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FEB 7 2005

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DOE-0142-05

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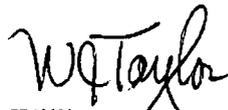
Dear Mr. Saric and Mr. Schneider:

**TRANSMITTAL OF THE PROJECT SPECIFIC PLAN FOR SAMPLING OF  
 MATERIAL ON THE EASTERN PORTION OF SOIL PILE AR6-006 (FORMER SP-7)  
 FOR ENVIROCARE'S WASTE ACCEPTANCE CRITERIA (SUPPLEMENT TO  
 20300-PSP-0011)**

Enclosed for your review is the Project Specific Plan for Sampling of Material on the Eastern Portion of Soil Pile AR6-006 (Former SP-7) for Envirocare's Waste Acceptance Criteria (Supplement to 20300-PSP-0011).

If you have any questions or require additional information, please contact Johnny Reising at (513) 648-3139.

Sincerely,

  
 William J. Taylor  
 Director

FCP:Reising

Enclosures: As Stated

Mr. James A Saric  
Mr. Tom Schneider

- 2 -

DOE-0142-05

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**DEMOLITION, SOIL AND DISPOSAL PROJECT**

**FERNALD CLOSURE PROJECT  
FERNALD, OHIO**



**JANUARY 2005**

**U.S. DEPARTMENT OF ENERGY**

**20600-PSP-0014  
REVISION 0**

**PROJECT SPECIFIC PLAN FOR SAMPLING OF MATERIAL ON THE  
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Document Number 20600-PSP-0014  
Revision 0

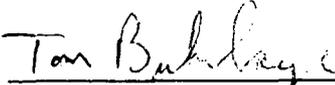
## APPROVAL:

  
for Dennis Dalga, Project Manager  
Waste Pits Project

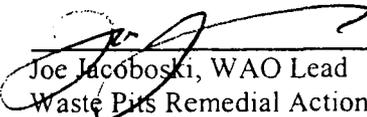
1/28/05  
Date

  
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Demolition, Soil and Disposal Project

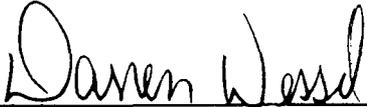
1/31/05  
Date

  
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1/31/05  
Date

  
Joe Jacoboski, WAO Lead  
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**FERNALD CLOSURE PROJECT**

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## LIST OF ACRONYMS AND ABBREVIATIONS

ASL	analytical support level
AWWT	Advanced Wastewater Treatment (Facility)
COC	constituent of concern
DOE	U.S. Department of Energy
DSDP	Demolition, Soil and Disposal Project
FACTS	Fernald Analytical Computerized Tracking System
FCP	Fernald Closure Project
FPA	Former Production Area
µg/L	micrograms per Liter
MDL	minimum detection level
mg/kg	milligrams per kilogram
mg/L	milligrams per Liter
OSDF	On-Site Disposal Facility
PCB	polychlorinated biphenyls
pCi/g	picoCuries per gram
PID	photoionization detector
ppm	parts per million
PSP	Project Specific Plan
QA/QC	Quality Assurance/Quality Control
RWP	Radiological Work Permit
SED	Sitewide Environmental Database
SP-7	Soil Pile 7
SVOC	semi-volatile organic compound
TAL	Target Analyte List
TCLP	Toxicity Characteristic Leaching Procedure
V/FCN	Variance/Field Change Notice
VOC	volatile organic compound
WAC	Waste Acceptance Criteria
WAO	Waste Acceptance Organization
WPP	Waste Pits Project (formerly WPRAP - Waste Pits Remedial Action Project)
yd <sup>3</sup>	cubic yards

1.0 INTRODUCTION

This Project Specific Plan (PSP) describes data collection activities necessary to support the profile characterization for the Envirocare of Utah waste acceptance criteria (WAC) of the soils in the eastern portion of Soil Pile 7 (SP-7, see Figure 1-1). SP-7 has recently been redesignated as Soil Pile AR6-006 but for continuity will be referred to as SP-7 in this document. The eastern and western sections of SP-7 have been physically delineated by fencing and the sampling effort described in this plan will apply ONLY to the segregated eastern portion of former SP-7. Additional soil that is added to the eastern section of the pile after sampling will be delineated by placing geotextile on the existing surface where the material is planned to be stockpiled. Recent topographic data will also be used to determine the additional volume and locations used for receiving new materials for purposes of future sampling and characterization of the new material. Figure 1-1 contains the topographical map of the current profile of the eastern portion of SP-7.

