberglass grating and bracing. Adjacent banks are lined with gabions to prevent erosion. Prior to earthwork in the 216-B-3-3 ditch, the flume and associated grating and handrail will be surveyed for radiological contamination to determine disposal requirements. The flowmeter will be dismantled; the float and float wire components will be disposed of based on sampling information for the flume. The plastic casing and remaining components of the flowmeter instrument have not been in contact with the water. They will be salvaged and disposed of as excess equipment. After all salvageable components have been removed, the flume will be hoisted out of position to an adjacent location and cut into manageable pieces. The concrete wingwalls will be knocked down and the gabions will be left in place. Concrete rubble will be located through civil surveys and consolidated in the 216-B-3-3 ditch.

9312797027

4.2.2. The 216-B-351, -352, -353, and -354 Flow Control and Spillway Structures

The 216-B-351 flow control structure provides contingency transfer of waste water from the 216-B-3 pond to the 3A pond. The 216-B-352 flow control structure provides for transfer of waste water from the 216-B-3 pond to the 3A pond. The 216-B-353 flow control structure provides for waste water transfer from the 3A pond to the 3B pond. The 216-B-354 flow control structure provides waste water transfer from the 3A pond to the 3C pond. Because the 3A pond is to be interim stabilized along with 216-B-3 pond and will therefore no longer be used, the need for the 216-B-351, -352, -353, and -354 flow control structures no longer exist. Removal of each of these structures entails essentially the same scope of work.

The 216-B-351 consist of a concrete headwall, wingwalls and a formed entrance well, galvanized chain link guard with associated metal pipe supports and bracing, one 42-in. by 36-in. downward opening metal culvert approximately 60 ft long installed below grade and approximately 100 ft open channel lined with mortar.

Concrete and mortar portions of the 216-B-351 structure will be demolished. As the embedded reenforcing bar or screen is exposed during demolition, it will be separated from the concrete with a cutting torch. Concrete and mortar waste will be consolidated in the 216-B-3 pond, located through civil surveys and interim stabilized. Before removal, the slide gate assembly and weed guard will be surveyed for radiological contamination to determine disposal requirements.

Accessible surfaces of the culvert will be wipe sampled to determine if there is any radioactive contamination. A temporary plug or cap will be installed at either end. Removal of the culvert will occur after interim stabilization has occurred and the access road over the 216-B-3 dike is no longer needed. At that time, the culvert will be excavated, cut into manageable pieces, and removed. Sampling will occur to determine if radioactive contaminants are present. Disposal will be in accordance with the results of this sampling.

Design for the 216-B-352, -353, and -354 flow control structures is essentially the same. Each has a formed steel, reinforced concrete overflow control structure at the inlet, with two control weirs and steel slide gates, a metal trash guard constructed of galvanized wire fabric supported by 2-in. diameter pipe, and expanded metal grating. From the overflow control structure, waste water is transferred via two 30-in. diameter, corrugated steel pipes to a stilling basin lined with riprap. The pipe consist of 20-ft sections, with O-ring seals and band couplers at the joints. Pipes in the 216-B-352 structure each have two 15 degree elbows at change in profile. At construction, the pipe was laid 3 to 4 ft below grade. The length of each pipe is about 120 ft.

Removal plans for the 216-B-352, -353, and -354 flow control structures are also nearly the same. Concrete portions of each structure will be demolished and consolidated in the 216-B-3 pond. Concrete rubble from each structure will be segregated and field located through civil surveys prior to

93127
90028

interim stabilization. Exposed surfaces of metal components will be surveyed for radiological contamination with hand-held detectors and sampled for dangerous waste contamination to determine proper disposal requirements. During demolition, the exposed metal reinforcing bar and screen will be cut away, sampled, surveyed, and disposed of accordingly. The corrugated metal culverts will be temporarily plugged or capped. The culverts will be removed when interim stabilization of the pond and lobes would no longer be inhibited by the excavation of these culverts. This would likely come toward the end of the project.

4.2.3. Concrete and Piping at Entrance of 216-B-3-3 Ditch

Waste water is routed from the PUREX Plant cooling water line to the head end of the 216-B-3-3 ditch through a buried 30-in. diameter, corrugated metal pipe. The exposed end of the pipe is cast into a concrete headwall structure. Waste water from the B Plant is routed to the 216-B-3-3 ditch via a buried 24-in. diameter vitrified clay pipe. A second concrete headwall structure is cast around the exposed end of the vitrified clay pipe. However, the pipe and headwall are below surrounding grade and are not visible in the field. Both influent pipes are in use at this time. A third inactive pipe opens to the 216-B-3-3 ditch about 100 ft downstream. This is a 30-in. corrugated metal pipeline, which formerly conveyed waste water from the 284-E Powerhouse. At some time in the past, the pipe was routed into the PUREX Plant cooling water line; the corrugated metal pipeline was capped and abandoned. On facility drawings, a fourth pipe, which terminates at the headend of the 216-B-3-3 ditch, is shown. This line is identified as an 18-in. vitrified clay pipe; it is presently unknown whether or not there is an active source of discharge associated with this pipe, or whether it physically exists in the field.

