6488

Department of Energy

Ohio Field Office
Fernald Closure Project
175 Tri-County Parkway
Springdale, Ohio 45246
(513) 648-3155

APR 6 2005

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

DOE-0213-05

Mr. Thomas Schneider, Project Manager
Ohio Environmental Protection Agency
Southwest District Office
401 East Fifth Street
Dayton, Ohio 45402-2911

Dear Mr. Saric and Mr. Schneider:

TRANSMITTAL OF THE REVISED OPERABLE UNIT 1 TRANSPORTATION AND DISPOSAL PLAN UPDATE; ADDITIONAL LOADOUT FACILITY FOR SP-7, WASTE PITS REMEDIAL ACTION PROJECT, FERNALD CLOSURE PROJECT

References: 1) Letter, Tom Schneider to William J. Taylor, Re: "Disapproval – Transportation Disposal Plan for OU1"

2) Letter, J. A. Saric to Johnny W. Reising, RE: "Transportation and Disposal Plan; SP-7 IP

The purpose of this letter is to transmit the revised draft Final Transportation and Disposal Plan for OU1 for the United States Environmental Protection Agency and Ohio Environmental Agency review and approval. The Plan details provisions for utilizing rail transportation for off site disposal of the above WAC soils in SP-7 following the railcar loading and shipping program used by the Waste Pits Remedial Action Project. Also enclosed are responses to comments received from your agency.

The enclosed draft Final Plan incorporates the discussions held on February 24, 2005, during a meeting between DOE, OEPA, and Fluor Fernald to review OEPA's comments; and, the responses to comments.

If you have any questions or require additional information, please contact Dave Lojek at (513) 648-3127.

Sincerely,

William J. Taylor
Director

FCP:Lojek

Enclosure: As Stated

cc w/ enclosure:
D. Lojek, OH/FCP
D. Pfister, OH/FCP
T. Schneider, OEPA-Dayton (three copies of enclosure)
G. Jablonowski, USEPA-V, SR6J
M. Cullerton, Tetra Tech
F. Bell, ATSDR
M. Shupe, HSI GeoTrans
R. Vandegrift, ODH
AR Coordinator, Fluor Fernald, Inc./MS78

cc w/o enclosure:
J. Reising, OH/FCP
K. Alkema, Fluor Fernald, Inc./MS01
D. Capelle, Fluor Fernald, Inc/MS 52-0
J. Chiou, Fluor Fernald, Inc./MS64
D. Dalga, Fluor Fernald, Inc./MS 52-1
C. Murphy, Fluor Fernald, Inc./MS77
Project File, MS52-5

SP-7 Implementation Plan

1.0 Introduction

In June 2004, an Implementation Plan for Waste Pit decontamination and demolition was submitted to the agencies (#15000-PL-0001). The comments/response from DOE required a separate plan submittal to the agency for review and approval to complete loadout of remaining above waste acceptance criteria (AWAC) materials located inside the SP-7 Stockpile. These AWAC materials are planned to be loaded outside of the Waste Pits Project (WPP) Railcar Loadout Building (RLB). The SP-7 Stockpile is configured into two sections within the controlled boundary. The SP-7 Stockpile consists of materials from soil excavations throughout the former production area, the abandoned outfall line, filter cake residue from the Advanced Wastewater Treatment (AWWT) Facility, demolition debris, and various waste materials from other remedial activities characterized as being above the On-Site Disposal Facility (OSDF) WAC.

The infrastructure to remove and load SP-7 Stockpile materials into railcars consists of:

Trailer complex areas for controlled entry and worker cool down
300' by 30' railcar loading area
Platform for Installation/Closure of IP-1 package
Available water for dust control
Trenching for water management
Fencing/berms for boundary and runoff control
Scale installation for weighing cars

This document addresses redesign investigation, removal action approach, water management, fugitive emissions and reference drawings depicting the operation loadout area.

2.0 SP-7 Stockpile Physical dimensions and characterization

2.1 Physical Description of SP-7 Stockpile

Soil Pile 7 lies in Area 6 just north of the Area 3B boundary in the northwest corner of the Former Production Area (FPA). Configured into two sections, east and west, the SP-7 Stockpile consists of materials from soil excavations throughout the former production area and the abandoned outfall line, as well as filter cake residue from the AWWT, demolition debris, and various waste materials from waste management activities. Prior to May 2004, the WPP project periodically excavated and hauled material out of SP-7 for eventual placement in bins at the RLB for sampling. The SP-7 material was sampled to verify Envirocare WAC compliance before load-out into railcars.

The west side of the stockpile was cordoned off and designated as inactive to facilitate in-situ sampling, which commenced May 2004. The east side of the stockpile was closed in February when insitu sampling commenced. The western section consists of approximately 47,000 cubic yards of material (70,500 Tons). The eastern section contains approximately 15,000 cubic yards (22,500 Tons). It is estimated that the east pile has less than 10 % concrete debris by volume and the west pile is believed to have less than 16%.