The soil in the eastern portion of the SP-7 pile will be sampled *in situ* by collecting soil core samples, versus the bin sampling approach used at the Waste Pits Project (WPP) for wastes and soils planned for disposal at Envirocare. This is the same methodology used in the May and December 2004 sampling of the western portion of SP-7. The eastern pile was built from soil and debris primarily excavated from Area 4A (approximately 12,000 yards) and Area 4B (approximately 10,000 yards) that were originally determined to be above the On-Site Disposal Facility (OSDF) WAC.

The general information that is routinely addressed in a PSP can be found in 20300-PSP-0011, *Project Specific Plan Guidelines for General Characterization for Sitewide Soil Remediation*. While this PSP has section headings similar to a full-length PSP, where the information in the section is identical to the information in the General PSP, 20300-PSP-0011, a reference to this General PSP is made, and the information is not repeated.

1.1 PURPOSE AND SCOPE

The purpose of this PSP is to provide specific direction regarding the sampling and analysis of soil materials staged at the eastern portion of the SP-7 stockpile to obtain the required density of samples and analytical data to evaluate the soil pile against the Envirocare WAC.

This PSP is not considered a work authorization document (for implementation of fieldwork) per SH-0021, Work Permits. Work authorization documents directing the implementation of fieldwork, per SH-0021, may include applicable Environmental Services procedures, Fluor Fernald work permits, Radiological Work Permit (RWP), penetration permits, and other applicable permits.

