



Department of Energy



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JUN 28 2005

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DOE-0271-05

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 DRAFT PROJECT SPECIFIC PLAN FOR THE  
EXCAVATION CONTROL AND PRECERTIFICATION OF AREA 7 SILOS AND  
GENERAL AREA (SUPPLEMENT TO 20300-PSP-0011)**

Enclosed for your review is the draft Project Specific Plan for the Excavation Control and Precertification of Area 7 Silos and General Area (Supplement to 20300-PSP-0011). This plan includes sampling information during remediation of debris and impacted soil in the K-65 Silos, Storm Water Retention Basins, the Western Access Road, TACO Office Trailer Complex Area, Security Trailer Park, Building 82A, several paved and graveled parking lots, the former Lime Sludge Ponds footprint, and the Cement Pond.

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

Sincerely,

*Johnny Reising*  
for William J. Taylor  
Director

FCP:Reising

0000  
Mr. James A. Saric  
Mr. Tom Schneider

-2-

DOE-0271-05

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**PROJECT SPECIFIC PLAN FOR  
THE EXCAVATION CONTROL OF  
AREA 7 SILOS AND GENERAL AREA  
(SUPPLEMENT TO 20300-PSP-0011)**

**ENVIRONMENTAL CLOSURE PROJECT**

**FERNALD CLOSURE PROJECT  
FERNALD, OHIO**



**JUNE 2005**

**U.S. DEPARTMENT OF ENERGY  
FERNALD AREA OFFICE**

**20500-PSP-0009  
REVISION A  
DRAFT**

6005

**PROJECT SPECIFIC PLAN FOR  
THE EXCAVATION CONTROL OF  
AREA 7 SILOS AND GENERAL AREA  
(SUPPLEMENT TO 20300-PSP-0011)**

**Document Number 20500-PSP-0009**

**Draft  
Revision A**

**June 2005**

**APPROVAL:**

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\_\_\_\_\_  
Frank Miller, Characterization/Waste Management Manager  
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\_\_\_\_\_  
Mike Frank, Real-Time Instrumentation Measurement Program Manager  
Environmental Closure Project Date

\_\_\_\_\_  
Linda Barlow, Waste Acceptance Organization  
Environmental Closure Project Date

\_\_\_\_\_  
Reinhard Friske, Quality Control  
Safety, Health and Quality Division Date

**FERNALD CLOSURE PROJECT**

**Fluor Fernald, Inc.  
P.O. Box 538704  
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## LIST OF ACRONYMS AND ABBREVIATIONS

A2PII	Area 2, Phase II
ASCOC	area-specific constituent of concern
ASL	analytical support level
COC	constituent of concern
DOE	U.S. Department of Energy
EMS	Excavation Monitoring System
FACTS	Fernald Analytical Computerized Tracking System
FCP	Fernald Closure Project
FRL	final remediation level
GC	gas chromatograph
HPGe	High-Purity Germanium (Detector)
IC	ion chromatograph
LCS	liquid scintillation counting
µg/kg	micrograms per kilogram
MDC	minimum detectable concentration
MDL	minimum detection level
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
NaI	sodium iodide
pCi/g	picoCuries per gram
PID	photoionization detector
ppm	parts per million
PSP	Project Specific Plan
PWID	Project Waste Identification and Disposition Report
QC	Quality Control
RSS	Radiation Scanning System
RTIMP	Real Time Instrumentation Measurement Program
RTRAK	Real-Time Radiation Tracking System
RWP	Radiation Work Permit
SED	Sitewide Environmental Database
SEP	Sitewide Excavation Plan
SWRB	Storm Water Retention Basin
TACOS	Transitional Additional Contractor Office Space
TAL	Target Analyte List
V/FCN	Variance/Field Change Notice
WAC	Waste Acceptance Criteria
WAO	Waste Acceptance Organization

1.0 INTRODUCTION

This Project Specific Plan (PSP) describes the data collection activities necessary to support excavation control and precertification activities of Area 7 Silos and General Area. This PSP only represents the specific information regarding Area 7 Silos and General Area. 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

The purpose of this PSP is to provide specific direction regarding the excavation control and precertification of Area 7 Silos and General Area. This detailed information includes reason to sample and constituents of concern.

1.2 SCOPE

The area included within the scope of this PSP is Area 7 Silos and General Area. See Figure 1-1 for areas included in excavation control and precertification of this PSP

The Area 7 Silos and General Area includes the K-65 Silos, the Cement Pond, the Storm Water Retention Basins (SWRBs), the West Access Road, Transitional Additional Contractor Office Space (TACOS) Complex, Security Trailer Park, Building 82A, Lime Sludge Pond, Construction Overflow Parking Lot, and Building 30/45 Parking Lot. Various utilities, slabs, footers, and foundations are also in the area. Portions of Area 7 (i.e., the Support Areas) not addressed in this document will be included in separate documentation.

The schedule for implementation of this PSP is expected to begin July 2005. Precertification of this area will begin following successful completion of the excavation control process and prior to certification.

