

INTEGRITY ASSESSMENT OF WASTE PIT LINER

DOCUMENT DATE 01-08-92



Department of Energy
Fernald Environmental Management Project
P.O. Box 398705
Cincinnati, Ohio 45239-8705
(513) 738-6357

2511

JAN 08 1992
DOE-352-92

Mr. Paul D. Pardi
Hazardous Waste Group Leader
Ohio Environmental Protection Agency
Southwest District Office
40 South Main Street
Dayton, Ohio 45402-2086

Dear Mr. Pardi:

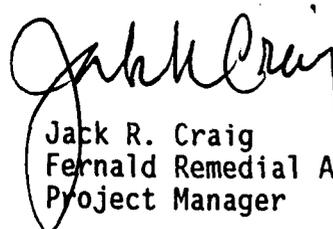
INTEGRITY ASSESSMENT OF WASTE PIT LINER

Reference: Letter, P. D. Pardi to J. R. Craig, "DOE - FMPC Hamilton County
Hazardous Waste, Waste Pit 4, Sampling," dated June 10, 1991

Enclosed, as requested in the referenced letter, are copies of some of the weekly inspection documents from the Fernald Environmental Management Project employee inspections of the waste pit 4 liner, during and after the sampling was conducted, and the independent integrity assessment conducted by the remedial design contractor after the liner was repaired.

If you have any questions concerning these evaluations, please contact Oba Vincent at FTS 774-6937 or (513) 738-6937.

Sincerely,



Jack R. Craig
Fernald Remedial Action
Project Manager

FO:Vincent

Enclosures: As Stated

1

cc w/encls.:

J. J. Fiore, EM-42, TREV
K. A. Hayes, EM-424, TREV
J. A. Saric, USEPA-V, 5HR-12
J. Benetti, USEPA-V, 5AR-26
G. E. Mitchell, OEPA-Dayton
T. Schneider, OEPA-Dayton
I. W. Diggs, WEMCO
J. P. Hopper, WEMCO
S. Mallette, Parsons
AR Coordinator, WEMCO

2511

Fernald Site SURFACE IMPOUNDMENT INSPECTION CHECKLIST (PITS, PONDS, AND LAGOONS)

ROUTINE INSPECTION NON-ROUTINE INSPECTION

3

INSPECTOR NAME:		BADGE NUMBER:	DATE:	TIME:
SUPERVISOR NAME:		BADGE NUMBER:	DATE:	TIME:
AREA:	WEATHER:			
Pit # 4	Sunny Warm			
		2172	10-29-91	2:34
		187	10/29/91 10/30/91	0800

	STATUS		DESCRIBE UNACCEPTABLE CONDITION	WORK REQUEST NUMBER	DATE CORRECTED	YES/FOLLOW INSPECTION	YES AEDO NOTIFIED
	Acceptable	Unacceptable					
Protective Cover on Dikes	✓						
≥ 2-Foot Freeboard	✓						
Condition of Liner	✓						
Condition of Patches	✓						
Groundwater Wells: Ground Surface Intact	✓						
Fencing System	NA						
Life Preservers Accessible	NA						
Boat or Rait Accessible	NA						
Berm Condition: No earth shifting No significant erosion No water penetrating	✓						

N/A can be used to indicate not applicable.

SUPERVISOR SIGNATURE:	DATE:
<i>John A. [Signature]</i>	10/30/91

PIT 4 COVER FML INSPECTION FORM

DATE RECEIVED BY ENVIRONMENTAL COMPLIANCE _____

DATE REVIEWED BY ENVIRONMENTAL COMPLIANCE _____

INSPECTOR
511

Eldon K. Smith

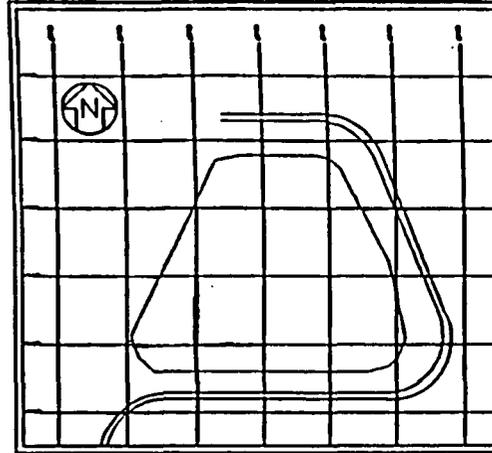
DATE

10-15-91

TIME

WEATHER

Cloudy Day



PIT 4

4

John A. Hill 10/16/91

CONDITION OF SOIL AT EDGE OF FML (soil erosion should not expose FML below grade)	SATISFACTORY	UNSATISFACTORY <small>Location and when corrected</small>	NATURE AND DATE OF CORRECTIVE ACTIONS
CONDITION OF ANCHOR TRENCHES (FML should be securely anchored in trench)	OK		
CONDITION OF FIELD SEAMS (tears)	OK		
CONDITION OF FACTORY SEAMS (tears)	OK		
CONDITION OF FML PANELS (holes)	OK		
CONDITION OF HOLD-DOWN PILLOWS (secure)	OK		

