1 of 1

DISTRIBUTION SHEET

To	From	Page 1 of 1
Distribution	Nuclear Fuel Evaluations	Date 3/27/95
Project Title/Work Order		EDT No. 610165
"Test Plan for K Basin Sludge Canister and Floor Sampling Device," WHC-SD-SNF-TP-013 / LD11A		ECN No.

Name	MSIN	Text With All Attach.	Text Only	Attach./Appendix Only	EDT/ECN Only
------	------	-----------------------	-----------	-----------------------	--------------

R. B. Baker	L5-01	X
A. E. Bridges	L5-01	X
G. E. Dixon	N1-41	X
D. S. Dutt	L6-13	X
T. E. Griffin	L6-13	X
J. C. Hamrick	X0-22	X
M. J. Langevin	X3-74	X
L. A. Lawrence	L5-01	X
P. J. MacFarlan	L5-01	X
B. J. Makenas	L5-01	X
P. V. Meeuwssen	L6-13	X
T. A. Meling (2)	L5-01	X
S. A. Norling	L6-57	X
R. P. Omberg	R3-85	X
D. W. Smith	R3-85	X
C. A. Thompson	X3-72	X
D. J. Trimble	L5-01	X
NFE Files	L5-01	X
SNF Project File	N1-31	X
Central Files (Orig. + 2)	L8-04	X
OSTI (2)	L8-07	X

MAR 28 1995 Sta. 21	ENGINEERING DATA TRANSMITTAL	Page 1 of 1 1. EDT 610165
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2. To: (Receiving Organization) Nuclear Fuel Evaluations 8M710		3. From: (Originating Organization) Nuclear Fuel Evaluations		4. Related EDT No.: N/A				
5. Proj./Prog./Dept./Div.: SNF		6. Cog. Engr.: T.A. Meling		7. Purchase Order No.: N/A				
8. Originator Remarks: Test Plan for two sludge sampling systems. One samples sludge off of the floor of the 100K Basins, and the other samples sludge out of 100K fuel storage canisters.				9. Equip./Component No.: N/A				
11. Receiver Remarks:				10. System/Bldg./Facility: 105KE/105KW				
				12. Major Assm. Dwg. No.: N/A				
				13. Permit/Permit Application No.: N/A				
14. Required Response Date: 3/24/95				15. DATA TRANSMITTED				
(A) Item No.	(B) Document/Drawing No.	(C) Sheet No.	(D) Rev. No.	(E) Title or Description of Data Transmitted	(F) Approval Designator	(G) Reason for Transmittal	(H) Originator Disposition	(I) Receiver Disposition
1	WHC-SD-SNF-TP-013		0	Test Plan for K Basin Sludge Cansiter and Floor Sampling Device	S.Q	1,3	1	1
16. KEY								
Approval Designator (F)			Reason for Transmittal (G)			Disposition (H) & (I)		
E, S, Q, D or N/A (see WHC-CM-3-5, Sec. 12.7)			1. Approval 4. Review 2. Release 5. Post-Review 3. Information 6. Dist. (Receipt Acknow. Required)			1. Approved 4. Reviewed no/comment 2. Approved w/comment 5. Reviewed w/comment 3. Disapproved w/comment 6. Receipt acknowledged		
17. SIGNATURE/DISTRIBUTION (See Approval Designator for required signatures)								
(G)	(H)	(J) Name	(K) Signature	(L) Date	(M) MSIN	(J) Name	(K) Signature	(L) Date
Reason	Disp							
1	1	Cog. Eng. T.A. Meling	<i>TA Meling</i>	3/23/95	L5-01			
1	1	Cog. Mgr. R.P. Omberg	<i>R.P. Omberg</i>	3/24/95	R3-88			
1	1	QA J.A. Tittle	<i>J. Tittle</i>	3-24-95	X3-78			
1	1	Safety S.A. Norling	<i>S.A. Norling</i>	3-24-95	X3-57			
		Env.						
1	1	A.E. Bridges	<i>A.E. Bridges</i>	3/23/95	L5-01			
1	1	P.J. MacFarlan	<i>P.J. MacFarlan</i>	3/24/95	X3-59			
18. T.A. Meling <i>TA Meling</i> Signature of EDT Date 3/23/95 Originator		19. R.P. Omberg <i>R.P. Omberg</i> Authorized Representative Date 3/24/95 for Receiving Organization		20. R.P. Omberg <i>R.P. Omberg</i> Cognizant Manager Date 3/24/95		21. DOE APPROVAL (if required) Ctrl. No. ☐ Approved ☐ Approved w/comments ☐ Disapproved w/comments		