This PSP is not considered a work authorization document (for implementation of fieldwork) per SH-0012, Work Permits. Work authorization documents directing the implementation of fieldwork, per SH-0012, may include applicable Environmental Services procedures, Fluor Fernald work permits, Radiation Work Permits (RWPs), penetration permits, and other applicable permits.

1.3 VARIANCE/FIELD CHANGE NOTICE (V/FCN) DOCUMENTATION

The Variance/Field Change Notice (V/FCN) process is utilized to document the occurrence of two situations. The first is to document a change in protocol occurring when a modification in the

1 characterization approach is required [e.g., a different decision process for defining the extent of  
2 contamination or for verifying that soil is below-waste acceptance criteria (WAC) or below-final  
3 remediation level (FRL) concentrations]. 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. This type of V/FCN requires agency approval prior to implementation.

6  
7 The second situation requiring a V/FCN is to provide documentation of sampling and analytical activities  
8 and to provide variable information that is dependent upon field conditions and cannot be specified  
9 initially in this PSP. As part of the excavation control process, the collection of physical samples will be  
10 documented in applicable field logs and with V/FCNs. Additionally, the Data Group Form, FS-F-5157  
11 will be generated per Procedure EW-1021, Preparation of the Project Waste Identification and  
12 Disposition (PWID) Report, following the generation of data from the analysis of physical samples. In  
13 this situation the use of this V/FCN form is not used to document a change in the protocol of this PSP, but  
14 is used to document sampling and analytical activities in order to demonstrate that these activities are  
15 compliant with the protocols of this PSP.

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

#### 20 21 1.4 KEY PERSONNEL

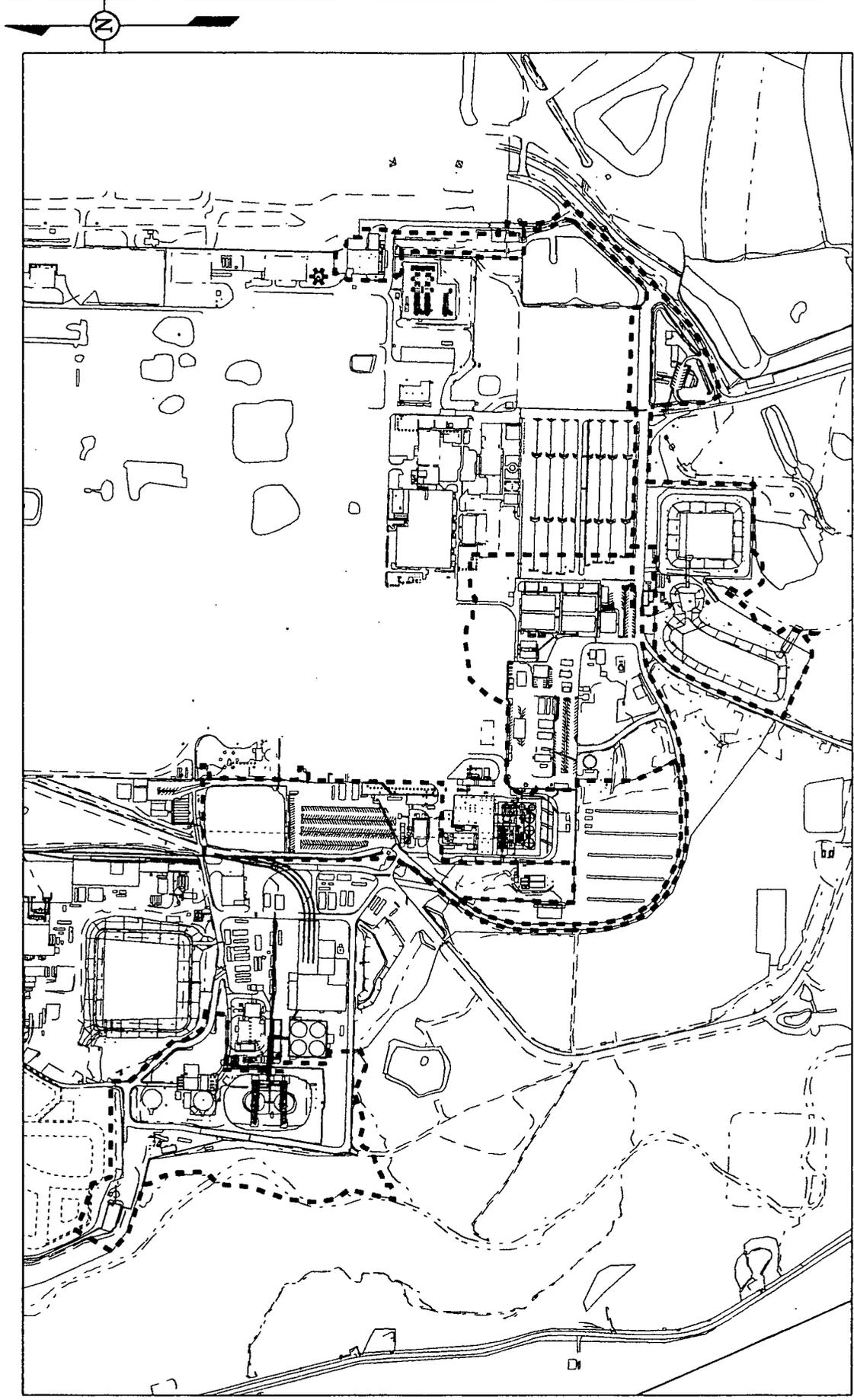
22 Refer to Section 1.4 of 20300-PSP-0011, *Project Specific Plan Guidelines for General Characterization*  
23 *for Sitewide Soil Remediation* and Table 1-1.