2.2 SP-7 Stockpile Material Characterization

The material in SP-7 has been sampled in-situ in three phases and characterization was completed after sampling. The first phase of sampling and analysis was conducted on approximately 42,500 cubic yards of material in the west section May/June 2004. A second phase of sampling was conducted in late November 2004 for 4500 cubic yards of material subsequently added to SP-7 prior to its segregation and the creation of an eastern section for all remaining material. The final phase of characterization was conducted on the eastern pile in February 2005. Remaining AWAC material will be sampled prior to placement in the SP-7 area. It is forecasted that current and future material added to SP-7 could total as much as 110,000 Tons.

The analytical suite selected for SP-7 sampling was based on process knowledge, RI/FS sample data, and pre-design physical and real-time sampling results. The defined list of analytes included (12) radionuclides, (9) inorganic and (32) organic constituents, pH, and PCBs. Soil proctors were performed to measure the in-situ moisture and define the soils optimum moisture. The sample frequency used reflected the WPP waste bin sampling method, (approximately one sample per 400 cubic yards of material). To ensure representative sampling, boring locations were dispersed 3-dimesionally throughout the SP-7 stockpile. Based on the sample results, the SP-7 materials were characterized as LSA-I, class A waste. The SP-7 sampling results from May 04 are listed in Appendix B. Sampling protocols, analytes and the like were included in the PSP's that went to the Agencies for approval. No additional characterization will be done to support waste shipments, since the in-situ characterization will provide all of the data needed to support shipping and disposal decisions.

3. 0 SP-7 Stockpile Excavation Preparation

This section describes the technical approach for the removal and loadout of SP-7.

3.1 SITE PREPARATION

Site preparation activities associated with the removal of SP-7 include establishment of the site boundaries and controls, site layout and surface water management. The details are provided in the following text and the construction drawings referenced in Appendix A.

3.1.1 Site Boundaries and Controls

The perimeter of the work will be bounded by a combination of construction fence, berms and use of existing perimeter fence. The road entrance and personnel entrances will utilize rope gates.

3.1.2 Surveying and Site Layout

The SP-7 work area will be surveyed to assure that the surface area is sloped to the storm water runoff ditches and the storm water runoff ditches drain to the Southeast corner of the SP-7 work area.

3.1.3 Surface Water Management

The area on the east side of the load out tracks and contained within the perimeter fence is graded so the runoff is collected in a trench system that channels the surface water to an existing trench system in the Southeast corner of the SP-7 area. The surface water at this point is connected into a site drainage system that discharges the water into the storm

water retention basin (SWRB). Reference drawing SK-LSA-I-01 in Appendix A for details.

Construction of a temporary site drainage system of HDPE pipe has begun. The old system will be removed after the new piping is placed into service (March 05). The southern half of the main storm sewer line will remain functional till completion of the Area 4B and northern half of MDC excavations. Another section of temporary HDPE pipeline will be installed to replace the southern half of the main storm sewer and the eastern half storm sewer line under the second street prior to excavation of these two areas. Each one of these pipelines will be removed at the end of excavation of their respective drainage area by October, 2005.

The ditch area directly west and adjacent to the load out tracks is not certified, but is considered clean with regard to not requiring water treatment. Contamination of this area is not anticipated to occur during the load out process. However, as an added precaution 10' of Geotextile fabric will be laid next to tracks and in between, staked and curbed to catch possible spill over during the loading operation (refer to Loadout Process section 4.2.2). Reference drawing SK-LSA-I-02 in Appendix A for details.

3.1.4 Radiological Air Monitoring and Dust Control

Air Monitoring

Occupational monitoring will be performed using personal and workplace air samplers in the work areas to ensure worker protection and will also serve as an indication of the effectiveness of engineering controls. Locations of SP-7 air monitors are shown on Dwg. SK-LSA-I-01.

Dust Control

SP-7 load out activities will be implemented in compliance with the FCP Site wide Dust Control Policy, RM-0047. Specifically, through implementation of the subject work, dust control measures will be implemented, as necessary, to mitigate dusting conditions. Actual dust control/work practices to be utilized will be dependent upon the activities being performed, and field conditions. Such practices will include the application of water, minimizing the height of drops during railcar loading, limiting vehicle speeds, etc.

4.0 SP-7 Stockpile Excavation and Loadout Process

The process consists of excavating and loading the LSA-I material into an IP-2 rated railcar (current method) and/or a standard railcar lined with a soft-sided IP-1 packaging. The use of the IP-1 packaging is described in the Department of Transportation (DOT) regulations, 49CFR 173.427(b)(1). The following is a description of the steps in the loadout process.

4.2.1 Stockpile Excavation

Excavated SP-7 materials consist of soils and building debris (concrete with rebar and piping). Oversized debris will be re-worked to meet Envirocare's size criteria. Heavy earth moving equipment such as bull dozers and track excavators will be used to move

the SP-7 stockpiled material into load-out working piles adjacent to the loadout area and tracks. Reference drawing SK-LSA-I-01 in Appendix A for details.