RELEASE AUTHORIZATION

Document Number: WHC-SD-SNF-TP-013, Rev. 0

Document Title: TEST PLAN FOR K BASIN SLUDGE CANISTER AND FLOOR SAMPLING DEVICE

Release Date: 3/28/95

**This document was reviewed following the
procedures described in WHC-CM-3-4 and is:**

APPROVED FOR PUBLIC RELEASE

WHC Information Release Administration Specialist:

Chris Willingham
C. Willingham

3/28/95

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SUPPORTING DOCUMENT		1. Total Pages 39
2. Title Test Plan for K Basin Sludge Canister and Floor Sampling Device	3. Number WHC-SD-SNF-TP-013	4. Rev No. 0
5. Key Words Sludge, Sampling, K Basin, Test Plan	6. Author Name: T. A. Meling <i>Alvera E. Budge for</i> Signature Organization/Charge Code W8M710/LD11A	
7. Abstract This document provides the test plan and procedure forms for conducting the functional and operational acceptance testing of the K Basin Sludge Canister and Floor Sampling Device(s).		

DISCLAIMER

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8. RELEASE STAMP
<p>OFFICIAL RELEASE BY WHC DATE MAR 28 1995 <i>Sta. 21</i></p>

TEST PLAN FOR K BASIN SLUDGE CANISTER AND FLOOR SAMPLING DEVICE

March 1995

PREPARED BY:

T. A. MELING
Nuclear Fuel Evaluations

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A.E. Bridges A.E. Bridges
R.B. Baker R.B. Baker 3/24/95
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I. INTRODUCTION

1.0 PURPOSE

The purpose of this document is to provide the test procedures for the functional and acceptance testing of the K Basins In Canister Sludge Removal Equipment and Floor Sludge Sampling Equipment (sludge samplers). This test plan will be used for both sets of equipment. For the floor sludge sampling equipment, the objective will be to gather K Basin sludge found on the Basin floor and transfer it above the grating to receiving containers for subsequent shipment to an analysis laboratory. The In Canister Sludge sampling equipment will be used to extract sludge contained in 105K West Basin and 105K East Basin fuel storage canisters and transfer it to a Single Fuel Element canister for subsequent shipment to an analysis or testing facility. Both systems will provide sampling consistent with Data Quality Objectives and sampling plans currently being developed.

2.0 SCOPE

The primary objective of this test plan is to complete acceptance testing of the sludge samplers. The equipment will be qualified to Safety Class 3 (required for use in the K Basins) with this acceptance test.

3.0 APPLICABLE/REQUIRED DOCUMENTS

The following documents are applicable and/or required for the acceptance testing of the fuel handling tools:

- WHC-SD-SNF-PCP-001, Rev. 1, *305 Building Cold Test Facility Management Plan*.
- WHC-SD-SNF-FRD-005, *305 Building Cold Test Facility Functions and Requirements*.
- WHC-SD-SNF-WP-014, *Work Plan for Development of K Basin In-Canister and Floor Sludge Sampler*.
- WHC-CM-6-1, *Standard Engineering Practices*.
- WHC-IP-1026, *Engineering Practices Guidelines*.
- WHC-CM-2-1, *Procurement Manual and Procedures*, PP 1, Purchase Requisition.
- WHC-CM-3-5, *Document Control and Records Management Manual*, Section 12.7, Approval of Environmental, Safety, and Quality Affecting Documents.
- WHC-CM-4-2, *Quality Assurance Manual*.
- WHC-CM-4-3, *Industrial Safety Manual*.
- Signature Verification Data Sheet (Appendix A).

