



# Department of Energy

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APR 26 1999

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

DOE-0665-99

Mr. Tom Schneider, Project Manager  
Ohio Environmental Protection Agency  
401 East 5<sup>th</sup> Street  
Dayton, Ohio 45402

Dear Mr. Saric and Mr. Schneider:

## TRANSMITTAL OF SOIL PILE 7 SAMPLING AND ANALYSIS INFORMATION

Reference: "Project Specific Plan for Sampling and Analysis of First Waste Loadout Materials for Operable Unit 1 (Rev. O, December 1998)"

This letter provides information detailing the sampling and analysis approach for Soil Pile 7 (SP-7) to support the continuation of first waste loadout operations under Operable Unit 1 (OU1). The information contained in this transmittal fulfills the commitment made in the referenced Project Specific Plan (PSP) to provide additional sampling and analysis information (e.g., final number and identification of sampling locations with target sample intervals) for SP-7 once the administrative controls needed to cordon off the appropriate portions of the pile for characterization and loadout are established. Recognizing that a portion of SP-7 must remain available for stockpiling material that does not meet the On-Site Disposal Facility (OSDF) Waste Acceptance Criteria (WAC), a boundary fence has been established across the east end of the pile to separate the active pile area (east end) from the inactive portion of SP-7 planned for characterization and loadout.

A survey of SP-7 has been completed and the information has been used to determine an appropriate number of samples, and sample distribution based on the technical approach defined in the referenced PSP. This information is detailed in the enclosed figure and tables and is summarized as follows.

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Mr. James A. Saric  
Mr. Tom Schneider

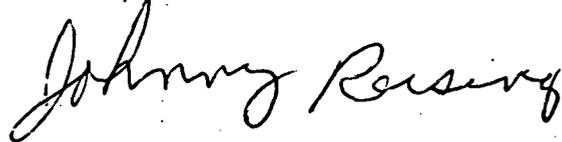
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- The volume of the loadout portion of SP-7 is approximately 15,000 cubic yards. Based on this volume of material and using the approach for determining sample frequency presented in section 1.3.1 of the PSP, a total of 12 sample locations yielding 53 discrete sample intervals was determined to be sufficient for characterization of the pile.
- A sample grid consisting of 12 grid blocks was established across the loadout portion of SP-7 and a boring location was selected at random within each grid block. Four vertical sample intervals were selected at random at each boring location with a fifth sample interval selected at five boring locations in the deepest part of the pile for a total of 53 sample intervals. The sample grid and boring locations are provided in Attachment 1. The sample intervals and associated analytical requirements are provided in Attachment 2.
- The analytical regime, sample screening procedures and sampling protocols for SP-7 are identical to the used for Soil Pile 6 (SP-6). The target analyte lists and associated number of analyses are provided in Attachment 3.

Sampling activities are tentatively scheduled to begin the week of April 26, 1999 with excavation of SP-7 beginning in early to mid June 1999. Prior to initiating sampling, the information provided in this transmittal will be incorporated into the PSP through a formal variance as provided for in the Sitewide CERCLA Assurance Project Plan (SCQ).

If you should have any questions or comments, please contact David Lojek at (513) 648-3127.

Sincerely,



Johnny W. Reising  
Fernald Remedial Action  
Project Manager

FEMP:Hall

Enclosure

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Mr. James A. Saric  
Mr. Tom Schneider