To protect the IP-1 liner from damage, while loading, we have taken the following precautions to remove debris: a. Work to begin on east section of SP-7 due to reduced debris accumulation (less then 10%). b. Soils group will remove debris from SP-7 using tracked excavator on stockpile and grappler at bottom of pile. Also, soil material will be spread out in 12" lifts to visually spot debris for removal, then pushed to load out area. Remaining soil will essentially be debris free, similar to CAT 1 material. c. Further debris removal can take place at load out by the loading operator, if a piece of debris was missed in the initial segregation. d. The loading operator will be instructed to lower his soil-laden bucket as close to rail car as possible before dumping his load.

All SP-7 material will be excavated from both the western and eastern sections down to the underlying undisturbed soil elevation that existed prior to placement of SP-7 material.

4.2.2 Loadout Process

The IP-1 packaging will be installed in the railcar either at the SP-7 loadout area or in the existing Waste Pit Project's RLB. The area for installation of the IP-1 packaging in the SP-7 loadout area is shown on drawing SK-LSA-I-01 (Reference Appendix A).
The material will be loaded into the IP-2 rated rail cars or standard rail cars lined with a soft-sided IP-1 packaging using equipment such as front-end loader or track excavator. Material will be placed in both the IP-1 and IP-2 packaging in a manner that the debris will not damage the packaging or Envirocare's railcar rollover facility. Debris will not be loaded into the IP-1 packaging other then rounded (no sharp angular pieces) concrete pieces less than 10". Reference drawing SK-LSA-I-02 in Appendix A for the loadout illustration.

Accidental waste falling off railcar will be handled by: a. Placing geotextile material between tracks and ten feet on the opposite side of the loading area. b. The geotextile will be pinned to ground and wrapped up over straw bales using turf pins. The straw bales will serve as a curb to stop any debris that may bounce off of car onto the other side. c. Any material that spills onto the ground opposite the loading side will be picked up and placed back into car or onto loading area at the end of every day or work evolution, if part of a day. Refer to drawing SK-LSA-I-02 for geotextile arrangement. Operator will be instructed to go no further then center of car while dumping and use the flexibility of a track excavator to smooth/level out the top to the sides.

The IP-1 packaging will be closed either at the SP-7 loadout area or in the existing Waste Pits RLB. The area for closing the IP-1 packaging in the SP-7 loadout area is shown on drawing SK-LSA-I-01 (Reference Appendix A). The liner will be inspected before and after loading for any visible damage. Any damaged areas will be repaired before shipment.

4.2.3 Weighing the Railcar

Railcars will be weighed in the RLB through mid April and after will be weighed at the SP-7 load out area when the new scale is constructed. The car is then assembled with other rail cars into a unit train for shipment to Envirocare.

4.2.4 Lid/De-lid Operation

The lidding/de-lidding of IP-2 rated rail cars will be performed in the RLB. If needed, a second lidding operation may be established on the roadway adjacent to the liner platform east of the loadout operation. Rail cars utilizing the IP-1 packaging do not require lids for the transport of LSA-I material. At the completion of the Waste Pit project, the FCP intends to continue to use the existing rail car fleet. An outreach program will be put in place to inform the public about the new cars without hard lids and that the new cars will be mixed with the lidded cars.

4.2.5 Radiological surveying Railcars

Envirocare will decontaminate railcar after unloading in accordance with DOT Return to Service Criteria, 49 CFR 173.443, paragraph c.

The scanning of cars at Fernald will be done per current procedure found in Waste Pits Project Radiological Control Plan (10500-PL-0020). Specifically, we survey the cars when they are received, and the outside of the railcars after they have been loaded. Although we cannot physically survey the inside of the railcars after loading, the liners have served to keep contaminated material from falling into the railcars (outside of the liner), through having the liner draped over the sides of the railcar during load out. As such, by knowing that the railcar is clean before loading, and protecting the railcar during loading, there should be minimal concern relative to contamination inside the car but outside the liner.

5.0 Removal Schedule

Removal and subsequent loading operations are planned to start late March and extend through August.

APPENDIX A

Drawings

Drawing number	Title
SK-LSA-I-01	Railcar Loadout of LSA-I Material (Plan)
SK-LSA-I-02	Railcar Loadout of LSA-I Material (Elevation view)

APPENDIX B

APPENDIX B[1]

SP-7 PHASE I SAMPLING PARAMETERS

TCLP Inorganics (102 samples)	Organics (2 samples – field screening)		
Arsenic	1,1,1,2-Tetrachloroethane	Benzene	Styrene
Barium	1,1,1-Trichloroethane	Bromobenzene	tert-Butylbenzene
Cadmium	1,1,2,2-Tetrachloroethane	Bromochloromethane	Tetrachloroethene
Chromium	1,1,2-Trichloroethane	Bromodichloromethane	Toluene
Lead	1,1-Dichloroethane	Bromoform	trans-1,2-Dichloroethene
Mercury	1,1-Dichloroethene	Bromomethane	trans-1,3-Dichloropropene
Selenium	1,1-Dichloropropene	Carbon Tetrachloride	Trichloroethene
Silver	1,2,3-Trichlorobenzene	Chlorobenzene	Trichlorofluoromethane
Zinc	1,2,3-Trichloropropane	Chloroethane	Vinyl chloride
Radiological (102 samples)	1,2,4-Trichlorobenzene	Chloroform	2,4,5-TP (Silvex)
Americium-241	1,2,4-Trimethylbenzene	Chloromethane	2,4,5-Trichlorophenol
Cesium-137	1,2-Dibromo-3-chloropropane	cis-1,2-Dichloroethene	2,4,6-Trichlorophenol
Neptunium-237	1,2-Dibromoethane	cis-1,3-Dichloropropene	2,4-D
Potassium-40	1,2-Dichlorobenzene	Dibromochloromethane	2,4-Dinitrotoluene
Radium-226	1,2-Dichloroethane	Dibromomethane	Chlordane
Radium-228	1,2-Dichloropropane	Dichlorodifluoromethane	Endrin
Technetium-99	1,3,5-Trimethylbenzene	Ethylbenzene	gamma-BHC (Lindane)
Thorium-230	1,3-Dichlorobenzene	Hexachlorobutadiene	Heptachlor