- Test Configuration Documentation List (Appendix B).

4.0 DOCUMENT INSTRUCTIONS

The following sections of this document are to be used during the sludge sampler acceptance tests.

- * The Signature Verification sheet will be signed by participating personnel who have to sign off or initial one of the acceptance test documents.
- * Test Configuration Documentation list will identify major test equipment, associated drawings numbers, sketches, etc.
- * Readiness Review checklist signoff will include names of people who review the checklist to ensure that the procedure is ready for the test to begin.
- * The job hazard analysis (JHA) and Material Safety Data Sheet (MSDS) list will include any JHAs or MSDSs necessary for worker safety.
- * The traveler form will provide instructions for testing, as well as spaces for concurrence signoffs.
- * The pre-job briefing signoff sheet will include the signatures of all personnel who attended the pre-job briefing.

II. TEST DOCUMENTATION FOR IN CANISTER SLUDGE SAMPLER

1.0 SIGNATURE VERIFICATION DATA SHEET

NAME (PRINT)	POSITION	COMPANY	SIGNATURE	INITIALS	DATE

2.0 TEST CONFIGURATION DOCUMENTATION LIST

Item: This may be major equipment, tooling, instrumentation, facility, etc. Use equipment name (and number if assigned).

Document Title: Title of drawing, sketch, figure, publication, vendor information, etc. More than one document may be applicable to a given item. List each document separately.

Document Number: Drawing, sketch, figure, vendor publication numbers, etc. Include revision if released.

Released: Enter YES, NO, or N/A (Not Applicable).

Included: Enter YES or NO. Copies of all documents not released shall be included in the current document.

ITEM	DOCUMENT TITLE	DOCUMENT NO.	RELEASED	INCLUDED

3.0 TEST READINESS REVIEW CHECKLIST

Date: _____

REVIEWERS

NAME (PRINT)	POSITION	SIGNATURE	DATE

CHECKLIST

1. Is this test procedure released?

Yes _____ No _____

Comments: _____

2. Are there any open items which need to be addressed prior to start of testing?

Yes _____ No _____

Comments: _____

TEST READINESS REVIEW CHECKLIST (CONTINUED)

3. Is the test procedure package complete, and are all pages, attachments, etc., marked TEST CONTROL COPY?

Yes _____ No _____

Comments: _____

4. Are all JHAs and MSDSs required by the procedure posted or located in the test area?

Yes _____ No _____

Comments: _____

5. Is all equipment installed or available at the test area for installation?

Yes _____ No _____

Comments: _____

6. Are all test materials available at the test area?

Yes _____ No _____

Comments: _____

7. Are the facility support systems available in the test area?

Yes _____ No _____

Comments: _____

TEST READINESS REVIEW CHECKLIST (CONTINUED)

8. Is the pre-job briefing complete.

Yes _____ No _____

Comments: _____

4.0 JOB HAZARD ANALYSIS AND MATERIAL SAFETY DATA SHEETS

The following JHAs and MSDSs are posted in the test area:

(List by title and number as applicable; this may be a hand-written entry, initialed, and dated.)