The 24-in. corrugated metal pipe from the PUREX Plant cooling water line will be plugged with grout. The concrete headwalls and wing walls at the outfall will be knocked down into the 216-B-3-3 ditch and covered in place. Embedded reinforcing bar or screen will be cut with an acetylene torch and removed as it becomes exposed during demolition.

The 24-in. vitrified pipe will be plugged with grout in the same manner. Because the headwall and wingwall of this structure are below the level of the adjacent ditch banks, no demolition will occur. The entire structure will be interim stabilized.

If the 18-in. vitrified pipe is determined to be present, it will be plugged in a like manner. If field investigations indicate that the 30-in. corrugated pipe is already secured, no additional action will occur there. The pipe will be plugged if it is not properly secured. No concrete headwalls are known to be associated with these structures. If one does exist, it will be interim stabilized.

4.2.4. The 216-B-3 Pond and 216-B-3A Pond Dikes

Interim stabilization activities will utilize the 216-B-3 pond dike as an access road. A culvert associated with the 216-B-351 flow control structure leads under the dike from the 216-B-3 pond to the 3A pond. This culvert will be excavated after interim stabilization activities no longer need the road across the dike.

93127190029

The 3A pond dike separates the 3A pond from the 3B pond. If dangerous waste contaminants are deemed present in the 3A pond sediment above proposed action levels, then contaminants may also be present in the dike as well. If soil must be removed from the 3B pond to accomplish clean closure, then removal of some contaminated soil from the dike could also be required. If contaminants in the dike are below proposed action levels, no further action will be taken, and the dike will be left in place. If contamination is present, some soil will be removed and consolidated in the 216-B-3 pond. The removal of contaminated soil from the dike and replacement with clean fill (to restore the dike to its current function and configuration) may be performed as an aspect of contaminated soil removal from the 3B and/or 3C ponds.

If it is determined that dangerous waste contaminants in 3B pond are so extensive as to preclude clean closure during the interim stabilization, then the earthen dike between the ponds will be presumed to be contaminated and would undergo interim stabilization with the ponds.

Piezometers associated with the 216-B-3 and 3A pond dikes will be plugged and abandoned concurrent with the interim stabilization of the 216-B-3 pond. The proposed method of abandonment is to plug the piezometer tubes (one to three per borehole) with a high solids bentonite. The Washington State Department of Ecology (Ecology) will be notified at least 72 hours before initiating the abandonment activities. Abandonment activities will be performed in accordance with WHC-CM-7-7, Environmental Investigations and Site Characterization Manual, EII 6.5, "Plugging and Abandoning of Characterization Boreholes." The piezometers may be disturbed and destroyed during earth moving activities. After earth moving has occurred, any portion of the piezometers remaining in place will have been effectively plugged and will require no further action.

4.3. INTERIM STABILIZATION OF THE 216-B-3 POND AND 216-B-3-3 DITCH

The various steps required to achieve interim stabilization are described in this section. This will occur in three phases as depicted in Figure 7. Isolation and dismantling of structures associated with the pond system will be an integral part of the interim stabilization activities.

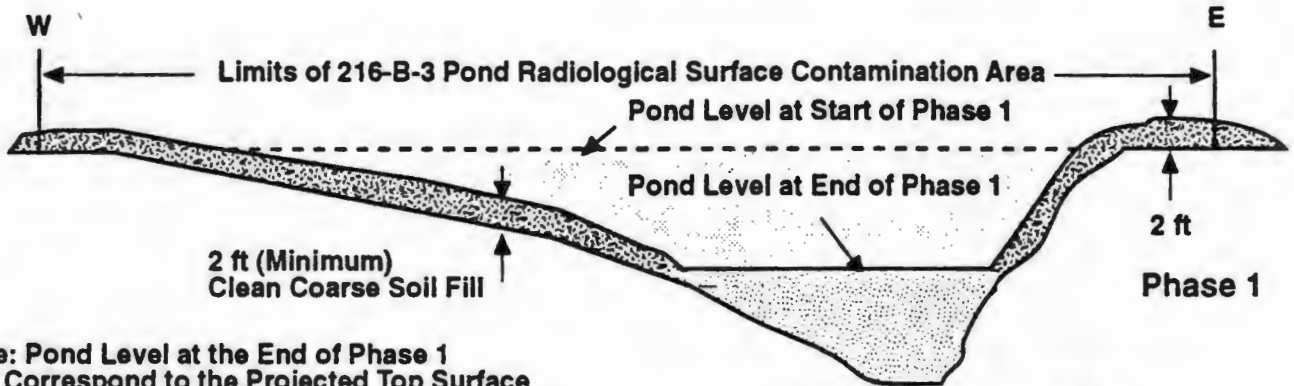
If there is decontamination work required in the 3B and 3C lobes, consolidation of the contaminated sediments into the 216-B-3 pond would occur similar to the description found in the B Pond Closure Plan.