Thorium-232	1,3-Dichloropropane	Isopropyl Benzene	Hexachlorobenzene
Uranium-234	1,4-Dichlorobenzene	m,p-Xylene	Hexachloroethane
Uranium-235	2,2-Dichloropropane	Methylene chloride	m,p-Cresol
Uranium-238	2-Butanone	Naphthalene	Methoxychlor
Uranium, Total	2-Chlorotoluene	n-Butylbenzene	Nitrobenzene
Chemistry (1 sample)	2-Hexanone	n-Propylbenzene	o-Cresol
pH	4-Chlorotoluene	o-Xylene	Pentachlorophenol
PCB (4 samples)	4-Methyl-2-pentanone	p-Isopropyltoluene	Pyridine
Total PCB	Acetone	sec-Butylbenzene	Toxaphene

[1] Sample numbers and results are from first phase of SP-7 sampling and reflect approximately 80% of the western portion

MAX/MIN VALUES OF DETECTED ANALYTES OF SP-7 SAMPLES

Radiological			
Parameter	Max Result	Min Result	Units
Americium-241	1.3	0.0821	pCi/g
Cesium-137	0.241	0.0254	pCi/g
Thorium-230	161	0	pCi/g
Thorium-232	6.66	0.303	pCi/g
Neptunium-237	1.18	0.0552	pCi/g
Uranium-234	1401	28.8	pCi/g dry
Uranium-235	67	0.159	pCi/g dry
Uranium-238	1129	3.2	pCi/g dry
Uranium, Total	3390	9.59	mg/kg dry
Radium-226	9.49	0.451	pCi/g
Radium-228	6.66	0.303	pCi/g
Technetium-99	270	1.8	pCi/g
Potassium-40	20.8	5.24	pCi/g
Inorganics			
Parameter	Max Result	Min Result	Units
Barium	2	0.22	mg/L
Cadmium	0.009	0.004	mg/L
Lead	0.52	0.027	mg/L
Mercury	0.00084	0.000472	mg/L
Chromium	0.022	0.0076	mg/L
Selenium	0.068	0.038	mg/L
Silver	0.021	0.0118	mg/L
Zinc	5.4	0.025	mg/L
Chemical			
Parameter	Max Result	Min Result	Units
pH	11.5	8.13	SU
PCBs			
Parameter	Max Result	Min Result	Units
Total PCB	916	10.4	ug/kg
Organics			
Parameter	Max Result	Min Result	Units
Chlorobenzene	510	140	ug/L
Benzene	4.3	4.3	ug/L

ATTACHMENT 1 - REVISED FEBRUARY 18, 2005
PROPOSED CHANGES TO "TRANSPORTATION AND DISPOSAL PLAN FOR OPERABLE UNIT 1"

Section 2.5.1, (DOT Requirements) changes:

Current Language:

"Packaging of this type of waste requires a strong, tight package for shipment (49 CFR 173.427). By definition, a strong, tight package prevents leakage of radioactive contents under normal transportation conditions. The Femp Gondola railcars will be designed to meet this requirement and will have an additional liner permanently applied to further reduce the chance of leakage."

Changes:

This section is changed to add another paragraph, "Packaging for SP7 soil and debris may use, in addition to the above railcar design, gondolas that meet DOT IP-1 packaging requirements without a permanently applied liner and without a hard lid.

Section 3.2.2, (Location #2: Railcar Loadout and Scale Facility) changes:

Current language:

"At this facility the railcar covers will be removed, liners installed, cars loaded, liners sealed, and railcar covers replaced."

Changes:

The title of Section 3.2.2 will be changed to Location #2: Railcar Loadout Facilities
Another paragraph will be added to Section 3.2.2 stating:

"A second temporary load out facility will be constructed that will provide additional load out capacity for Above Waste Acceptance Criteria (AWAC) soil and debris. The layout and operational approach of this facility will be presented to U.S. EPA and Ohio EPA for their concurrences. In general at this facility, liners will be installed, AWAC soils and debris will be loaded, the liners sealed, and other activities will be performed to prepare the railcars for shipment as well as to control impacted runoff and dust."