1  
2  
3

**TABLE 1-1  
KEY PERSONNEL**

<b>Title</b>	<b>Primary</b>	<b>Alternate</b>
Department of Energy (DOE) Contact	Johnny Reising	TBD
Environmental Closure Project Manager	Jyh-Dong Chiou	Rich Abitz
Characterization Manager	Frank Miller	Denise Arico
Area 7 Lead	Denise Arico	Krista Flaugh
RTIMP Manager	Mike Frank	Dale Seiller
Soil Sampling Manager	Tom Buhrlage	Jim Hey
Surveying Manager	Jim Schwing	Andy Clinton
WAO Contact	Linda Barlow	TBD
Construction Manager	Kevin Harbin	Tim Hastings
Engineering Lead	Tony Snider	Dave Russell
Laboratory Contact	Heather Medley	Amy Meyer
Data Validation Contact	Jim Chambers	Baohe Chen
Field Data Validation Contact	Dee Dee Edwards	Jim Chambers
Data Management Lead	Denise Arico	Krista Flaugh
Radiological Control Contact	Corey Fabricante	Jeff Denton
FACTS/SED Database Contact	Kym Lockard	Susan Marsh
Quality Control Contact	Reinhard Friske	Darren Wessel
Safety and Health Contact	Gregg Johnson	Pete Bolig

- 4
- 5 FACTS - Fernald Analytical Computerized Tracking System
- 6 RTIMP - Real Time Instrumentation Measurement Program
- 7 SED - Sitewide Environmental Database
- 8 WAO - Waste Acceptance Organization



LEGEND:

-----  
 AREA 7 SILOS  
 AND GENERAL AREA



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FIGURE 1-1. AREA 7 SILOS AND GENERAL AREA

## 2.0 AREA-SPECIFIC WORK REMAINING STATUS

### 2.1 AREA 7

#### 2.1.1 History

Area 7 constitutes 85 acres of the Fernald Closure Project (FCP). The majority of this area is located to the west and south of the Former Production Area, with a portion located south of the Main Parking Lot and just east of Area 5. Area 7 is bordered by Paddys Run on the west and Area 1 border it to the east. Areas 1 and 2 comprise the southern border while the Waste Pits and Areas 4B and 3B are to the north. The Area 7 Silos and General Area Excavation represent approximately 56 acres and includes the following:

- K-65 Silos
- Cement Pond
- The SWRBs
- The West Access Road
- TACOS Complex
- Security Trailer Complex
- Building 82A
- Lime Sludge Pond
- Construction Overflow Parking Lot
- Building 30/45 Parking Lot

As stated in the Excavation Plan for Area 7 Silos and General Area, at- and below-grade structures, roadways, and underground utilities not related to groundwater remediation are present throughout. Those utilities, etc. associated with ongoing site needs and/or groundwater remediation will not be addressed in this document. Rather they will be covered under separate documentation. The portion of Area 7 (i.e., the Silos Process Support and Advanced Waste Water Treatment Facility Area) not addressed by this PSP will be presented in separate documentation.

#### 2.1.2 Excavation Control

##### 2.1.2.1 ASCOCs

The evaluation of the preliminary list of area-specific constituents of concern (ASCOCs) found in the Sitewide Excavation Plan (SEP) Table 2-7 for Remediation Area 7, data from the predesign investigation of the area, and historical information resulted in the following list of primary and secondary constituents of concern (COCs) for excavation control of Area 7. These are the only COCs driving excavation.

#### **Primary COCs**

- Total Uranium
- Radium-226

1 **Secondary COCs**

- 2
- 3 • Aroclor-1254
  - 4 • Perchlorate
  - 5 • Technetium-99
- 6

7 The above list of COCs will be used to verify that the planned remedial excavation limits are sufficient to  
8 capture the above-FRL contamination during excavation. Note that the entire ASCOC list applicable to  
9 this area will be reevaluated during the certification design process to determine which of the ASCOCs  
10 will be carried into certification. As always, this evaluation as well as the justification for the retention or  
11 elimination of any COC will be presented in the CDL for agency review and approval.

12

13 **2.1.2.2 Excavation Types**

14 The types of excavation identified in Area 7 Silos and General Area are those that are either above-WAC  
15 (driven by technetium-99) or above-FRL (driven by total uranium, radium-226, and aroclor-1254). The  
16 only constituents controlling excavation in Area 7 Silos and General Area are technetium-99, total  
17 uranium, radium-226, and aroclor-1254. Perchlorates will also be evaluated, in both soil and  
18 groundwater, during excavation in the Equipment Burial Area.