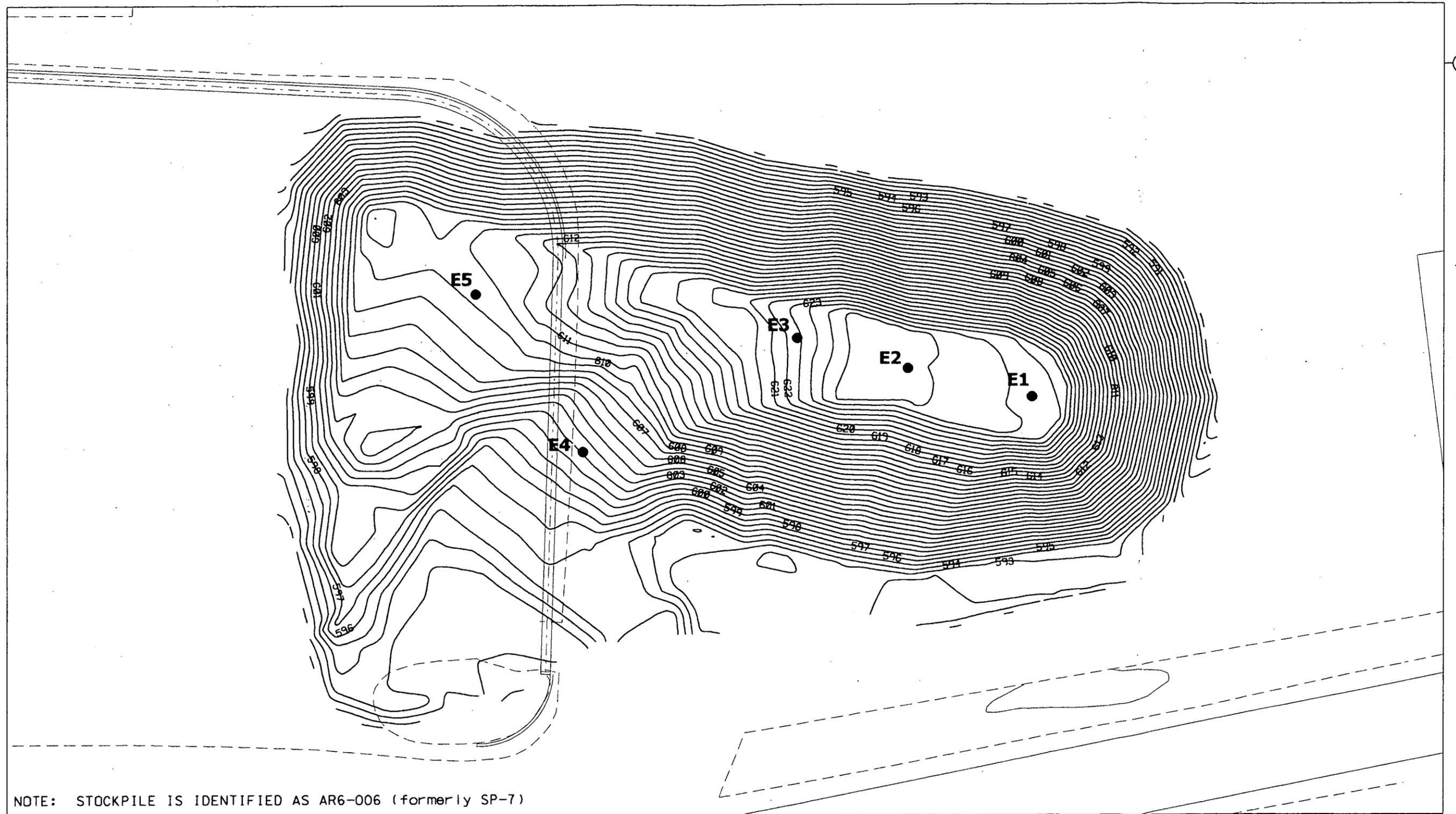
1 1.2 VARIANCE/FIELD CHANGE NOTICE (V/FCN) DOCUMENTATION

2 Field conditions may arise that warrant a different decision process for evaluating the soil on the eastern  
3 portion of SP-7 for the Envirocare WAC. Factors that will be considered under special circumstances  
4 include safety of the workers, cost effectiveness, the need for a timely response, and impending weather  
5 conditions. In the event that a change in the characterization approach is needed, the Characterization  
6 Manager or designee must prepare a Variance/Field Change Notice (V/FCN). The completed V/FCN  
7 must contain the signatures of all affected organizations, which at a minimum includes the Project  
8 Manager, Characterization Manager, Waste Acceptance Organization (WAO), and Quality Assurance/  
9 Quality Control (QA/QC) but may also include Soil Sampling and/or the Analytical Program Manager, as  
10 appropriate. A time-critical variance may be obtained in cases where expedited approval is needed to  
11 avoid costly project delays. In the case of a time-critical variance, verbal or written approval  
12 (electronic mail is acceptable) must be received from the Characterization Manager and from  
13 QA/QC prior to implementing the variance. The completed approved V/FCN form must be completed  
14 within seven working days after the time-critical variance is approved. Changes to the PSP will also be  
15 noted in the applicable Field Activity Logs.

16  
17 If a V/FCN is required, the Characterization Manager will document the change and requirements through  
18 the V/FCN process in accordance with Section 7.5 of the 20300-PSP-0011, *Project Specific Plan*  
19 *Guidelines for General Characterization for Sitewide Soil Remediation*.

20  
21 1.3 KEY PERSONNEL

22 Reference Section 1.4 of 20300-PSP-0011, *Project Specific Plan Guidelines for General*  
23 *Characterization for Sitewide Soil Remediation*. The WAO lead contact will be Joe Jacoboski for this  
24 PSP. Also, Dennis Dalga, the Project Manager of the WPP should be added to this list.  
25



NOTE: STOCKPILE IS IDENTIFIED AS AR6-006 (formerly SP-7)

LEGEND:

● BORING LOCATION



DRAFT

FIGURE 1-1. EASTERN "SP-7" MATERIAL STOCKPILE - BORING LOCATIONS AND TOPOGRAPHY

2.0 AREA-SPECIFIC WORK

2.1 SP-7 BACKGROUND

The soil stockpile SP-7 is designated for interim storage of above-OSDF WAC soil and debris and lies in Area 6 just north of the Area 3B boundary in the northwest corner of the Former Production Area (FPA). The entire pile consists of materials from throughout the FPA and the abandoned outfall line, as well as filter cake residue from the Advanced Wastewater Treatment (AWWT) Facility and various waste materials from waste management activities characterized as being above the OSDF WAC. Prior to May 2004, the WPP project periodically excavated and hauled material out of SP-7 for eventual placement in their material handling bins where it was characterized for compliance with the Envirocare WAC before loadout into railcars.

This sampling plan is designed to provide data to support *in situ* characterization of the material comprising the eastern portion of SP-7 to meet the Envirocare WAC. This approach will facilitate direct railcar loadout of the SP-7 eastern material without requiring further sampling and analysis. Two previous sampling efforts in May and December of 2004 were completed to characterize the western portion of SP-7 in the *Project Specific Plan for Sampling of Soil Pile 7 (SP-7) for Envirocare's Waste Acceptance Criteria* (20600-PSP-0008, Rev. 0) and the *Project Specific Plan for Sampling of Additional Material on the Western Portion of Soil Pile AR6-006 (Former SP-7) for Envirocare's Waste Acceptance Criteria* (20600-PSP-0010, Rev. 0).