Section 3.6, (Runoff/Drainage Control) changes:

Current Language:

"The FEMP railcars will be designed to include a permanent, impermeable polyurethane liner which will ensure the tightness of the gondola car against leaks. This polyurethane liner will be applied to the inside surface of the gondolas. Each gondola car will also have a rigid cover that will remain in place except for loading and unloading. In addition to the permanent railcar liner, a disposable liner will be installed prior to loading each car. This liner will aid in removing waste from the car at the disposal facility by minimizing hold-up material and contamination."

Changes:

This section is revised to add the following paragraph:

"For transport of AWAC soil and debris meeting current LSA-I requirements, gondola cars meeting DOT IP-1 packaging requirements may be used."

OU1 Transportation & Disposal Plan

Attachment 1 Comments

1. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.5.1 Pg. #: Line #: Code: C
Comment: The text should be not eliminated as most of the rail cars will still maintain the permanently applied liner system and those cars are still required for operations involving OU1 material. Most of the proposed changes within Attachment 1 cause this conflict. All revisions should propose additions to discuss the new cars and the new waste being loaded. No references to previous requirements for waste pit material rail cars should be deleted.

Response: Agree

Action: Changes have been incorporated and shown on attached revisions to plan

2. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.5.2 Pg. #: Line #: Code: C
Comment: See comment 1. The change is not appropriate. If no lid exists then it can't be removed without DOE presence. The existing text in the approved plan would seem sufficient to address both types of cars.

Response: Agree

Action: Changes have been incorporated and shown on attached revisions to plan

3. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 3.2.2 Pg. #: Line #: Code: C
Comment: The current load out facility continues to exist and operate, it is inappropriate remove the existing language. The plan should be revised to include a new section addressing the new loadout area.

Response: Agree

Action: Changes have been incorporated and shown on attached revisions to plan

SP-7 Implementation Plan Comments

1. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: General Pg. #: Line #: Code: C
Comment: The plan needs to include a detailed contour map showing the proposed completed load out area, silt fence, damn installation and surface water flow paths. This or another figure should detail waste movement pathways: how material is being moved from SP-7 to the load out piles; how that pathway is controlled. The current figue SK-LSA-1-01 suggests dozers will push the soil a minimum of 200' to the load out pile for the furthest rail car. This doesn't appear to be a practical approach.

Response: In the meeting, it was agreed that a contour map is not necessary. However, a drawing will be generated to show the layout and features around the SP-7 requested by OEPA. Fluor understands that pushing soil distances of 200' is not the most efficient. Fluor intends to keep heavy equipment usage in the SP7 area to a minimum and since the area is rough and not prepared for truck traffic it is better to use dozers.

Action: Fluor to survey expanded SP7 load out area and generate as built drawing depicting the features requesed by EPA.

2. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: General Pg. #: Line #: Code: C
Comment: The original NESHAPs evaluation for Waste Pits Project did not include the simultaneous load out of OU1 materials and SP-7 materials. Provide a NESHAPs evaluation including the new materials to ensure that air monitoring continues to be adequate.

Response: We believe an additional NESHAP subpart H evaluation is not necessary in this case and feel it would serve no useful purpose.

Subpart evaluations such as those conducted in accordance with Section 61.93(b)(4)(ii) are used to determine if a point source subject to the NESHAP standard is required to install emission monitoring as per Section 61.93(b). The load out of OU1/SP-7 material is a fugitive source and is not subject to these emission monitoring requirements therefore the results of this type of evaluation would be moot.

Although there are no monitoring requirements for fugitive sources under NESHAP Subpart H the fact is all sources at the FCP, including fugitive, are monitored. We believe any potential emissions from these activities will be adequately monitored for the following reasons:

1. **The FCP is currently demonstrating compliance with the NESHAP standard using the alternate environmental measurements option approved by the USEPA Reg 5 under Section 61.93(b)(5). This consists of a network of sixteen ambient monitors placed on the FCP's fenceline and was designed to measure the release of fugitive emissions from the site. FCP believes this network of compliance monitors is fully capable of adequately monitoring potential site emissions, as does the USEPA since this is implicit in their approval.**

2. **In addition to the FCP's network of compliance monitors there will be project specific monitoring in place for both the OU1 and SP-7 material load out activities. The location of these monitors is included in the Implementation Plan.**

3. **Although the initial project evaluation encompassed only OU1 material the addition of SP-7 material will not adversely affect its results. The contamination level of the SP-7 material is considerably less (Less than 16 percent by average for uranium.) than that of the OU1 material. The evaluation using only the OU1 material results in an overestimation of any potential impact. Since the load out activities of the OU1 materials alone have resulted in measurable dose rates well below the 10 mRem NESHAP**

limit the addition of the less contaminated SP-7 material will not adversely impact the FCP's attainment of this standard.

Action: Map will be modified to show location of air monitors.

3. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: General Pg. #: Line #: Code: C
Comment: The plan does not sufficiently detail fugitive dust control measures. Additional detail on pro-active measures must be included. Vehicle speed limits, wind speed limits, drop height limits, long pushing distances and other actions should be specified to prevent fugitive dust emissions.