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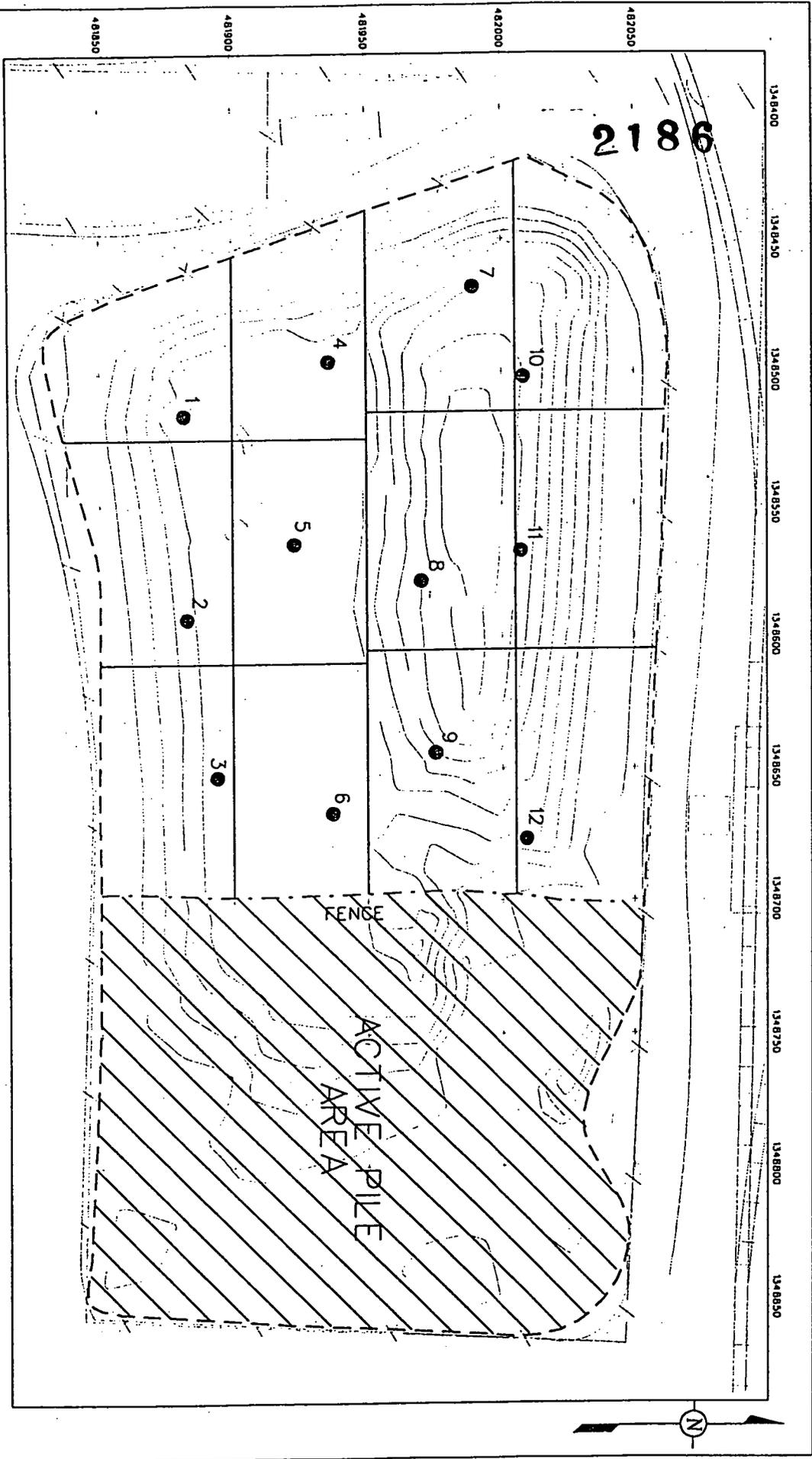
cc w/enclosure:

N. Hallein, EM-42/CLOV  
G. Jablonowski, USEPA-V, SRF-5J  
J. Saric, USEPA-V, SRF-5J  
R. Beaumier, TPSS/DERR, OEPA-Columbus  
T. Schneider, OEPA (three copies of enclosure)  
F. Bell, ATSDR  
M. Schupe, HSI GeoTrans  
R. Vandegrift, ODH  
F. Barker, Tetra-Tech  
D. Carr, FDF/52-2  
AR Coordinator, FDF/78

cc w/o enclosure:

A. Tanner, OH/FEMP  
T. Hagen, FDF/65-2  
J. Harmon, FDF/90  
R. Heck, FDF/2  
S. Hinnefeld, FDF/31  
T. Walsh, FDF/65-2  
ECDC, FDF/52-7

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● SAMPLE POINT LOCATION

SP-7 SAMPLE POINT LOCATIONS



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## SP-7 SAMPLE IDENTIFICATION AND LOCATIONS