4.3.1. Phase 1: Drawdown and Interim Stabilization of Pond Sediments

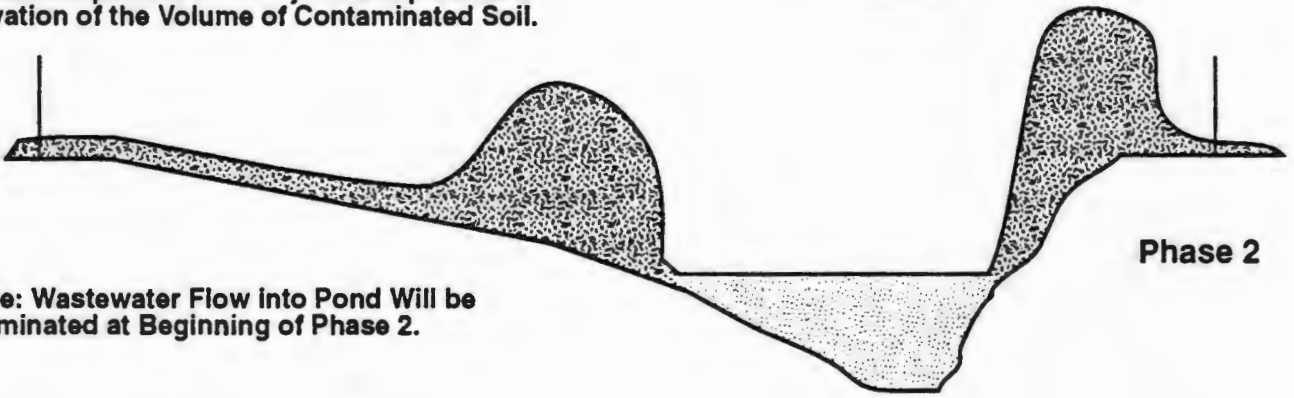
This phase will entail cross section modification of the 216-B-3-3 ditch and a reduction of waste water discharged via this ditch as needed to accommodate the interim stabilization. Waste water transfers between the 216-B-3 pond and the 3A lobe via the 216-B-352 flow control and spillway structure will be terminated after the flow of waste water to the 216-B-3 pond is reduced. Flow in the 216-B-3-3 ditch will be reduced to approximately 1,000 gal per minute after the ditch cross section has been modified, with the excess flow being routed around through an existing pipeline to the 3A lobe.

93127-90030

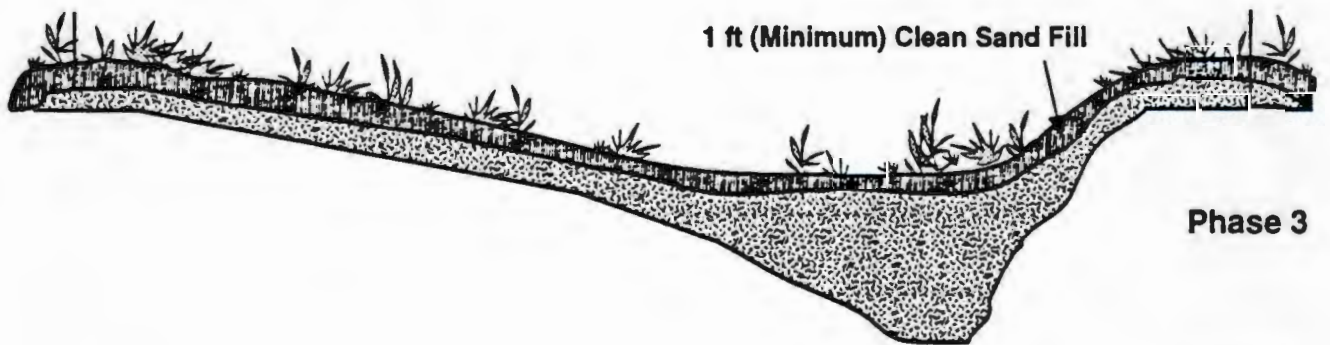
Figure 7. Profile View of the 216-B-3 Pond Illustrating Three Phases of Interim Stabilization.