Fernald Site
SURFACE IMPOUNDMENT INSPECTION CHECKLIST
 (PITS, PONDS, AND LAGOONS)

ROUTINE INSPECTION NON-ROUTINE INSPECTION

19

2511

INSPECTOR NAME:	BADGE NUMBER: 2172	DATE: 10-22-91	TIME: 2:00 pm
SUPERVISOR NAME:	BADGE NUMBER: 187	DATE: 10/22/91	TIME: 1740
AREA: Pit 4	WEATHER: Clear 70°		

	STATUS		DESCRIBE UNACCEPTABLE CONDITION	WORK REQUEST NUMBER	DATE CORRECTED	YES/FOLLOW INSPECTION	YES AEDO NOTIFIED
	Acceptable	Unacceptable					
Protective Cover on Dikes	OK						
≥ 2-Foot Freeboard	OK						
Condition of Liner	OK						
Condition of Patches	OK						
Groundwater Wells: Ground Surface Intact	OK						
Fencing System	OK						
Life Preservers Accessible	OK						
Boat or Raft Accessible		N/A					
Berm Condition: No earth shifting No significant erosion No water penetrating	OK						

N/A can be used to indicate not applicable.

SUPERVISOR SIGNATURE: 	DATE: 10/22/91
---------------------------	-------------------

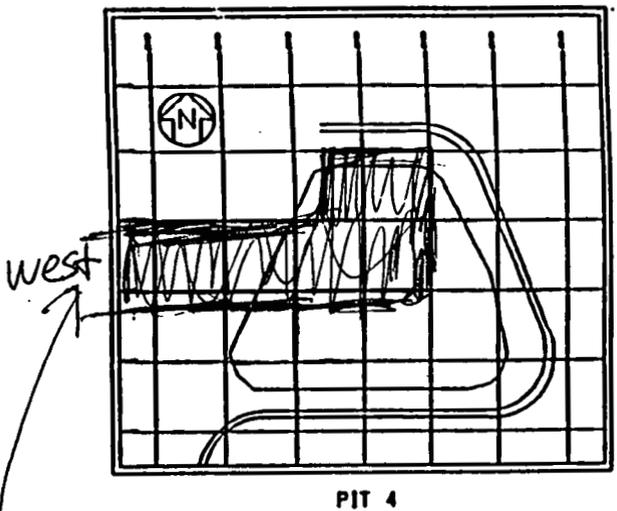
PIT 4 COVER FML INSPECTION FORM

DATE RECEIVED BY ENVIRONMENTAL COMPLIANCE _____
DATE REVIEWED BY ENVIRONMENTAL COMPLIANCE _____

2511

INSPECTOR Eldred Bishop
DATE 9 10-1-91
TIME 10:00AM
WEATHER SUNNY WARM High TO

Susan Leon 10/2/91



	SATISFACTORY	UNSATISFACTORY <small>Describe and show location</small>	INITIAL AND DATE OF CORRECTIVE ACTION
CONDITION OF SOIL AT EDGE OF FML (soil erosion should not expose FML below grade)	good	"L" shape platform (wood) from westside to center 20F wide	
CONDITION OF ANCHOR TRENCHES (FML should be securely anchored in trench)	good	" (see drawing) "	
CONDITION OF FIELD SEAMS (tears)	good	" "	
CONDITION OF FACTORY SEAMS (tears)	good	" "	
CONDITION OF FML PANELS (holes)	good	" "	
CONDITION OF HOLD-DOWN PILLOWS (secure)	good	" "	