NUMBER	TITLE	DATE

5.0 TEST TRAVELER

TEST TRAVELER		Page	1 of	Number	
Job Description: In Canister Sludge Sampling Equipment testing.		Work Order No.	Prepared by:		
		Approval Designer:			
Operation Number	Test Instruction	Ref. Dwg. Proc. Spec.	Completion Sign/Stamp	Date	Notes
1.0	Pre-operational Checkout		Q T O NA E C		
1.1	Stamp "TEST CONTROL COPY" on entire procedure.		Q T O NA E C NA		
1.2	Conduct the "pre-job briefing" of operations, including a review of all procedures, drawings, and other engineering documents required to complete the test. Signoff Section 7.0.		Q T O NA E C NA		
1.3	Verify that the performance criteria is included as Attachment 1 of this traveler.		Q T O NA E C NA		

Q = QA Inspector, T = Technician, O = Operations, E = Engineer, and C = Craft

TEST TRAVELER (Continuation Sheet)			Page	2 of	Number
Operation Number	Test Instruction	Ref... Dwg... Proc. Spec.	Completion Sign/Stamp	Date	Notes
2.0	Calibration Checks: Verify that all instruments and equipment have current calibration stickers.		Q T O NA E C NA		
3.0	Issue and verify the equipment list (Attachment 2).		Q T O NA E C NA		
4.0	Complete and verify the test layout/schematic (Attachment 3).		Q T O NA E C NA		
5.0	Set up the test equipment per the test layout/schematic.		Q T O NA E C NA		
5.1	Prepare the sludge containing canister barrel. Note composition of sludge simulant used, quantity (volume), depth, and number of dummy fuel assemblies.		Q T O E C		Composition: Quantity: Depth in can: # of dummy assemblies:

Q = QA Inspector, T = Technician, O = Operations, E = Engineer, and C = Craft

TEST TRAVELER (Continuation Sheet)			Page	3 of	Number
Operation Number	Test Instruction	Ref. Dwg. Proc. Spec.	Completion Sign/Stamp	Date	Notes
6.0	Attach equipment as shown in assembly drawing for In Canister Sludge sampler. Ensure proper assembly.		Q T O E C		
6.1	Attach Sludge Delivery assembly of the sludge sampler to the Destination Single Element Fuel Canister (SEFC).		Q T O E C		
6.2	Insert the Suction Rod into the sludge containing canister, holding the rod above the sludge. Activate the pump. Record Pump power level. Move the tip of the suction rod around the canister to help retrieve all of the sludge simulant.		Q T O E C		Pump Power Level _____
6.3	Deactivate the pump. Remove the suction rod from the sludge containing canister.		Q T O E C		

Q = QA Inspector, T = Technician, O = Operations, E = Engineer, and C = Craft

TEST TRAVELER (Continuation Sheet)			Page	4 of	Number
Operation Number	Test Instruction	Ref. Dwg. Proc. Spec.	Completion Sign/Stamp	Date	Notes
6.4	Detach the Sludge Delivery assembly from the Destination Single Element Fuel Canister.		Q T O E C		
6.5	Inspect the sludge delivered to the Destination Single Element Fuel Canister (record volume), as well as the sludge remaining in the Origin Double Barrel Fuel Canister (record volume). Note Results. 1/4" chunks or larger retrieved?		Q T O E C		Weight of sludge in SEFC is _____ Weight of Sludge in DB canister is _____
6.6	Steps 6.0 through 6.4 can be repeated for additional test/training purposes.		Q T O E C		

Q = QA Inspector, T = Technician, O = Operations, E = Engineer, and C = Craft

TEST TRAVELER (Continuation Sheet)		Page	5 of 5	Number	
Operation Number	Test Instruction	Ref. Dwg. Proc. Spec.	Completion Sign/ Stamps	Date	Notes
7.0	Verify that all steps in this traveler have been completed.		Q T O NA E C NA		
List of Required Attachments: 1. Performance Criteria 2. Equipment List 3. Test Layout/Schematic Optional Attachments: 4. Acceptance Criteria for K Basin Equipment					

Q = QA Inspector, I = Technician, O = Operations, E = Engineer, and C = Craft

6.0 RETEST PROCEDURE AND DATA SHEETS

Q = Quality Assurance T = Technician E = Test Engineer 0 = Other DEFINED

Index additions by hand-written entries, initial, and date.