2.2 SP-7 WAC ATTAINMENT SAMPLING DESIGN

The sampling activities conducted to evaluate the soil material on the eastern portion of SP-7 for Envirocare's WAC will be performed under the guidelines of Section 4.0 of 20300-PSP-0011, *Project Specific Plan Guidelines for General Characterization for Sitewide Soil Remediation*, which addresses the standard Geoprobe® soil core collection and sample handling methods.

2.2.1 Determination of WAC COCs

Compliance with the Envirocare WAC and the Waste Profile Record established for WPP must be demonstrated for any waste materials shipped from the FCP to Envirocare for disposal. Therefore, WPP's defined list of constituents of concern (COCs) is applicable to all SP-7 soil material. Characterization for certain selected geophysical WAC will be based on previous soils placed in SP-7 that have been processed through WPP and shipped to Envirocare and other geophysical parameters require measurement at the time of shipment.

1 The COCs are as follows:

2  
3 **Radiological COCs**

- 4  
5 • Uranium-235, Uranium-238, Total Uranium  
6 • Radium-226, Radium-228  
7 • Thorium-230, Thorium-232  
8 • Cesium-137  
9 • Americium-241  
10 • Neptunium-237  
11 • Potassium-40  
12 • Technetium-99

13  
14 **Chemical COCs**

- 15 • pH  
16  
17  
18 • Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium, Silver, and Zinc by  
19 Toxicity Characteristic Leaching Procedure (TCLP) analysis.  
20  
21 • Total Polychlorinated Biphenyls (PCBs) (one sample total)  
22  
23 • If Photoionization Detector (PID) field screening limit of 1,472 parts per million (ppm) is  
24 exceeded, then analyze for the TCLP organics list.  
25

26 **Geophysical Parameters**

- 27  
28 • % Moisture (to be determined from radioanalytical process)  
29

30 **2.2.2 Sampling Design for Envirocare WAC**

31 The prescribed sampling density applied to WPP bin sampling is one sample per 600 tons of material  
32 [or approximately 400 cubic yards (yds<sup>3</sup>)] based on the *WPRAP* (now WPP) *Sampling and Analysis*  
33 *Plan for Waste Pit Materials, Shaw E&I Project No. 773481 (Revision 1)*. This sampling density was  
34 utilized in the sampling design for the May and December 2004 characterization effort of SP-7 western  
35 portion and will be used for this sampling and analysis effort as well. The volume of the eastern portion  
36 of SP-7 was calculated to be approximately 22,200 yd<sup>3</sup> based on a topographic survey conducted on  
37 January 26, 2005. This volume translates into approximately 57 radiological/metals [Target Analyte  
38 List (TAL) B] samples and one PCB (TAL C) sample required to align with the sampling density applied  
39 to typical WPP wastes since commencement of operations in 1999. Sample analytical requirements are  
40 specified in Table 2-1 and constituents for each TAL are listed in Appendix A.  
41

1 Five boring locations are planned for sampling the material on the eastern SP-7 based on the depth and area  
2 of material, the accessible surface area of the soil pile, the contours and/or pile thickness, and the feasibility  
3 of successful collection of the required number of samples in a timely manner without prolonged delays.  
4 The five boring locations are approximately evenly spaced across the accessible surface of the pile. This  
5 design is intended to ensure that the samples collected are as representative as possible given the  
6 aforementioned constraints. The method of soil placement on the pile involved spreading each load across  
7 the east-west inclined surface in thin layers with the exception of the northwest quadrant that was placed in  
8 thicker lifts. Therefore, this sampling design should ensure that the soil borings intercept materials that are  
9 representative of the material placed on the eastern portion of SP-7.

10  
11 Based on five boring locations, one sample will be collected for every 2 or 4 vertical feet through the  
12 material to achieve the required 57 samples for radiological and TCLP metal constituents. The 2-foot or  
13 4-foot intervals allows for the most efficient sampling using the Geoprobe® device, since a standard  
14 sampling core is 4 feet long. For each borehole, the boring will extend to the base of the pile for volatile  
15 organic compound (VOC) screening and sample collection as stated in Appendix B. The entire length of  
16 each soil core will be field screened for volatile organics to bias samples to the areas of maximum field  
17 screening results. One headspace screen sample will be collected for every 4-foot core. Figure 1-1  
18 illustrates the locations of the five borings. The depth intervals and number of samples planned from each  
19 location are listed in Appendix B.