Response: SP7 loadout activities will be implemented in compliance with the FCP Sitewide Dust Control Policy. Specifically, through implementation of the subject work, dust control measures will be implemented, as necessary, to mitigate dusting conditions. Actual dust control/work practices to be utilized will be dependent upon the activities being performed, and field conditions. Such practices will include the application of water, minimizing the height of drops during railcar loading, limiting vehicle speeds, etc."

Action: Implementation Plan will be revised. Track excavator operator will be briefed and instructed to minimize drop heights when loading rail cars.

4. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: General Pg. #: Line #: Code: C
Comment: The plan does not sufficiently detail measures required to prevent breaching of the lining system. Specific requirments for rebar protrusions, soil cushioning, drop heights, debris ratios etc should be included. Detailed loading specifications are important to ensure these less rigorous containers are not breached during the loading of transportation process. Unlike the waste pit gondola cars, the rail cars proposed for this project are intentionally designed to leak, thus placing much greater emphasis on the importance of liner integrity. After loading, how will the continued integrity of the IP-1 packaging be verified?

Response: To protect the IP-1 liner from damage, while loading, we have taken

the following precautions: a. Work to begin on east section of SP7 due to reduced debris accumulation (less then 10%). b. Soils group will remove debris from SP7 using tracked excavator on stockpile and grappler at bottom of pile. Remaining soil will essentially be debris free, similar to CAT 1 material. c. Further debris removal can take place at loadout by the loading operator, if a piece of debris was missed in the initial segregation. d. The loading operator will be instructed to lower his soil laden bucket as close to rail car as possible before dumping his load.

The liner will be inspected before and after loading for any visible damage. Any damaged areas will be repaired before shipment.

Action: : Implementation Plan will be revised Track excavator operator and Hazwats will be briefed and instructed on procedure.

5. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: General Pg. #: Line #: Code: C
Comment: Additional loadout details should also address concerns such as waste falling off the rail car or loaded into areas it is not supposed to be and how that waste will be recovered. Criteria to prevent the loading vehicles arm from extending beyond the opposite side of the rail car should be included. Figure SK-LSA-I-02 shows how an excavator arm should not be extending beyond the rail car. The bucket should always be between the opposite wall of the rail car and the tracks of the loader. Not extending out where waste can fall off into the unplanned areas.

Response: a. Geotextile material will be placed between tracks and ten feet on the opposite side of the loading area . b. The geotextile will be pinned to ground and wrapped up over straw bales using turf pins. The straw bales will serve as a curb to stop any debris that may bounce off of car onto the other side. c. Any material that spills onto the ground opposite the loading side will be picked up and placed back into car or onto loading area at the end of every day or work evolution, if part of a day.

The drawing that shows excavator arm over other side of car was meant to only

illustrate the piece of equipment we intended to use and was limited in size available to our CAD personnel. Operator will be instructed to go no further then center of car while dumping and use the flexibility of a track excavator to smooth/level out the top to the sides.

Action: Implementation Plan and the drawing will be revised . Track excavator operator will be briefed on procedure.

6. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: General Pg. #: Line #: Code: C
Comment: The plan suggests DOE intends to ship both lidded and unlidded cars within the same unit train. Will there be any way that the general public will be able to tell that the lids are not supposed to be on one car while they are required on the next car? It would seem likely that members of the public will be calling to say "a lid blew off" or "they sent a car out without a lid in their rush to get done."

Response: An outreach program will be put in place to inform the public about the new cars without hard lids and that the new cars will be mixed with the lidded cars

Action: Provide a public out reach effort to inform the public. Implementation plan will be revised.

Action: No Action

9. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 2.1 Pg. #: Line #: last line Code: C
Comment: The text states that the east and west sections of SP-7 each include 25% concrete by volume. The Envirocare WAC specifies that the soil:debris ratio should be greater than 9:1. What steps will be taken to comply with the Envirocare WAC requirement?

Response: Actually we now believe the east pile has less than 25% (around 10%) and the west pile is still believed to have up to 25%.

There is no specific WAC from Envirocare relative to the amount of debris that can be shipped in railcars. However, if the FCP ships material at less than 16% debris, the price for disposal is based on a soil disposal rate. If there is more than 16% debris in a railcar, the waste will be accepted by Envirocare for disposal, but the FCP will be charged for the debris disposal rate."

Action: Implementation plan will be revised to include west pile " up to 25%" and east pile "less then 25%".

10. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 3.1.3 Pg. #: Line #: Code: C
Comment:The text lacks in details. See comments 1 above and comments below. Locations of the dams on the north and south ends of the loadout area should be indicated. Placement of the pump used to convey storm water from the west side of the tracks to the east side should be shown. Will any grading be necessary to direct the storm water to a sump? How will the piping be routed around or under the tracks?

the tracks and then to the storm water system.
1) Where will the rainwater that normally flows in the trench drain after the dams are installed?
2) What is the capacity in the trench between the two dams? How much rainfall will the trench safely hold? Provide a map which shows all drainage in the area including the flows in the RR trench up-gradient of this Project.

Response: See response to question #10 for both items #1 and #2

Action: Update drawing to as built condition.

13. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 3.1.3 Pg. #: Line #: Code: C
Comment: The current storm water management strategy for large storms specifies that rainwater will be allowed to accumulate in the deep excavations in the former Production Area until it can be worked away in the CAWWT. It is our understanding that water flows under gravity southwards in the Main Drainage Corridor and that this flow is throttled at the south end. It would seem under this scenario that storm water flows would also need to be retained in the RR trench.

Response: See response to question #10.

Action: OEPA visited the SP-7 area on March 3, 2005 and did not have any issues with the storm water controls in place. Adjustments to the area can be made in the event any future concerns are raised.
Drawing will reflect as built conditions.

14. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 3.1.3 Pg. #: Line #: Code: C
Comment: The text states that storm water will be routed to the southeast corner of SP-7 and then into the site drainage system. It is our understanding that the site drainage system is part of the original site infrastructure and is over fifty years old. That being said, the weekly faxes indicate that the northern half of the existing system will be replaced with temporary piping. Provide details of the temporary piping. Are there any plans to replace the southern half of the system?

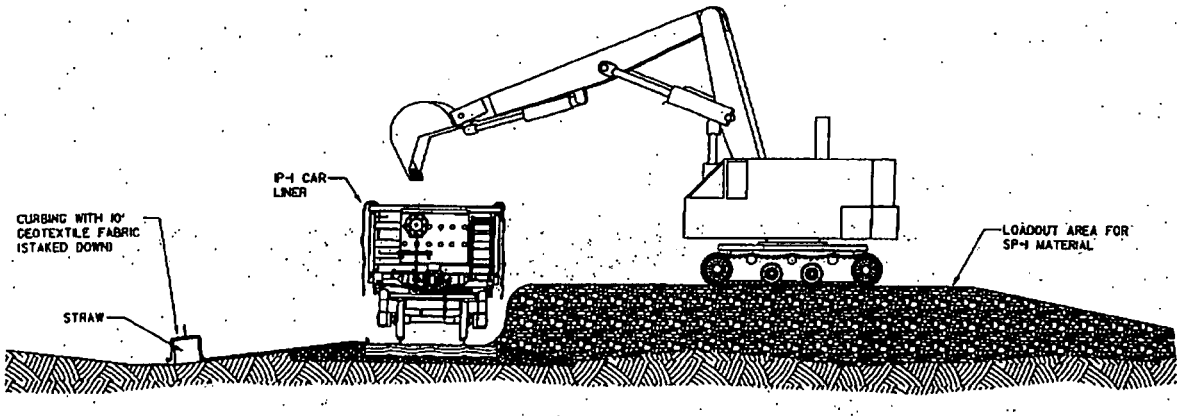
Response: Construction for the HDPE temporary pipe has begun and current progress was shown to the EPA representatives during their visit on March 3, 2005. The old system will be removed after the new piping is placed into service starting the week of March 7, 2005. The southern half of the main storm sewer line will remain functional till completion of the Area 4B and northern half of MDC excavations. Another section of temporary HDPE pipeline will be installed to replace the southern half of the main storm sewer and the eastern half storm sewer line under the second street prior to excavation of these two areas. Each one these pipelines will be removed at the end of excavation of their respective drainage area by October, 2005.

Action: No action.

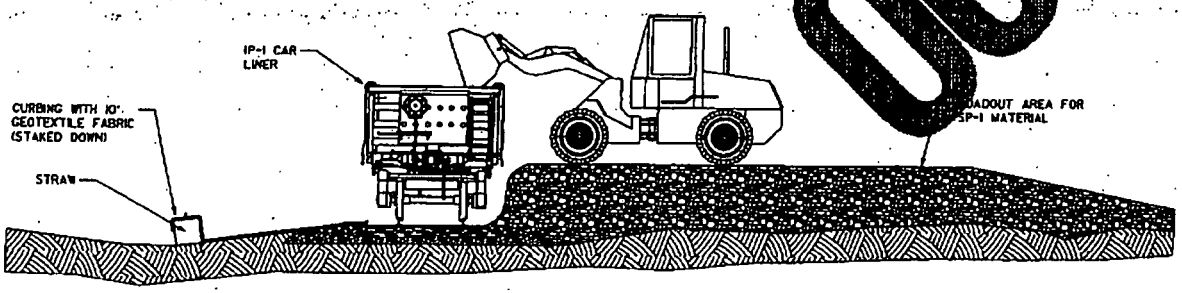
15. Commenting Organization: Ohio EPA Commentor: OFFO
Section #: 3.1.3 Pg. #: Line #: Code: C
Comment: This section references the ditch area as "clean". When referring to clean the assumption is that it's not certified but it is considered clean with regard to not requiring water treatement. Please clarify if this assumption is correct.

Response: That is correct the area is not yet certified.