PIT 4 COVER
FML INSPECTION FORM

DATE RECEIVED BY ENVIRONMENTAL COMPLIANCE _____

DATE REVIEWED BY ENVIRONMENTAL COMPLIANCE _____

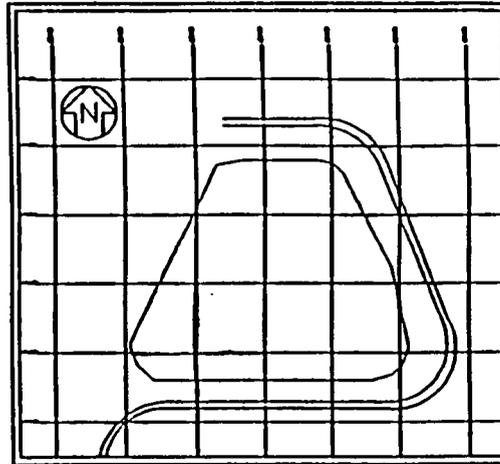
1152

INSPECTOR John Bush

DATE 9-23-91

TIME 0800

WEATHER _____



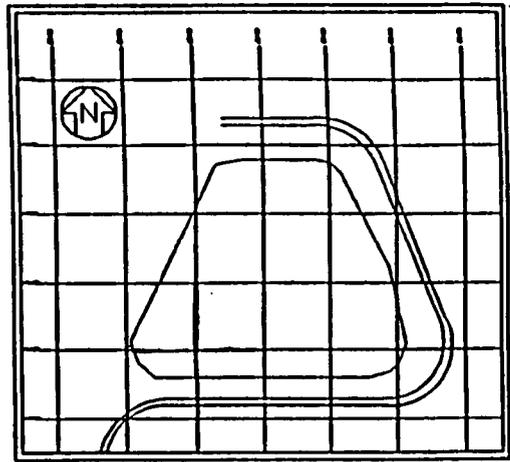
PIT 4

	SATISFACTORY	UNSATISFACTORY <small>Location and when corrected</small>	INITIALS AND DATE OF CORRECTIVE ACTION
CONDITION OF SOIL AT EDGE OF FML (soil erosion should not expose FML below grade)	OK	CONTRACTOR WORKING ON PIT 4	
CONDITION OF ANCHOR TRENCHES (FML should be securely anchored in trench)	OK		
CONDITION OF FIELD SEAMS (tears)	OK		
CONDITION OF FACTORY SEAMS (tears)	OK		
CONDITION OF FML PANELS (holes)	OK		
CONDITION OF HOLD-DOWN PILLOWS	N/A		

PIT 4 COVER
FML INSPECTION FORM

DATE RECEIVED BY ENVIRONMENTAL COMPLIANCE _____
DATE REVIEWED BY ENVIRONMENTAL COMPLIANCE _____

INSPECTOR V. Bowles
DATE 9/17/91
TIME 1100 hrs
WEATHER Sunny



PIT 4

	SATISFACTORY	UNSATISFACTORY <small>Condition and when reported</small>	NATURE AND DATE OF CORRECTIVE ACTION
CONDITION OF SOIL AT EDGE OF FML (soil erosion should not expose FML below grade)	✓		
CONDITION OF ANCHOR TRENCHES (FML should be securely anchored in trench)	✓		
CONDITION OF FIELD SEAMS (tears)	✓		
CONDITION OF FACTORY SEAMS (tears)	✓	I.T. Drilling + Sampling	
CONDITION OF FML PANELS (holes)	✓		
CONDITION OF HOLD-DOWN PILLOWS (secure)	✓		

PIT 4 COVER
FML INSPECTION FORM

DATE RECEIVED BY ENVIRONMENTAL COMPLIANCE _____

DATE REVIEWED BY ENVIRONMENTAL COMPLIANCE _____

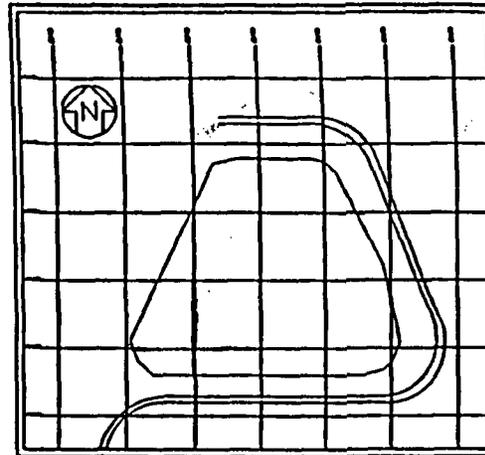
2511

INSPECTOR N. Bowles

DATE 9-3-91

TIME 1400 hrs

WEATHER Starting to rain / warm



11

PIT 4

SATISFACTORY

UNSATISFACTORY
Condition and when necessary

INITIAL AND DATE
OF CORRECTIVE ACTION

	SATISFACTORY	UNSATISFACTORY <small>Condition and when necessary</small>	INITIAL AND DATE OF CORRECTIVE ACTION
CONDITION OF SOIL AT EDGE OF FML (soil erosion should not expose FML below grade)	✓		
CONDITION OF ANCHOR TRENCHES (FML should be securely anchored in trench)	✓		
CONDITION OF FIELD SEAMS (tears)	✓		
CONDITION OF FACTORY SEAMS (tears)	✓		
CONDITION OF FML PANELS (holes)	✓	A.S.I drilling South Central portion of Pit	
CONDITION OF HOLD-DOWN PILLOWS (secure)	✓		