Note: Pond Level at the End of Phase 1 Will Correspond to the Projected Top Surface Elevation of the Volume of Contaminated Soil.



Note: Wastewater Flow into Pond Will be Terminated at Beginning of Phase 2.



29203021.1

93127790031

To prevent exposure and dispersion of potentially contaminated ditch bottom sediments under the reduced flow conditions, the channel will be reduced from its current dimensions to a width of approximately 2 ft. Areas of contaminated soil will be pushed into the bottom of the ditch, then covered with enough clean soil to prevent airborne contamination. Care will be taken to ensure that the stream channel is not blocked for any significant length of time. Clean soil will be excavated from the spoil pile on the north bank of the 216-B-3 pond or possibly the spoil pile south of the 216-B-3-3 ditch. Additional sources of clean soil include the spoil pile located to the east of the 3C lobe, and the undisturbed areas located to the south of the 216-B-3 pond. Civil survey control will be used during earth moving activities.

A temporary culvert will be installed just upstream of the confluence of the 216-B-3-3 ditch and 216-B-3 pond. The culvert will be covered with clean backfill and will provide access across the ditch. This will facilitate equipment movement around the 216-B-3 Pond System during interim stabilization activities.

The shoreline area and surrounding surface contamination zone of the 216-B-3 pond will be interim stabilized with 2 ft (minimum) of clean backfill. Soil will be stockpiled around the perimeter of the pond while work is progressing in the 216-B-3-3 ditch. When work has been completed in the ditch, soil placement inside the surface contamination zone will begin. Work will progress toward the waters edge. Additional soil will be hauled and placed as needed. When the shoreline is interim stabilized, the flow of water into the 216-B-3 pond via the 216-B-3-3 ditch will be reduced to approximately 1,000 gal per minute.

As the pond level shrinks, the clean soil layer will be extended out over the exposed sediments following the pond bottom topography. Work will progress from the highest elevation points to the low point located east of the center of the pond. A minimum of 2 ft of clean soil will be used. Flow into the pond will be controlled in such a way that the water level will continue to shrink, allowing interim stabilization of the exposed sediments. Sediments will be allowed to dry sufficiently to allow successful interim stabilization, but not to the point as to allow air borne contamination. Water will be applied if pond sediments are in danger of drying. The water level will be stabilized at a predetermined elevation approximately equal to the projected final grade. A flow channel leading from the 216-B-3-3 ditch to the reduced pool in the 216-B-3-3 pond will be maintained. Clean soil will be placed up to the edge of this channel so that no unwetted sediments will be exposed. This will prevent overflows onto clean soils and minimize the chance for contamination.

4.3.2. Phase 2: Placement of Clean Soil in Deepest Portion of Pond

This phase will entail filling the deepest portions of the pond with clean soil. The water level will be maintained at a predetermined level that fills this portion of the pond. Clean soil will be stockpiled around this area, and the flow channel leading to this area. When enough clean soil has been stockpiled to cover potentially contaminated sediments, the flow of water

93127-20032

into the pond will be eliminated by routing water to the 3A lobe. Exposed sediments will be allowed to dry sufficiently to allow for successful interim stabilization, but not to the point as to allow air borne contamination. Water will be used if sediments are in danger of excessive drying. Clean soil will be worked out over the exposed sediments following the pond bottom topography. Enough soil will be placed in the deepest portions of the pond so that access for subsequent radiation surveillance equipment is not limited. Final grade will be determined based on actual pond bottom topography.

An additional layer of clean soil will be placed over the contaminated soils consolidated in the 216-B-3-3 ditch. A minimum of 2 ft of clean backfill (including the 1 ft of topsoil) will be used to interim stabilize the potentially contaminated soil. Final grade of the 216-B-3-3 ditch will be contingent upon the volume of contaminated soil consolidated in the ditch.

4.3.3. Phase 3: Topsoil Placement, Revegetation, and Marker Post Placement

An additional layer of topsoil will be placed over the layer of coarse soil cover to provide a suitable rooting medium. The topsoil layer will be approximately 12 in. thick and may be excavated from a nearby borrow area. If the surface layers are tightly compacted, a disc will be used to loosen them. A high nitrogen fertilizer will be spread over the site and a mixture of Siberian and Thickspike perennial wheatgrass or other suitable grasses will be planted. Straw mulch will then be broadcast over the area and crimped into the soil. The perennial mix requires autumn planting to establish a viable stand. If interim stabilization is completed too late in the fall for a planting, an annual grass such as rye can be planted in the early spring, followed in autumn by the perennial.