Action: No Action



TYPICAL SECTION @ LOADOUT AREA
BACK HOE LOADER



TYPICAL SECTION @ LOADOUT AREA
FRONT END LOADER

007

UNITED STATES
DEPARTMENT OF ENERGY
FERNALD CLOSURE PROJECT

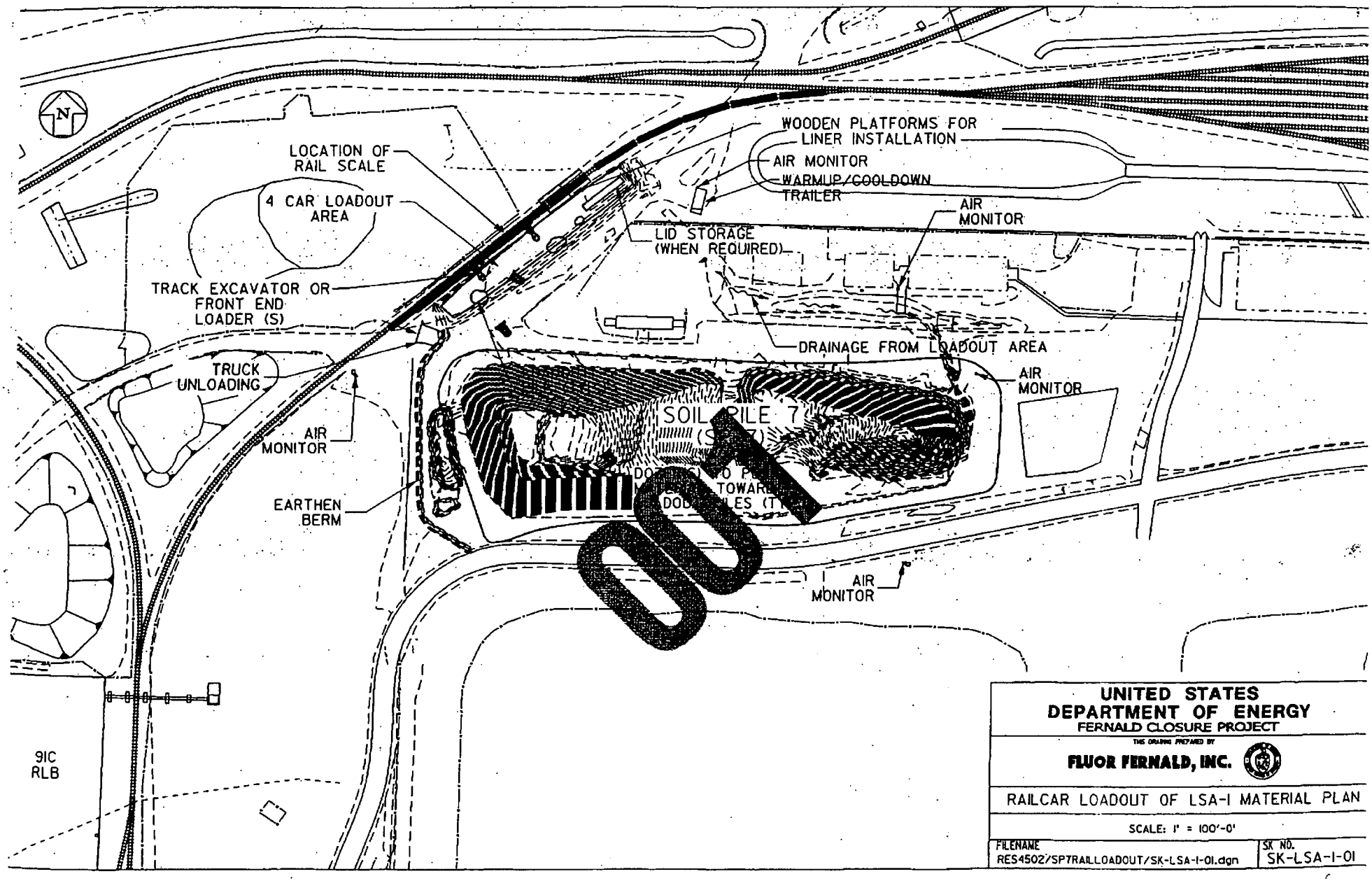
THIS DRAWING PREPARED BY
FLUOR FERNALD, INC.

RAILCAR LOADOUT OF LSA-1 MATERIAL ELEVATION

NO SCALE

FILENAME
RES4502/SP7RAILLOADOUT/SK-LSA-1-02.dgn

SK NO.
SK-LSA-1-02


N
LOCATION OF RAIL SCALE
4 CAR LOADOUT AREA
TRACK EXCAVATOR OR FRONT END LOADER (S)
TRUCK UNLOADING
AIR MONITOR
EARTHEN BERM
WOODEN PLATFORMS FOR LINER INSTALLATION
AIR MONITOR
WARMUP/COOLDOWN TRAILER
AIR MONITOR
LID STORAGE (WHEN REQUIRED)
DRAINAGE FROM LOADOUT AREA
AIR MONITOR
AIR MONITOR
91C RLB
UNITED STATES DEPARTMENT OF ENERGY
FERNALD CLOSURE PROJECT
THIS DRAWING PREPARED BY
FLUOR FERNALD, INC.
RAILCAR LOADOUT OF LSA-I MATERIAL PLAN
SCALE: 1" = 100'-0"
FILENAME
RES4502/SP7RAILLOADOUT/SK-LSA-I-01.dgn
SK NO.
SK-LSA-I-01