### 20 21 2.2.3 Sampling Strategy

#### 22 Organics Field Screening

23 A PID will be utilized to screen all soil cores for organics to determine if the established WPP Waste  
24 Profile limit of 1,472 ppm headspace reading is exceeded on any sample. The headspace screening and  
25 follow-on actions will be performed as follows:

- 26  
27 1) Immediately after removal of the plastic core liner, the entire 4-foot core will be surveyed with a  
28 PID.
- 29  
30 2) The highest PID response interval will be placed into an 8 ounce glass jar for headspace analysis  
31 until it is half full; if there is no PID reading above background, then select a random interval.
- 32  
33 3) Environmental Services Procedure EQT-04, Photoionization Detector will be followed for  
34 obtaining the level of volatile organics in the headspace with one exception. The minimum time  
35 allowed for the sample to set at ambient temperature (>60°F but not in direct sunlight) prior to the  
36 insertion of the PID shall be 30 minutes.
- 37  
38 4) If the PID reading exceeds 1,472 ppm a lab sample will be collected for selected TCLP organics  
39 plus PCBs (TALs C, F and G) from the same depth interval via an additional (side-by-side)  
40 boring.
- 41

1 The WPP procedure for PID headspace screening has been reviewed and found to be sufficiently  
2 comparable to the EQT-04, Photoionization Detector procedure.

3  
4 Radiological and Metals Sample Selection

5 The radiological and TCLP metals samples (TAL B) will be collected from each 2-foot or 4-foot sample  
6 interval on a representative basis in accordance with Appendix B. As a general rule, an aliquot from  
7 approximately five locations (equally spaced) along the 2-foot or 4-foot interval (dependent on the  
8 specific boring location) should be collected in order to achieve minimum sample mass (i.e., 500 grams)  
9 that generally represents the "average" for the sample interval. No radiological field screening is  
10 necessary under this PSP.

11  
12 Each boring will be completed to the designated depth below the surface unless refusal due to debris is  
13 encountered on repeated attempts. If refusal is encountered during advancement of the boring, at least  
14 two additional attempts should be made within 10 feet of the original boring location and documented in  
15 the Field Activity Log. Initial repositioning of the boring location will be done north or south of the  
16 refusal location, if at all possible, in order to stay at the approximate same elevation for sample depth  
17 planning purposes. If it is necessary to relocate soil borings in excess of 10 feet from the original  
18 location, a V/FCN will be completed to document this change.

19

**TABLE 2-1  
 PHYSICAL SAMPLE ANALYTICAL REQUIREMENTS**

TAL/Analytes (ASL B)	Sample Matrix	Lab	Preservation	Holding Time	Container Type	Minimum Sample Mass (wet)* or Volume
<b>TAL B</b> % Moisture Total Uranium (ppm) Uranium-235 (pCi/g) Uranium-238 (pCi/g)  Thorium-230 (pCi/g) Thorium-232 (pCi/g) Radium-226 (pCi/g) Radium-228 (pCi/g) Cesium-137 (pCi/g) Americium-241 (pCi/g) Neptunium-237 (pCi/g) Potassium-40 (pCi/g) Technetium-99 (pCi/g)  TCLP Metals (mg/L)  pH	Solid	Off-site	Cool 4°C (for metals)	12 months          6 months  NA	Appropriate Size Plastic or Glass	500 grams
<b>TAL C</b> Total PCBs (mg/kg) 1 sample only	Solid	Off-site	Cool 4°C	14 days	Appropriate Size Glass	60g
<b>TAL F</b> TCLP VOCs (mg/L)	Solid	Off-site	Cool to 4° C	14 days	Glass jar w/Teflon-lined lid. Fill to minimize headspace	1, 60mL (fill to minimum size)
<b>TAL G</b> TCLP SVOC/Pests/Herbicides (mg/L)	Solid	Off-site	Cool to 4° C	14 days	1 Glass w/Teflon-lined lid.	200g ; Fill to minimize headspace
<b>TAL F</b> VOCs (µg/L)	Liquid (trip blank)	Off-site	Cool to 4° C H <sub>2</sub> SO <sub>4</sub> to pH<2	14 days	3-40 ml glass w/Teflon-lined lid.	120mL Fill to minimize headspace

\*One sample per release shipped to an off-site laboratory shall be identified on the Chain of Custody/Request for Analysis forms as "designated for laboratory QC" and will consist of three times the volume listed.