Once the stabilization has been completed, radioactively contaminated areas that were interim stabilized will be posted as underground radioactive material in accordance with WHC-CM-4-10, Radiation Protection.

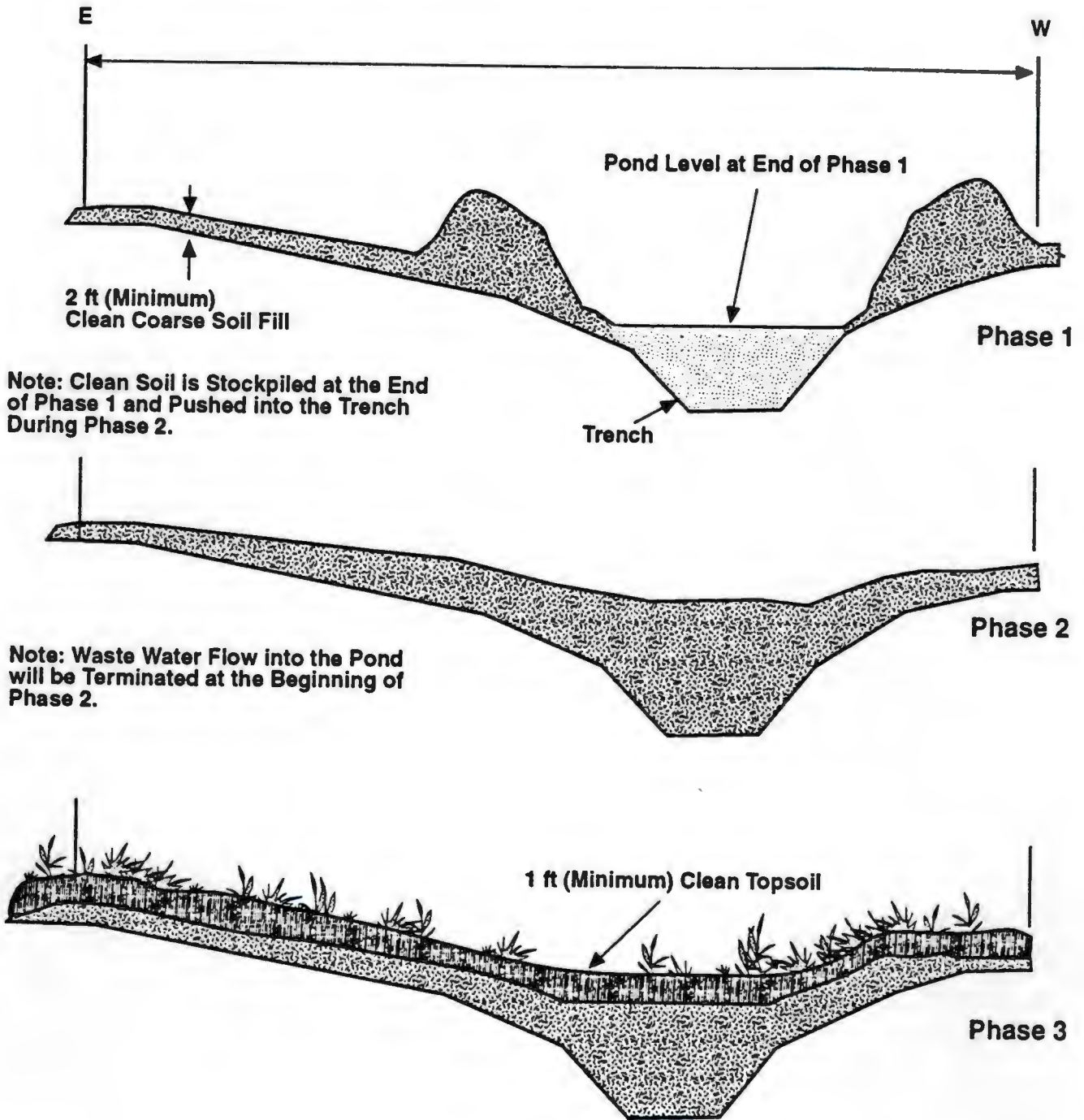
4.4. INTERIM STABILIZATION OF THE 216-B-3A POND

The 3A pond may not be used for waste water disposal in the future due to the proximity of the 216-B-3 pond. However, this lobe may not be contaminated with hazardous or radioactive constituents above proposed action levels. If it is determined that the pond is not contaminated or is lightly contaminated, it may not be necessary to interim stabilize this pond. If contamination is present, it will be removed and consolidated, if possible, in the 216-B-3 pond. The surface contamination posting will then be removed. In either case, the pond may then have a clean soil layer or other suitable rooting medium placed over it and be revegetated.