19

20 Real-time scanning for total uranium and radium-226 will be performed for above-FRL areas per  
21 20300-PSP-0011, Section 5.1. Physical sampling for excavation control of above-WAC technetium-99  
22 and above-FRL aroclor-1254 contamination will be performed per 20300-PSP-0011, Section 5.2.

23

24 Table 2-1 lists the excavation control COCs and their limits. Tables 2-2 and 2-3 address the excavation  
25 monitoring and sampling requirements, as well as the physical sample volumes, preservation  
26 requirements, and analysis information. Appendix A lists the Target Analyte Lists (TALs).

27

28 **2.1.3.3 Locations**

29 The list of above-WAC areas and COCs are as follows:

30

<u>Above-WAC Areas</u>	<u>COC</u>
SWRB <sup>1</sup>	Technetium-99
K-65 Trench <sup>2</sup>	Technetium-99

<sup>1</sup>Sediment in the SWRB has been identified as above-WAC. Following removal of the synthetic liner of the SWRB, the soil will be sampled to ensure it is below-WAC for technetium-99.

<sup>2</sup>Sediment within the concrete K-65 Trench has been identified as above-WAC. Prior to removal of the K-65 Trench, soil around it will be sampled to ensure it is below-WAC. Following removal of the K-65 Trench, soil underneath it will be sampled to ensure it is below-WAC.

1 The list of above-FRL areas (see Figures 2-1 through 2-3) and COCs are listed below. Also included in  
2 this plan is continued excavation control of the Area 2, Phase II (A2PII) - Subarea 3 Subcontractor  
3 Laydown Area, which is located along the western side of the west SWRB.

4

<u>Above-FRL Areas</u>	<u>COC</u>
FRL #1 - Silos 1 and 2 Footprint	Radium-226
FRL #2 - North of Silo 4	Total Uranium
FRL #3 - Building 30/45 Parking Lot	Total Uranium
FRL #4 - Northwest of CAWWT	Total Uranium
FRL #5 - Central Construction Overflow Parking Lot	Total Uranium
FRL #6 - South of Construction Overflow Parking Lot	Total Uranium
FRL #7 - Northeast of Construction Overflow Parking Lot	Total Uranium
FRL #8 - Underneath Boiler Plant	Total Uranium
Equipment Burial Area	Perchlorates
A2PII Subarea 3 Subcontractor Laydown Area (along western side of the west SWRB)	Aroclor-1254

5

6 2.1.3 Precertification

7 Precertification will be performed per 20300-PSP-0011, Section 3.0 and Section 6.0.

**TABLE 2-1**  
**LIMITS FOR AREA 7 EXCAVATION CONTROL COCS**

Area 7 COCs	WAC	FRL	MDC
<b>Primary</b>			
Uranium	1030 mg/kg	82.0 mg/kg	8.2 mg/kg
Uranium (high leachability)	1030 mg/kg	20.0 mg/kg	2.0 mg/kg
Radium-226	NA	1.7 pCi/g	0.17 pCi/g
<b>Secondary</b>			
Aroclor-1254	NA	130 µg/kg	13 µg/kg
Technetium-99	29.1 pCi/g	30 pCi/g	2.91 pCi/g
Perchlorates (soil)	NA	TBD	0.04 mg/kg *
Perchlorates (groundwater)	NA	TBD	0.004 mg/L *

\* Best achievable laboratory limits.

µg/kg - micrograms per kilogram  
 MDC - minimum detectable concentration  
 mg/kg - milligrams per kilogram  
 mg/L - milligrams per liter  
 pCi/g - picoCuries per gram

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

TAL <sup>1,2</sup> (all ASL B)	Hold Time	Method	Sample Matrix	Preservative	Container	Minimum Sample Mass/Volume
TAL A Technetium-99	12 mos	LSC	Solid	None	Appropriate size plastic or glass	50 grams
TAL B Aroclor-1254	14 days	GC	Solid	Cool 4°C	Appropriate size glass with Teflon lid	100 grams
TAL C Perchlorate	28 days	IC	Solid	Cool 4°C	Appropriate size plastic or glass with Teflon lid	100 grams
		IC	Liquid (groundwater)		Appropriate size glass with Teflon lid	250 mL

<sup>1</sup> 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 Quality Control (QC)" and shall have a triple aliquot sampled.

<sup>2</sup> All samples will be shipped off-site for analysis utilizing historical data.