- ASL - analytical support level
- µg/L - micrograms per Liter
- mg/kg - milligrams per kilogram
- mg/L - milligrams per Liter
- pCi/g - picoCuries per gram
- SVOC - semi-volatile organic compound

### 3.0 INSTRUMENTATION AND TECHNIQUES

No real-time radiological scanning is required under this PSP; therefore, the required subsections for this section per 20300-PSP-0011 are not listed.

### 4.0 PREDESIGN – FIELD METHODS

Reference the corresponding section of 20300-PSP-0011, *Project Specific Plan Guidelines for General Characterization for Sitewide Soil Remediation* for each of the following sections:

#### 4.1 REAL-TIME ACTIVITIES

Real-time activities are not applicable to this PSP.

#### 4.2 SAMPLE COLLECTION METHODS

Refer to Section 4.2 of 20300-PSP-0011, *Project Specific Plan Guidelines for General Characterization for Sitewide Soil Remediation*.

#### 4.3 PHYSICAL SAMPLE IDENTIFICATION

Refer to Section 4.3 of 20300-PSP-0011, *Project Specific Plan Guidelines for General Characterization for Sitewide Soil Remediation* for general physical sample identification guidelines. A detailed description for identifying physical samples specific to Envirocare WAC sampling of SP-7 follows:

A6-SP7E-E: Sample collected from *eastern* portion of Soil Pile 7 for Envirocare WAC Attainment

Location Designator: The Location Designator is a sequential boring number (e.g., 1, 2, etc.). Multiple boreholes at one sample location (due to subsurface refusal) will be identified with A, B, C suffix and so on (e.g., 1A, 1B)

Λ: The ^ is placed between the location designator and the depth interval. When used, the information to the left of this symbol identifies the boring number and allows the automatic assignment of the boring identification number to be transferred to the appropriate field/table in the Sitewide Environmental Database (SED). The ^ is not used if the sample does not have coordinates such as trip blanks, a “-” is used instead.

Depth Interval Designator: This number indicates the sequential interval of the sample from the soil pile surface. For example, “1” = the first sample interval (i.e., 0 to 2-foot interval or 0 to 4-foot interval, dependent on the specific boring location as listed in the Appendix B sample identifiers).

1    Analysis Type:                    M = metals  
2    R = radionuclides  
3  
4    P = Total PCBs  
5  
6    L = total VOCs (if required)  
7    TB = Trip Blank for VOCs (if organics analysis is required)  
8    TL = TCLP VOCs (if required)  
9    TS = TCLP SVOCs/Pesticides/Herbicides (if required)

10

11    An example sample ID would be A6-SP7E-E3^2-RM, which represents a sample from the second 2-foot  
12    interval from boring location 3 to be analyzed for metals and radiological constituents. Appendix B  
13    contains the sample identifiers for each depth interval.

## 5.0 EXCAVATION CONTROL MEASURES

Excavation control sampling or real-time radiological scanning is not required under this PSP for the eastern portion of the SP-7 material, therefore the required subsections for this section per 20300-PSP-0011 are not applicable and are not listed.

## 6.0 PRECERTIFICATION

Precertification activities are not applicable to this PSP for the eastern portion of SP-7 material; therefore, the required subsections for this section per 20300-PSP-0011 are not listed.

## 7.0 QUALITY ASSURANCE/QUALITY CONTROL REQUIREMENTS

Reference the corresponding section of 20300-PSP-0011, *Project Specific Plan Guidelines for General Characterization for Sitewide Soil Remediation* for each of the following sections:

### 7.1 QUALITY CONTROL SAMPLES - REAL-TIME MEASUREMENTS AND PHYSICAL SAMPLES

### 7.2 DATA VALIDATION

#### 7.2.1 Physical Sample Data Validation

In addition to the requirements in the 20300-PSP-0008 document, each laboratory release will be reported as a full data package to enable the project to validate each release at Validation Support Level B. Field data package(s) will be validated.