[illegible]

7.0 PRE-JOB BRIEFING SIGNOFF SHEET

PRE-JOB SAFETY PLANNING/JOB HAZARD ANALYSIS SIGNOFF SHEET				
Job Description: _____				
Job Location: _____				
Date	Name (Print)	Signature	Supervisor	Org. Code

III. TEST DOCUMENTATION FOR FLOOR SLUDGE SAMPLER

1.0 SIGNATURE VERIFICATION DATA SHEET

NAME (PRINT)	POSITION	COMPANY	SIGNATURE	INITIALS	DATE

2.0 TEST CONFIGURATION DOCUMENTATION LIST

Item: This may be major equipment, tooling, instrumentation, facility, etc. Use equipment name (and number if assigned).

Document Title: Title of drawing, sketch, figure, publication, vendor information, etc. More than one document may be applicable to a given item. Listed each document separately.

Document Number: Drawing, sketch, figure, vendor publication numbers, etc. Include revision if released.

Released: Enter YES, NO, or N/A (Not Applicable).

Included: Enter YES or NO. Copies of all documents not released shall be included in this document.

ITEM	DOCUMENT TITLE	DOCUMENT NO.	RELEASED	INCLUDED

3.0 TEST READINESS REVIEW CHECKLIST

Date: _____

REVIEWERS

NAME (PRINT)	POSITION	SIGNATURE	DATE

CHECKLIST

1. Is this test procedure released?

Yes _____ No _____

Comments: _____

2. Are there any open items which need to be addressed prior to start of testing?

Yes _____ No _____

Comments: _____

TEST READINESS REVIEW CHECKLIST (CONTINUED)

3. Is the test procedure package complete, and are all pages, attachments, etc., marked TEST CONTROL COPY?

Yes _____ No _____

Comments: _____

4. Are all JHAs and MSDSs required by the procedure posted or located in the test area?

Yes _____ No _____

Comments: _____

5. Is all equipment installed or available at the test area for installation?

Yes _____ No _____

Comments: _____

6. Are all test materials available at the test area?

Yes _____ No _____

Comments: _____

7. Are the facility support systems available in the test area?

Yes _____ No _____

Comments: _____

TEST READINESS REVIEW CHECKLIST (CONTINUED)

8. Is the pre-job briefing complete.

Yes _____ No _____

Comments: _____

4.0 JOB HAZARD ANALYSIS AND MATERIAL SAFETY DATA SHEETS

The following JHAs and MSDSs are posted in the test area:

(List by title and number as applicable; this may be a hand-written entry, initialed, and dated.)

[illegible]

5.0 TEST TRAVELER

TEST TRAVELER		Page 1 of 1	Number		
Job Description: Floor Sludge Sampling Equipment testing.		Work Order No.	Prepared by:		
		Approval Designator:			
Operation Number	Test Instruction	Ref. Dwg. Proc. Spec.	Completion Sign/ Stamps	Date	Notes
1.0	Pre-operational Checkout		Q T O NA E C		
1.1	Stamp "TEST CONTROL COPY" on entire Procedure.		Q T O NA E C NA		
1.2	Conduct the "pre-job briefing" of operations, including a review of all procedures, drawings, and other engineering documents required to complete the test. Signoff Section 7.0.		Q T O NA E C NA		
1.3	Verify that the performance criteria is included as Attachment 1 of this traveler.		Q T O NA E C NA		

Q = QA Inspector, I = Technician, O = Operations, E = Engineer, and C = Craft

TEST TRAVELER (Continuation Sheet)				Page	2 of 2	Number
Operation Number	Test Instruction	Ref. Dwg. Proc. Spec.	Completion Sign/Stamp	Date	Notes	
2.0	Calibration Checks: Verify that all instruments and equipment have current calibration stickers.		Q T O E C NA			
3.0	Issue and verify the equipment list (Attachment 2).		Q T O E C NA			
4.0	Complete and verify the test layout/schematic (Attachment 3).		Q T O E C NA			
5.0	Set up the test equipment per the test layout/schematic.		Q T O E C			
5.1	Prepare sludge simulant container. Note composition, quantity (volume) and depth of sludge simulant in the container.		Q T O E C		Composition: Quantity Depth in container:	