If the 3A pond must be interim stabilized, it will occur in three phases as depicted in Figure 8. Isolation and dismantling of structures associated with this pond will be an integral part of the interim stabilization. Interim stabilization of the 3A pond will not occur until interim stabilization of the 216-B-3 pond and 216-B-3-3 ditch are interim stabilized.

9312797033

Figure 8. Profile View of 216-B-3A Illustrating Three Phases of Interim Stabilization.



9 3 1 2 7 9 0 0 3 4

4.4.1. Phase 1: Drawdown and Interim Stabilization of Pond Sediments

The shoreline area and surrounding surface contamination zone will be interim stabilized with a minimum of 2 ft of clean backfill. Clean soil will be worked out over the contaminated areas, progressing towards the water's edge. When the entire shoreline and adjacent surface contamination zone have been interim stabilized, the quantity of waste water discharged to the 3A pond will be reduced, with the excess being diverted from the 3A pond to the 3B and/or 3C ponds. Waste water discharge via the 216-B-354 flow control structure will be eliminated.

As the pond level shrinks, the clean soil layer will be extended out over the exposed sediments following the pond bottom topography. Flow into the pond will be controlled such that the water level continues to shrink, allowing interim stabilization of the exposed sediments. Work will progress from the highest elevation points to the low point, which is a north-south oriented trench dug to increase the percolation capacity of the pond. The water level will be reduced to the top of the trench. Sediments will be allowed to dry sufficiently to allow successful interim stabilization but not to the point as to allow airborne contamination. Water will be applied if pond sediments are in danger of drying. A flow channel leading from the diversion pipeline to the reduced pool in the 3A pond will be maintained. Clean soil will be placed up to the edge of this channel so that no unwetted sediments will be exposed.

4.4.2. Phase 2: Backfill of the Trench with Clean Soil

This phase entails the placement of clean soil into the trench. The trench will be brought up to the surrounding grade with clean soil. The water level in the trench will be maintained at a constant elevation that is roughly equal to the projected final grade, i.e., the level with the surrounding pond bottom. Enough clean soil will be stockpiled around the trench to allow coverage of all potentially contaminated sediments. Waste water will then be diverted to the 3B and/or 3C ponds or other suitable location, and the trench allowed to empty. Sediments will be allowed to dry sufficiently to allow interim stabilization, but not to the point as to allow air borne contamination. Clean fill will then be pushed into the trench. At the end of Phase 2, the trench will have been backfilled to the surrounding grade. As the water level is reduced and eventually eliminated, exposed sediments in the flow channel between the diversion pipeline and the 3A Pond will be interim stabilized.

4.4.3. Phase 3: Topsoil Placement, Revegetation, and Marker Post Placement

An additional layer of topsoil will be placed over the layer of coarse soil cover. This will provide a suitable rooting medium. The topsoil layer will be approximately 12 in. thick, and will be excavated from a nearby borrow area. Grasses will be planted so as to minimize the erosion potential. If the surface layers are tightly compacted, a disc will be used to loosen them. A high nitrogen fertilizer will be spread over the site and a mixture of Siberian and Thickspike perennial wheatgrass or other suitable grasses will be

9 3 1 2 7 9 0 3 5

planted. Straw mulch will then be broadcast over the area and crimped into the soil. The perennial mix requires autumn planting to establish a viable stand. If interim stabilization is completed too late in the fall for a planting, an annual grass such as rye can be planted in the early spring, followed in autumn by the perennial.

Once the stabilization has been completed, the areas that were decontaminated will be surveyed to confirm that there are no radioactive materials present on the surface. Radioactively contaminated areas that were interim stabilized will be posted as underground radioactive material in accordance with WHC-CM-4-10.

4.5. POST STABILIZATION

In the period between interim stabilization and final remediation, routine surveillance and maintenance of the 216-B-3 Pond System will be performed. The Westinghouse Hanford Environmental Assurance organization will establish a schedule for periodic surveillance of the site. Initially, the frequency is expected to be semi-annually or every six months. The surveillance will include monitoring the site for the following: surface radioactive material, potential uptake of radioactivity by vegetation, intrusion into subsurface radioactive materials by animals or insects, proper posting, and general appearance and condition.

Any items found to be out of compliance will be brought to the attention of the landlord organization for that area for correction. Items which cannot be fixed immediately will be documented and tracked until they are completed. The landlord organization will periodically inspect the site to ensure the posting and barriers are in good condition. Annually, the site will be cleaned of unwanted vegetation and sprayed with a selective herbicide or sterilant. Besides the surveillances, the 216-B-3 pond system will also be placed on the schedule for herbicide application. The selective herbicide is used to control deep-rooted vegetation without harming the desirable grasses. The sterilant is used where no vegetation is wanted. The herbicide will be applied under the direction of the Westinghouse Hanford Site Commercial Pesticide Applicator.