ASL - analytical support level  
 GC - gas chromatograph  
 IC - ion chromatograph  
 LSC - liquid scintillation counting

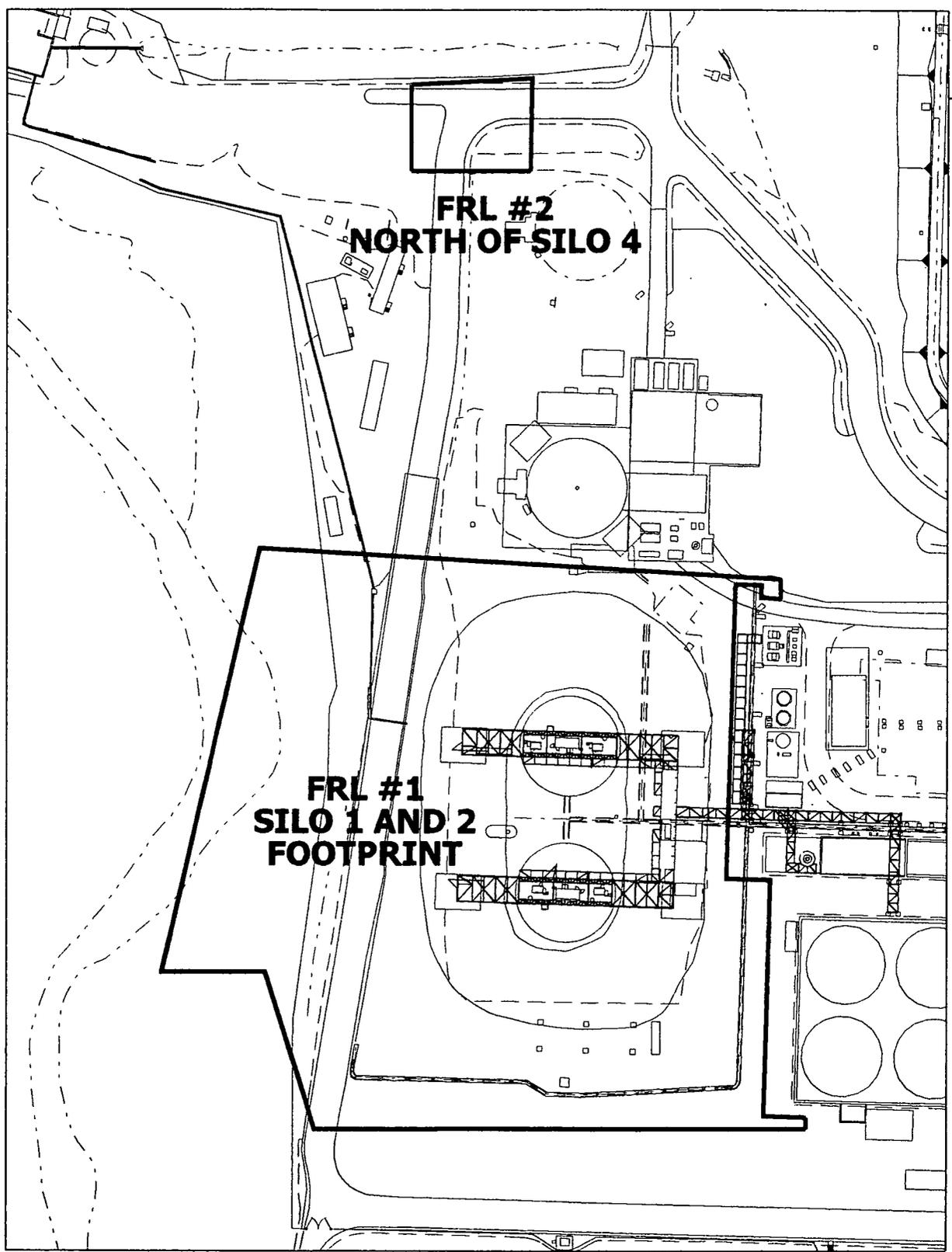
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**TABLE 2-3  
 EXCAVATION MONITORING/SAMPLING REQUIREMENTS**

Type of Contamination Zone	Types of Samples/Measurements and Data Use		
	Sideslope of Each Excavation Lift	Floor of Each Excavation Lift	Floor/Sideslope at Design Depth for Contamination Zone
Above-FRL Uranium	<ul style="list-style-type: none"> <li>Real-time for Uranium (WAC)</li> </ul>	<ul style="list-style-type: none"> <li>Real-time for Uranium (WAC)</li> </ul>	<ul style="list-style-type: none"> <li>Real-time for Uranium (WAC/FRL)*</li> </ul>
Above-FRL Radium-226	<ul style="list-style-type: none"> <li>Real-time for Uranium (WAC)</li> </ul>	<ul style="list-style-type: none"> <li>Real-time for Uranium (WAC)</li> </ul>	<ul style="list-style-type: none"> <li>Real-time for Radium-226/Uranium (WAC/FRL)*</li> </ul>
Above-WAC Technetium-99	<ul style="list-style-type: none"> <li>Physical sample for Technetium-99 (WAC)</li> <li>Real-time for Uranium (WAC)</li> </ul>	<ul style="list-style-type: none"> <li>Real-time for Uranium (WAC)</li> </ul>	<ul style="list-style-type: none"> <li>Physical sample for Technetium-99 (WAC)</li> <li>Real-time for Uranium (FRL)*</li> </ul>
Above-FRL Aroclor-1254	<ul style="list-style-type: none"> <li>Physical sample for Aroclor-1254 (for FRL)</li> <li>Real-time for Uranium (WAC)</li> </ul>	<ul style="list-style-type: none"> <li>Real-time for Uranium (WAC)</li> </ul>	<ul style="list-style-type: none"> <li>Physical sample for Aroclor-1254 (for FRL)</li> <li>Real-time for Uranium (FRL)*</li> </ul>