Sample Identification	Northing	Easting	Total Depth (ft)	Interval No.	TAL	Sample Depth (ft)
SP7-1	481882	1348516	8.15	1	A,B	0.5-2
				2	A,B	2-3.5
				3*	A,B,C,D,F	3.5-5
				4	A,B	6.5-8
SP7-2	481883	1348593	6.51	1	A,B	0.5-2
				2	A,B	2-3.5
				3	A,B	3.5-5
				4*	A,B,C,D,F	5-6.5
SP7-3	481894	1348653	8.63	1	A,B	0-1.5
				2	A,B	1.5-3
				3	A,B,C	4.5-6
				4	A,B	6-7.5
SP7-4	481936	1348496	7.82	1	A,B,C	0-1.5
				2	A,B	1.5-3
				3	A,B,C	4.5-6
				4	A,B	6-7.5
SP7-5	481923	1348565	8.7	1	A,B	1-2.5
				2	A,B,C,F	2.5-4
				3	A,B	4-5.5
				4	A,B	5.5-7
				5	A,B	7-8.5
SP7-6	481937	1348667	8.51	1	A,B	1-2.5
				2	A,B	2.5-4
				3	A,B	4-5.5
				4	A,B	5.5-7
				5*	A,B,C,D,F	7-8.5
SP7-7	481989	1348468	12.81	1	A,B	0.5-2
				2	A,B,C	3.5-5
				3	A,B	6.5-8
				4	A,B	9.5-11
				5	A,B	11-12.5
SP7-8	481970	1348579	15.33	1	A,B	4.5-6
				2*	A,B,C,G,H,I	6-7.5
				3	A,B	7.5-9
				4	A,B	12-13.5
				5	A,B	13.5-15
SP7-9	481975	1348644	13.15	1	A,B	1-2.5
				2	A,B	4-5.5
				3	A,B	5.5-7
				4*	A,B,C,D,E	8.5-10
				5	A,B	11.5-13
SP7-10	482008	1348502	15.35	1	A,B	2-3.5
				2	A,B	3.5-5
				3	A,B	8-9.5
				4	A,B	11-12.5
SP7-11	482007	1348568	14.93	1	A,B	1.5-3
				2*	A,B,C,D,F	4.5-6
				3	A,B	6-7.5
				4	A,B	9-10.5
SP7-12	482009	1348677	7.38	1	A,B,C	1-2.5
				2	A,B	2.5-4
				3	A,B	4-5.5
				4	A,B	5.5-7

\*Gross alpha/beta screen for off-site analyses

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## TARGET ANALYTE LISTS FOR SP-7 SOIL PILE

## TAL A (53 samples)

Gamma Spectrometry Scan (300 grams): 30-minute count time identification of all peaks using multiple library searches

## TAL B (53 samples)

TCLP Inorganics and pH (150 grams/50 grams): Arsenic, Barium, Cadmium, Chromium, Lead, Mercury, Selenium, Silver, Zinc, pH

## TAL C (11 samples)

Alpha Spectrometry (5 grams): Isotopic uranium, Isotopic thorium, Radium-226

## TAL D (5 samples minimum)

TCLP Organics (60 grams/120 grams/500 grams): Endrin, Lindane, Methoxychlor, Toxaphene, 2,4-D, 2,4,5-TP (Silvex), Benzene, Carbon Tetrachloride, Chlordane, Chlorobenzene, Chloroform, o-Cresol, m-Cresol, p-Cresol, Cresol, 1,4-Dichlorobenzene, 1,2-Dichloroethane, 1,1-Dichloroethylene, 2,4-Dinitrotoluene, Heptachlor (and its epoxide), Hexachlorobenzene, Hexachlorobutadiene, Hexachloroethane, Methyl ethyl ketone, Nitrobenzene, Pentachlorophenol, Pyridine, Tetrachloroethylene, Trichloroethylene, 2,4,5-Trichlorophenol, 2,4,6-Trichlorophenol, Vinyl chloride

## TAL E (1 sample)

Polychlorinated biphenyls (200 grams): Aroclor 1016, Aroclor 1221, Aroclor 1232, Aroclor 1242, Aroclor, 1248, Aroclor 1254, Aroclor 1260

## TAL F (5 samples)

ICP/MS (5 grams): Uranium-235 (wt %)

## TAL G (1 sample)

Reactive cyanide and sulfide (150 grams)

## TAL H (1 sample)

Paint Filter Liquids Test (200 grams)

## TAL I (1 sample)

Off-site pH (50 grams)

## TAL J (3-4 samples)

Total Volatiles (3 x 40 mL) for Trip Blanks: Vinyl chloride, 1,1-dichloroethylene, Chloroform, 1,2-dichloroethane, Methyl ethyl ketone, Carbon tetrachloride, Trichloroethylene, Benzene, Tetrachloroethylene, Chlorobenzene

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