5. PROJECT DOCUMENTATION


A final report will be prepared and issued documenting the interim stabilization. The report will include a description of the activities performed at the site and note any significant variation from the original plan. The topographic surveys from before and after stabilization will become part of the report as well as key photographs. If any noteworthy problems are encountered during the stabilization, their resolution will be documented in a section on "Lessons Learned." The final report will be entered into the administrative record for the site.

93127 90036

6. REFERENCES

- Ecology, et al., 1989, *Hanford Federal Facility Agreement and Consent Order*, Washington State Department of Ecology, U.S. Environmental Protection Agency, and U.S. Department of Energy, Olympia, Washington.
- Hayward, W. M., 1989, *Gable Mountain Pond Interim Stabilization Final Report*, WHC-SD-TI-036 Rev. 0, March 1989, Westinghouse Hanford Company, Richland, Washington.
- RL, 1990, *216-B-3 Pond System Closure/Postclosure Plan*, DOE/RL-89-28, U.S. Department of Energy, Richland Field Office, Richland, Washington.
- Smith, D. L., 1992, *216-A-29 Ditch Interim Stabilization Final Report*, WHC-SD-TI-060 Rev. 0, January 1992, Westinghouse Hanford Company, Richland, Washington.
- WHC, 1987, *Industrial Safety Manual*, WHC-CM-4-3, Volumes 1 (December 1987), 2 (December 1987), 3 (May 1988), and 4 (January 1992), Westinghouse Hanford Company, Richland, Washington.
- WHC, 1988a, *Radiation Protection*, WHC-CM-4-10, March 1988, Westinghouse Hanford Company, Richland, Washington.
- WHC, 1988b, *Environmental Investigations and Site Characterization Manual*, WHC-CM-7-7, August 1988, Westinghouse Hanford Company, Richland, Washington.
- WHC, 1988c, *Environmental Compliance*, WHC-CM-7-5, September 1988, Westinghouse Hanford Company, Richland, Washington.
- WHC, 1989, *Hanford Restoration Quality Assurance Program Plan*, WHC-CM-6-7, January 1989, Westinghouse Hanford Company, Richland, Washington.
- WHC, 1992, *Interim Stabilization for B-Pond Evaluation of Potential Methods*, WHC-SD-DD-TI-068, April 1992, prepared for Westinghouse Hanford Company by Golder Associates, Inc. (883-1758), Richland, Washington.

93127197037

Date Received: <i>7/9/92 RMB</i>	INFORMATION RELEASE REQUEST	Reference: WHC-CM-3-4			
Complete for all Types of Release					
Purpose <input type="checkbox"/> Speech or Presentation <input type="checkbox"/> Full Paper (Check only one suffix) <input type="checkbox"/> Summary <input type="checkbox"/> Abstract <input type="checkbox"/> Visual Aid <input type="checkbox"/> Speakers Bureau <input type="checkbox"/> Poster Session <input type="checkbox"/> Videotape		<input type="checkbox"/> Reference <input checked="" type="checkbox"/> Technical Report <input type="checkbox"/> Thesis or Dissertation <input type="checkbox"/> Manual <input type="checkbox"/> Brochure/Flier <input type="checkbox"/> Software/Database <input type="checkbox"/> Controlled Document <input type="checkbox"/> Other			
ID Number (Include revision, volume, etc.) WHC-SD-DD-AP-015 Rev. 0		List attachments.			
Date Release Required Immediately					
Title 216-B-3 Pond System Interim Stabilization Plan	Unclassified Category UC-	Impact Level			
New or novel (patentable) subject matter? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If "Yes", has disclosure been submitted by WHC or other company? <input type="checkbox"/> No <input type="checkbox"/> Yes Disclosure No(s).	Information received from others in confidence, such as proprietary data, trade secrets, and/or inventions? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Identify)				
Copyrights? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes If "Yes", has written permission been granted? <input type="checkbox"/> No <input type="checkbox"/> Yes (Attach Permission)	Trademarks? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes (Identify)				
Complete for Speech or Presentation					
Title of Conference or Meeting N/A	Group or Society Sponsoring				
Date(s) of Conference or Meeting	City/State	Will proceedings be published? <input type="checkbox"/> Yes <input type="checkbox"/> No Will material be handed out? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Title of Journal	DOES NOT CONTAIN CLASSIFIED OR UNCLASSIFIED CONTROLLED				
CHECKLIST FOR SIGNATORIES NUCLEAR INFORMATION					
<u>Review Required per WHC-CM-3-4</u>	<u>Yes</u>	<u>No</u>	<u>Reviewer - Signature Indicates Approval</u>	<u>Date</u>	
Classification/Unclassified Controlled Nuclear Information	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>Terry S. Hall</u>	<u>Terry S. Hall</u>	<u>7/9/92</u>
Patent - General Counsel	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>S.W. BERGLIN</u>	<u>S.W. Berglin</u>	<u>6/17/92</u>
Legal - General Counsel	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>B.D. Williamson</u>	<u>B.D. Williamson</u>	<u>6/17/92</u>
Applied Technology/Export Controlled Information or International Program	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
WHC Program/Project	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>M.C. Hughes</u>	<u>M.C. Hughes</u>	<u>6/17/92</u>
Communications	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
RL Program/Project	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>S.J. Wood</u>	<u>S.J. Wood</u>	<u>6/17/92</u>
Publication Services	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<u>M.R. Woychick</u>	<u>M.R. Woychick</u>	<u>7/10/92</u>
Other Program/Project	<input type="checkbox"/>	<input checked="" type="checkbox"/>			
Information conforms to all applicable requirements.			The above information is certified to be correct.		
References Available to Intended Audience	<input type="checkbox"/> Yes <input type="checkbox"/> No	INFORMATION RELEASE ADMINISTRATION APPROVAL STAMP Stamp is required before release. Release is contingent upon resolution of mandatory comments. 			
Transmit to DOE-HQ/Office of Scientific and Technical Information	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
Author/Requestor (Printed/Signature)	Date				
D. L. Smith <u>D.L. Smith</u>					
Intended Audience	<input type="checkbox"/> Internal <input type="checkbox"/> Sponsor <input checked="" type="checkbox"/> External				
Responsible Manager (Printed/Signature)	Date				
D. R. Speer <u>D.R. Speer</u>	<u>6/16/92</u>	Date Cancelled	Date Disapproved		