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 5  
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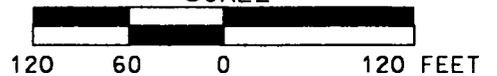
\* During real-time uranium WAC/FRL scan, the data collected will be evaluated later for precertification purposes by reviewing concentrations of thorium-232 and radium-226, as well as thorium-228 and radium-228 based on equilibrium in comparison to their respective FRLs.



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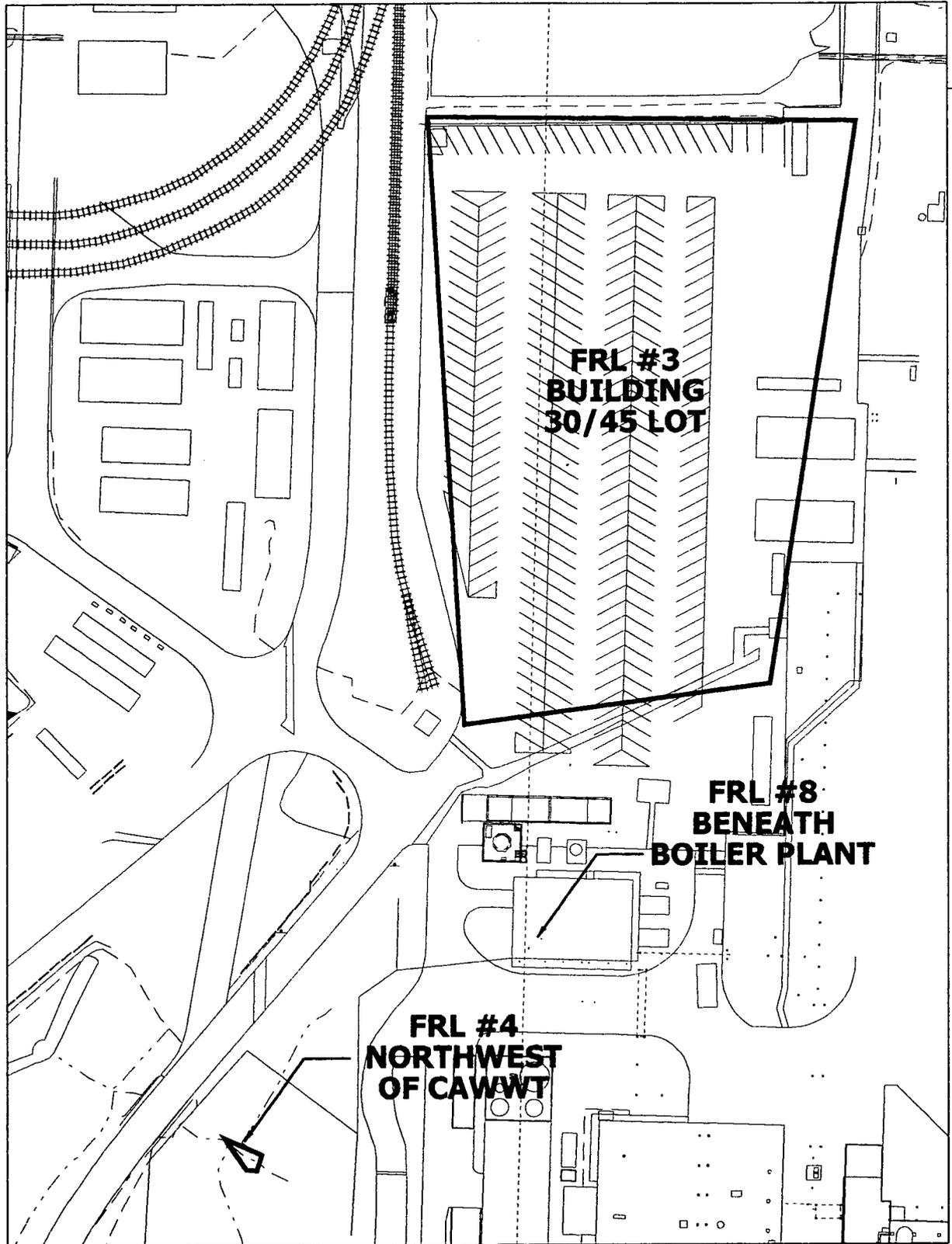
**—** ABOVE-FRL BOUNDARY

**SCALE**



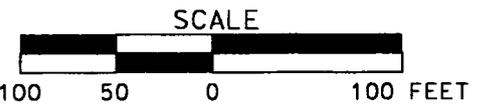
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**FIGURE 2-1. AREA 7 EXCAVATION CONTROL ABOVE-FRL LOCATIONS**