Q = QA Inspector, T = Technician, O = Operations, E = Engineer, and C = Craft

TEST TRAVELER (Continuation Sheet)			Page	3 of ____	Number
Operation Number	Test Instruction	Ref.. Dwg.. Proc.. Spec.	Completion Sign/ Stamps	Date	Notes
6.0	Attach equipment as shown in assembly drawing for Floor Sludge sampler. Ensure proper assembly.		Q I O E C		
6.1	Attach Sludge Delivery assembly of the sludge sampler to the grating level sludge receiving containers.		Q I O E C		
6.2	Insert the Core Isolation Tube into the sludge container. Activate the pump. Record the Pump Power Level.		Q I O E C		Sludge Depth Pump Power Level ____
6.3	When sludge suction activity has ended, deactivate the pump. Remove the Core Isolation Rod from the sludge container.		Q I O E C		

Q = QA Inspector, I = Technician, O = Operations, E = Engineer, and C = Craft

TEST TRAVELER (Continuation Sheet)			Page	4 of ____	Number
Operation Number	Test Instruction	Ref... Dwg... Proc... Spec.	Completion Sign/Stamps	Date	Notes
6.4	Detach the Sludge Delivery assembly from the receiving containers.		Q T O E C		
6.5	Inspect the sludge simulant delivered to the receiving containers (record volume). Note Results. 1/4" chunks or larger retrieved?		Q T O E C		Volume of simulant in receptacle ____.
6.6	Steps 6.0 through 6.4 can be repeated for additional test/training purposes.		Q T O E C		

Q = QA Inspector. T = Technician. O = Operations. E = Engineer. and C = Craft

TEST TRAVELER (Continuation Sheet)		Page	5 of 5	Number	
Operation Number	Test Instruction	Ref. . . Dwg. . . Proc. Spec.	Completion Sign/ Stamps	Date	Notes
7.0	Verify that all steps in this traveler have been completed.		Q I O NA E C NA		
List of Required Attachments: 1. Performance Criteria 2. Equipment List 3. Test Layout/Schematic Optional Attachments: 4. Acceptance Criteria for K Basin Equipment					

Q = QA Inspector, I = Technician, O = Operations, E = Engineer, and C = Craft

6.0 RETEST PROCEDURE AND DATA SHEETS

Q = Quality Assurance T = Technician E = Test Engineer 0 = Other DEFINED DEFINED

Index additions by hand-written entries, initial, and date.

[illegible]

7.0 PRE-JOB BRIEFING SIGNOFF SHEET

PRE-JOB SAFETY PLANNING/JOB HAZARD ANALYSIS SIGNOFF SHEET				
Job Description: _____				
Job Location: _____				
Date	Name (Print)	Signature	Supervisor	Org. Code

ATTACHMENT 1
ACCEPTANCE/PERFORMANCE CRITERIA

The performance criteria for the In Canister Sludge Sampler testing includes the following:

- * 85% of the sludge (by volume) that is in the canister before sampling will be delivered from the canister to the receptacle container.
- * Particles equal to or larger than 1/4" will not be picked up by the sampling system.

The performance criteria for the Basin Floor Sludge Sampler testing includes the following:

- * 85% of the sludge (by volume), that is assumed to be captured by the isolation tube, will be delivered from the canister to the receptacle container.
- * Particles equal to or larger than 1/4" will not be picked up by the sampling system.