#### 7.2.2 Real-Time Data Verification/Validation (Not Applicable)

### 7.3 APPLICABLE DOCUMENTS, METHODS AND STANDARDS

### 7.4 SURVEILLANCES

### 7.5 IMPLEMENTATION AND DOCUMENTATION OF VARIANCE/FIELD CHANGE NOTICES (V/FCN)

## 8.0 SAFETY AND HEALTH

Reference the corresponding section of 20300-PSP-0011, *Project Specific Plan Guidelines for General Characterization for Sitewide Soil Remediation* for this section.

The configuration of the eastern portion of SP-7 warrants a discussion of personnel and vehicle safety measures required to be employed during sampling work associated with this PSP. Field personnel involved in this activity shall be briefed by Construction Management on Traveler section that apply to this scope of work. This briefing must include Traveler Module #1, Section 1.17 on Stocking of Materials at a minimum. Vehicles and sampling personnel will not perform soil borings within 8 feet of the top surface edge of any part of SP-7 due to the potential for material slides or personnel falls.

## 9.0 EQUIPMENT DECONTAMINATION

Reference the corresponding section of 20300-PSP-0011, *Project Specific Plan Guidelines for General Characterization for Sitewide Soil Remediation* for this section.

## 10.0 DISPOSITION OF WASTES

Reference the corresponding section of 20300-PSP-0011, *Project Specific Plan Guidelines for General Characterization for Sitewide Soil Remediation* for this section.

## 11.0 DATA MANAGEMENT

Reference the corresponding section of 20300-PSP-0011, *Project Specific Plan Guidelines for General Characterization for Sitewide Soil Remediation* for each of the following sections.

11.1 REAL-TIME (NOT APPLICABLE)

11.2 PHYSICAL SAMPLES

**APPENDIX A**

**TARGET ANALYTE LISTS**

**APPENDIX A  
TARGET ANALYTE LISTS**

**TAL B (off-site lab)**

<b>Analyte</b>	<b>MDL (soil)</b>
Total Uranium	8.2 mg/kg
Uranium-234	Best Achievable (pCi/g)
Uranium-235	Best Achievable (pCi/g)
Uranium-238	Best Achievable (pCi/g)
Percent Moisture	Per Radiological Method
Thorium-230	100 pCi/g
Thorium-232	1.0 pCi/g
Radium-226	1.0 pCi/g
Radium-228	1.0pCi/g
Cesium-137	1.0pCi/g
Technetium-99	2.9 pCi/g
Americium-241	8.5 pCi/g
Neptunium-237	8.5 pCi/g
Potassium-40	3.4 pCi/g
TCLP Arsenic	0.5 mg/L
TCLP Barium	10 mg/L
TCLP Cadmium	0.1 mg/L
TCLP Chromium	0.5 mg/L
TCLP Lead	0.5 mg/L
TCLP Mercury	0.02 mg/L
TCLP Selenium	0.1 mg/L
TCLP Silver	0.5 mg/L
TCLP Zinc	1.0 mg/L
PH	NA

MDL - minimum detection level

**TAL C (off-site lab)**

<b>Analyte</b>	<b>MDL (soil)</b>
Total PCBs	0.01 mg/kg

\* Best achievable

**TAL F – (TCLP; off-site lab)**

TCLP Analyte	MDL (mg/L)
1,2-Dichloroethane	0.05
2,4-dinitrotoluene	0.013 *
Benzene	0.05
Carbon Tetrachloride	0.05
Chlorobenzene	10
Chloroform	0.06
1,1-Dichloroethylene	0.07
Methyl ethyl ketone	20
Tetrachlorethylene	0.07
Trichloroethylene	0.05
Vinyl Chloride	0.02

\* Best achievable

Note: TAL F also applies to VOC trip blanks.

**TAL G – (TCLP ; off-site lab)**

TCLP Analyte	MDL (mg/L)
2,4,5-trichlorophenol	40
2,4,6-trichlorophenol	0.2
1,4-Dichlorobenzene	0.75
Hexachlorobenzene	0.013 *
Hexachlorobutadiene	0.05
Hexachloroethane	0.3
Methoxychlor	1.0
Nitrobenzene	0.2
Pentachlorophenol	10
o-Cresol	20
m-Cresol	20
p-Cresol	20
Chlorodane	0.003
2,4-D	1
Endrin	0.002
Heptachlor	0.0008
Lindane	0.04
Pyridine	0.5 *
Toxaphene	0.05
2,4,5-TP (Silvex)	0.1