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**—** ABOVE-FRL BOUNDARY



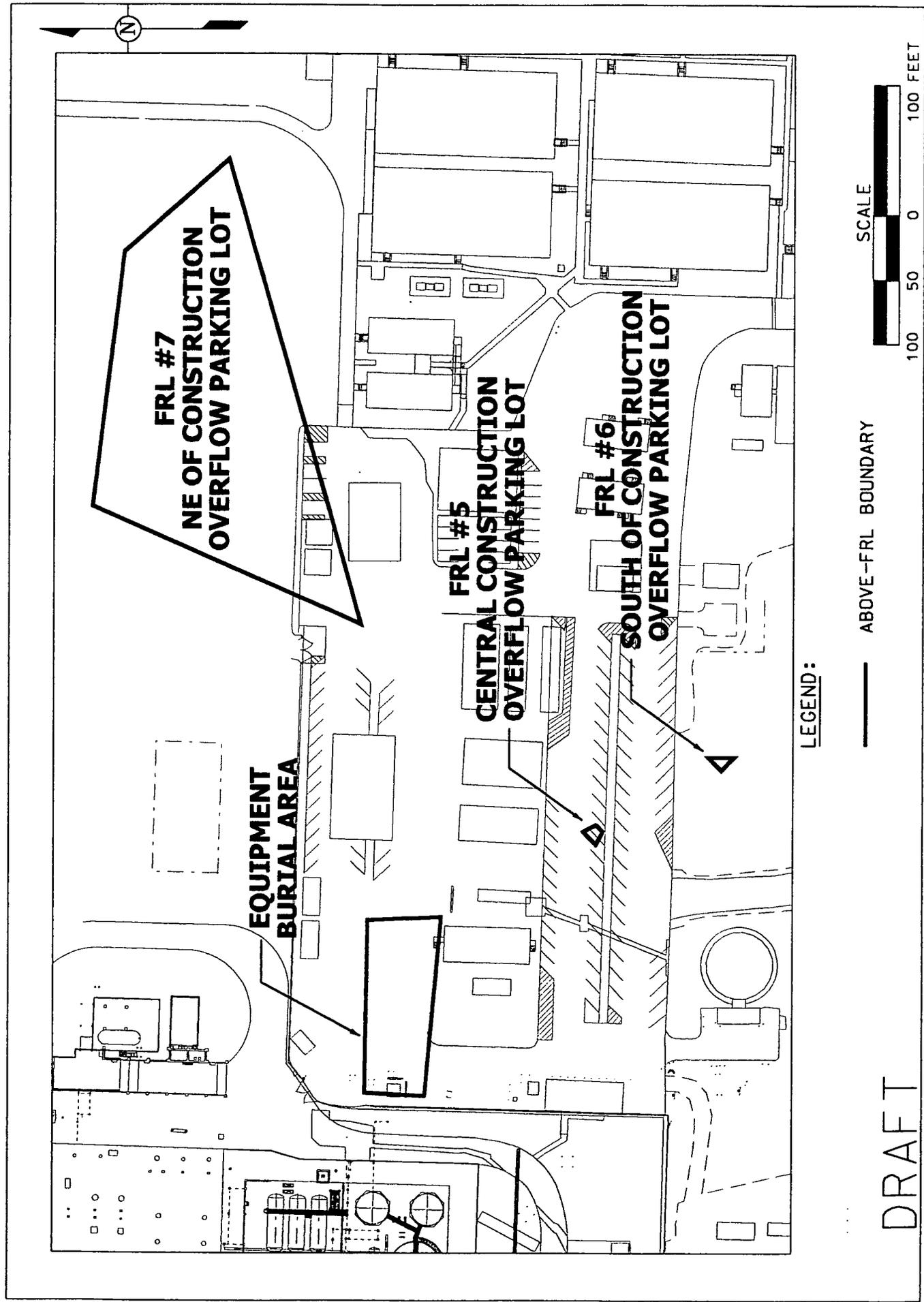
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**FIGURE 2-2. AREA 7 EXCAVATION CONTROL ABOVE-FRL LOCATIONS**

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STATE PLANNING COORDINATE SYSTEM 1983

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FIGURE 2-3. AREA 7 EXCAVATION CONTROL ABOVE-FRL LOCATIONS

### 3.0 INSTRUMENTATION AND TECHNIQUES

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:

#### 3.1 MEASUREMENT INSTRUMENTATION AND TECHNIQUES

##### 3.1.1 Real-Time

##### 3.1.1.1 Sodium Iodide Data Acquisition (RTRAK, RSS, GATOR, EMS)

##### 3.1.1.2 HPGe Data Acquisition

##### 3.1.1.3 Excavation Monitoring System

##### 3.1.1.4 Radon Monitor

##### 3.1.2 Surface Moisture Measurements

#### 3.2 REAL-TIME MEASUREMENT IDENTIFICATION

#### 3.3 REAL-TIME DATA MAPPING

#### 3.4 REAL-TIME SURVEYING

1 **4.0 PREDESIGN**

2  
3 The predesign investigations of Area 7 were completed using the PSPs noted in the Excavation Plan  
4 Area 7 Silos and General Area.