ATTACHMENT 2
EQUIPMENT LIST

To Be provided by the 305 Cold Test Facility (CTF):

Crane
Double Barrel Canister (empty)
Camera/monitor station
Pool and associated equipment (i.e., stiffbacks etc.)
Box to contain sludge in Floor sludge test (for use in CTF pool)

To Be provided by Nuclear Fuel Evaluations:

Single Element Fuel Canister
Sludge Sampling Equipment
Above grating simulant receptacles
Dummy Fuel Elements
Sludge Simulant
Single Element Fuel Canister Table¹
Video Tape

¹ May be used in test if need arises and fabrication is complete

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ATTACHMENT 3 - TEST LAYOUT SCHEMATICS

SAMPLE CONFIGURATION LAYOUT

HANFORD JOB HAZARD ANALYSIS CHECKLIST										Page 1 of <u>1</u>	
Prepared By T.A. Meling					Date 03/23/95		Area 300		Bldg. 305		
Scope/Description: Testing of floor and canister sludge sampling systems. Sludge simulants and water will be delivered via pump from the basin and the bottom of the pit to containers.										☒ New ☐ Revised	
Emergency Contact Person(s): Primary: A.E. Bridges Secondary: P.J. MacFarlan Emergency Radio/Phone Number: 376-1337										JHA Number (not required):	
Specific Work Location(s): 305 Cold Test Facility Pool and Pit											
KNOWN OR POTENTIAL HAZARDS											
	Yes	No	✓	●	Reference		Yes	No	✓	●	Reference
1. Radiation Area Work		X	✓	●		10. Respiratory Hazards		X	✓	●	
2. Hazardous Waste Operations		X	✓	●		11. Electrical Hazards	X		✓	●	Elec. & H2O
3. Confined Space Entry		X	✓	●		12. Lock and Tag		X	✓	●	
4. Cutting/Welding		X		●		13. Scaffolding		X			
5. Roof Work		X				14. Aerial Lifts		X	✓		
6. Fall Hazards (> = 10')	X				305 Pit	15. Asbestos Removal		X	✓	●	
7. Excavation/Trenching		X		●		16. Other (see JHA Sht. 2):		X			
8. Asbestos Inspection Report		X		●		✓ = Formal training required. ● = Items that require a permit/form/report.					
9. Hazardous Materials		X	✓								
Other Hazards		Yes	No	Control Measures							
1. Temperature Extremes			X								
2. Noise			X								
3. Poor Lighting			X								
4. Animals/Insects			X								
5. Process Chemicals/Steam			X								
6. Dust			X								
7. Flammable/Combustible Materials			X								
8. Ladders			X								
9. Wet/Slippery Floors	X			Maintain caution in pool area. Mop up free water on floor.							
10. Uneven Terrain			X								
11. Open Excavations/Trenches			X								
12. Adjacent Water Hazard	X			Observe Existing Railings. Use caution around Pool.							
13. Vehicle Traffic			X								
14. Heavy Equipment			X								
15. Rigging Operation	X			Hardhats required.							
16. Manual Lifting	X			Proper lifting techniques used.							
17. Power Tools			X								
18. Pinch Points			X								
19. Falling Objects			X								
20. Sharp Objects			X								
21. Overhead Obstructions			X								
22. Site Control (Signs/Barricades)	X			Observe Facility Postings.							
23. Remote Work Area			X								
24. Other (see JHA Sht. 2):			X								
MINIMUM DRESS REQUIREMENTS: Observe Facility requirements.											
APPROVALS											
Does further evaluation of the job steps, associated hazards, or safety measures need to be performed? ☐ Yes ☒ No											
If Yes, continue job hazard analysis on the following pages.											
Supervisor, Person in Charge (Signature) <i>[Signature]</i> 3/27/95					Industrial Safety/Hygiene (Signature) <i>[Signature]</i> 3-27-95

AIM

Association for Information and Image Management

1100 Wayne Avenue, Suite 1100
Silver Spring, Maryland 20910
301/587-8202

Centimeter

Inches

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BY APPLIED IMAGE, INC.

**DATE
FILMED**

5/26/95

END