\* Best Achievable

**APPENDIX B**

**BORING AND SAMPLE TABLE FOR THE  
EASTERN PORTION OF SP-7**

**APPENDIX B**  
**BORING AND SAMPLE TABLE FOR THE EASTERN PORTION OF SP-7**

Boring ID	Depth Interval*	Sample ID	TAL	Northing	Easting
A6-SP7E-E1	0-2'	A6-SP7E-E1^1-RM	B	TBD	TBD
	2-4'	A6-SP7E-E1^2-RM	B		
	4-6'	A6-SP7E-E1^3-RM	B		
	6-8'	A6-SP7E-E1^4-RM	B		
	8-10'	A6-SP7E-E1^5-RM	B		
	10-12'	A6-SP7E-E1^6-RM	B		
	12-14'	A6-SP7E-E1^7-RM	B		
	14-16'	A6-SP7E-E1^8-RM	B		
	16-18'	A6-SP7E-E1^9-RM	B		
	18-20'	A6-SP7E-E1^10-RM	B		
	20-22'	A6-SP7E-E1^11-RM	B		
	22-24'	A6-SP7E-E1^12-RM	B		
	24-26'	A6-SP7E-E1^13-RM	B		
	26-28'	A6-SP7E-E1^14-RM	B		
	28-30'	A6-SP7E-E1^15-RM	B		
	30-32'	A6-SP7E-E1^16-RM	B		
A6-SP7E-E2	0-2'	A6-SP7E-E2^1-RM	B	TBD	TBD
	2-4'	A6-SP7E-E2^2-RM	B		
	4-6'	A6-SP7E-E2^3-RM	B		
	6-8'	A6-SP7E-E2^4-RM	B		
	8-10'	A6-SP7E-E2^5-RM	B		
	10-12'	A6-SP7E-E2^6-RM	B		
	12-14'	A6-SP7E-E2^7-RM	B		
	14-16'	A6-SP7E-E2^8-RM	B		
	16-18'	A6-SP7E-E2^9-RM	B		
	18-20'	A6-SP7E-E2^10-RM	B		
	20-22'	A6-SP7E-E2^11-RM	B		
	22-24'	A6-SP7E-E2^12-RM	B		
	24-26'	A6-SP7E-E2^13-RM	B		
	26-28'	A6-SP7E-E2^14-RM	B		
	28-30'	A6-SP7E-E2^15-RM	B		
	30-32'	A6-SP7E-E2^16-RM	B		
32-34'	A6-SP7E-E2^17-RM	B			

**APPENDIX B**  
**BORING AND SAMPLE TABLE FOR THE EASTERN PORTION OF SP-7**

Boring ID	Depth Interval*	Sample ID	TAL	Northing	Easting
A6-SP7E-E3	0-2'	A6-SP7E-E3^1-RM	B	TBD	TBD
	2-4'	A6-SP7E-E3^2-RM	B		
	4-6'	A6-SP7E-E3^3-RM	B		
	6-8'	A6-SP7E-E3^4-RM	B		
	8-10'	A6-SP7E-E3^5-RM	B		
	10-12'	A6-SP7E-E3^6-RM	B		
	12-14'	A6-SP7E-E3^7-RM	B		
	14-16'	A6-SP7E-E3^8-RM	B		
	16-18'	A6-SP7E-E3^9-RM	B		
	18-20'	A6-SP7E-E3^10-RM	B		
	20-22'	A6-SP7E-E3^11-RM	B		
	22-24'	A6-SP7E-E3^12-RM	B		
	24-26'	A6-SP7E-E3^13-RM	B		
	26-28'	A6-SP7E-E3^14-RM	B		
28-30'	A6-SP7E-E3^15-RM	B			
A6-SP7E-E4  <i>(assumed elevation of 602 ft.)</i>	0-4'	A6-SP7E-E4^1-RM	B	TBD	TBD
	4-6'	A6-SP7E-E4^2-RM	B		
	6-8'	A6-SP7E-E4^3-RM	B		
	8-10'	A6-SP7E-E4^4-RM	B		
A6-SP7E-E5	0-4'	A6-SP7E-E5^1-RM	B	TBD	TBD
	4-8'	A6-SP7E-E5^2-RM	B		
	8-12'	A6-SP7E-E5^3-RM	B		
		A6-SP7E-E5^3-P	C		
	12-16'	A6-SP7E-E5^4-RM	B		
	16-20'	A6-SP7E-E5^5-RM	B		
			B		
			B		
		B			