5  
6 **5.0 EXCAVATION CONTROL MEASURES**

7  
8 Reference the corresponding section of 20300-PSP-0011, *Project Specific Plan Guidelines for General*  
9 *Characterization for Sitewide Soil Remediation* for each of the following sections:

10  
11 **5.1 EXCAVATION DESIGN CONTROL REQUIREMENTS**

12 **5.1.1 Contamination Zone**

13 **5.1.2 Floors, Roads and Foundations**

14 **5.1.3 Real-Time Lift Scans**

15 **5.1.4 Above-WAC Lift Scans**

16 **5.2 ORGANIC SCREENING AND PHYSICAL SAMPLING REQUIREMENTS**

17 **5.2.1 Above-WAC Photoionization Detector (PID)/Gas Chromatograph (GC) Screening**

18 **5.2.2 All Other Physical Sample Requirements**

19 In addition to the information contained in the corresponding section of 20300-PSP-0011, *Project*  
20 *Specific Plan Guidelines for General Characterization for Sitewide Soil Remediation*, if discolored or  
21 stained soil is noted further investigation with the possibility of additional sampling may occur.

22  
23 **5.2.3 PID Screening and Physical Sampling Procedures**

24 **5.2.4 Physical Sample Identification**

25  
26 **6.0 PRECERTIFICATION**

27  
28 Reference the corresponding section of 20300-PSP-0011, *Project Specific Plan Guidelines for General*  
29 *Characterization for Sitewide Soil Remediation* for each of the following sections:

30  
31 **6.1 INITIAL PRECERTIFICATION NaI SCAN AT BASE OF DESIGN GRADE**

32 **6.2 PRECERTIFICATION HPGE MEASUREMENTS IN 20 PPM FRL (URANIUM) AREAS**

33 **6.3 PRECERTIFICATION HPGE MEASUREMENTS IN 82 PPM FRL (URANIUM) AREAS**

34 **6.4 DELINEATING HOT SPOTS FOLLOWING PRECERTIFICATION HPGE MEASUREMENTS**

1                   **7.0 QUALITY ASSURANCE/QUALITY CONTROL REQUIREMENTS**

2  
3   Reference the corresponding section of 20300-PSP-0011, *Project Specific Plan Guidelines for General*  
4   *Characterization for Sitewide Soil Remediation* for each of the following sections:

5  
6   7.1 QUALITY CONTROL SAMPLES - REAL-TIME MEASUREMENTS AND PHYSICAL SAMPLES

7   7.2 DATA VALIDATION

8   7.2.1 Physical Sample Data Validation

9   7.2.2 Real-Time Data Verification/Validation

10  7.3 APPLICABLE DOCUMENTS, METHODS AND STANDARDS

11  7.4 SURVEILLANCES

12  7.5 IMPLEMENTATION AND DOCUMENTATION OF VARIANCE/ FIELD CHANGE NOTICES (V/FCN)

13  
14                   **8.0 SAFETY AND HEALTH**

15  
16   Reference the corresponding section of 20300-PSP-0011, *Project Specific Plan Guidelines for General*  
17   *Characterization for Sitewide Soil Remediation* for this section.

18  
19                   **9.0 EQUIPMENT DECONTAMINATION**

20  
21   Reference the corresponding section of 20300-PSP-0011, *Project Specific Plan Guidelines for General*  
22   *Characterization for Sitewide Soil Remediation* for this section.

23  
24                   **10.0 DISPOSITION OF WASTES**

25  
26   Reference the corresponding section of 20300-PSP-0011, *Project Specific Plan Guidelines for General*  
27   *Characterization for Sitewide Soil Remediation* for this section.

28  
29                   **11.0 DATA AND RECORDS MANAGEMENT**

30  
31   Reference the corresponding section of 20300-PSP-0011, *Project Specific Plan Guidelines for General*  
32   *Characterization for Sitewide Soil Remediation* for each of the following sections:

33  
34  11.1 REAL-TIME

35  11.2 PHYSICAL SAMPLES

**APPENDIX A**

**TARGET ANALYTE LISTS FOR  
EXCAVATION CONTROL AND PREDESIGN**

1 **APPENDIX A**  
2 **TARGET ANALYTE LISTS FOR EXCAVATION CONTROL AND PRECERTIFICATION**  
3  
4

5 **TAL A**

Analyte	FRL	MDL (soil)
Technetium-99	30 pCi/g	29.1 pCi/g

8 **TAL B**

Analyte	FRL	MDL (soil)
Aroclor-1254	130.0 µg/kg	13.0 µg/kg

12 **TAL C**

Analyte	FRL	MDL (soil)	MDL (water)
Perchlorate	NA	0.04 mg/kg	0.004 mg/L

15 MDL - minimum detection level  
16