93127590038

DISTRIBUTION SHEET

To:
Decommissioning & RCRA Closure
Program

From:
Decommissioning Engineering

Date:
06/16/92

Project Title/Work Order:

216-B-3 Pond System Interim Stabilization Plan (WHC-SD-DD-AP-015 Rev. 0)

EDT No.: 156132

ECN No.:

Name	MSIN	With Attachment	EDT/ECN & Comment	EDT/ECN only
------	------	-----------------	-------------------	--------------

U.S. Department of Energy-Richland Field Office

R. G. McLeod A5-19 X*

Kaiser Engineers Hanford Company

L. B. Munnell E2-50 X

Pacific Northwest Laboratory

C. A. Brandt K6-09 X

H. A. Gard P7-54 X

Westinghouse Hanford Company

D. R. Baker X7-02 X

G. T. Berlin R1-62 X

R. G. Dieffenbacher H4-16 X

S. R. Durfee T3-11 X*

D. B. Erb H4-55 X

W. M. Hayward R2-77 X*

D. O. Hess L6-57 X

M. C. Hughes L4-88 X*

R. E. Jennings X7-02 X

A. R. Johnson T1-30 X

G. L. Kasza H5-29 X

D. M. Kelley T3-11 X

W. J. Kennedy S5-04 X

J. R. Laws H4-57 X

K. M. Leonard B2-19 X

*This signifies that the recipient will receive the document with Tiara White covers and colored photographs inserted.

93127 : 90039

Name	MSIN	With Attachment	EDT/ECN & Comment	EDT/ECN Only
R. E. Lerch	B2-35	X*		
C. L. Looney	N3-06	X		
M. B. Malady	N3-06	X		
S. F. McCoy	L4-88	X		
M. A. Mihalic (5)	L4-88	X (all copies)*		
K. J. Moss	R3-12	X		
F. J. Muller	L4-78	X		
W. L. Osborne	T3-11	X*		
S. M. Price	H4-57	X		
R. C. Roos	H4-55	X		
F. A. Ruck	H4-57	X		
W. J. Rued	H4-57	X		
M. R. Sackschewsky	H4-14	X		
D. L. Smith (5)	R2-77	X (all copies)*		
K. A. Smith	T3-06	X		
D. R. Speer	R2-77	X		
G. E. Van Sickle	R2-81	X		
B. F. Weaver	T3-11	X*		
C. R. Webb	T1-30	X		
F. G. Zwiesler	T3-06	X		
DE Files R.10.5	R2-77	X		
Central Files	L8-04	X		
EDMC	H4-22	X		
Information Release Administration	R1-08	X		

*This signifies that the recipient will receive the document with Tiara White covers and colored photographs inserted.

9312797040