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Department of Energy

Ohio Field Office
Fernald Environmental Management Project
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(513) 648-3155

DEC 04 2003

Mr. James A. Saric, Remedial Project Manager
United States Environmental Protection Agency
Region V, SR-6J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

DOE-0068-04

Mr. Tom Schneider, Project Manager
Ohio Environmental Protection Agency
401 East 5th Street
Dayton, Ohio 45402-2911

Dear Mr. Saric and Mr. Schneider:

TRANSMITTAL OF THE RESPONSES TO U.S. ENVIRONMENTAL PROTECTION AGENCY COMMENTS ON THE DRAFT CERTIFICATION REPORT FOR AREA 6, PHASE I - PART ONE

References:
1. Letter DOE-0024-04, from G. Griffiths to J. Saric and T. Schneider, "Transmittal of the Draft Certification Report for Area 6, Phase I – Part One," dated October 24, 2003
2. Letter from T. Schneider to G. Griffiths, "Approval – Draft Certification Report for Area 6, Phase I – Part One," dated October 27, 2003
3. Letter from J. Saric to J. Reising, "Comments on the Draft Certification Report for Area 6, Phase I – Part One," dated November 18, 2003

Enclosed for your approval are the responses to the United States Environmental Protection Agency (USEPA) comments on the draft Certification Report for Area 6, Phase I - Part One. The statistical analysis results for Certification Unit 3 are provided as an attachment to the comments. Approval from the Ohio Environmental Protection Agency (OEPA) is noted in Reference 2. Upon approval of these comments responses, the report will be finalized.

Recycled and Recyclable

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

Sincerely,

FCP:Reising

William J. Taylor
Director

Enclosure: As Stated

cc w/enclosure:
J. Reising, OH/FCP
T. Schneider, OEPA-Dayton (three copies of enclosure)
G. Jablonowski, USEPA-V, SR-6J
M. Cullerton, Tetra Tech
F. Bell, ATSDR
M. Shupe, HSI GeoTrans
R. Vandegrift, ODH
AR Coordinator, Fluor Fernald, Inc./MS78

cc w/o enclosure:
K. Johnson, OH/FCP
J. Chiou, Fluor Fernald, Inc./MS64
T. Hagen, Fluor Fernald, Inc./MS1
W. Hooper, Fluor Fernald, Inc./MS64
F. Miller, Fluor Fernald, Inc./MS64
D. Powell, Fluor Fernald, Inc./MS64
ECDC, Fluor Fernald, Inc./MS52-7

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RESPONSES TO U.S. ENVIRONMENTAL PROTECTION AGENCY COMMENTS ON THE DRAFT CERTIFICATION REPORT FOR AREA 6, PHASE I – PART ONE

FERNALD CLOSURE PROJECT
FERNALD, OHIO

NOVEMBER 2003

U.S. DEPARTMENT OF ENERGY

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RESPONSES TO UNITED STATES ENVIRONMENTAL PROTECTION AGENCY COMMENTS ON THE DRAFT CERTIFICATION REPORT FOR AREA 6, PHASE I – PART ONE

COMMENTS

1. Commenting Organization: U.S. EPA Commentor: Saric
   Section #: Executive Summary Pg.#: ES-1 Line #: 12 Code: C
   Original Comment #: 1
   Comment: The text states that Area 6, Phase I – Part One is located west of Paddys Run. The text should be revised to state that Area 6, Phase I – Part One is located east of Paddys Run.
   Response: DOE agrees with the comment.
   Action: The Executive Summary has been revised to state that Area 6, Phase I – Part One is located east of Paddys Run.

2. Commenting Organization: U.S. EPA Commentor: Saric
   Section #: Appendix A Pg.#: A.CU3 Line #: Not Applicable Code: C
   Original Comment #: 2
   Comment: The table listing the certification samples, laboratory analytical results, and statistical analysis results for Certification Unit 3 is missing from Appendix A. The appendix should be revised to include this table.
   Response: The statistical analysis results for Certification Unit 3 seem to have been inadvertently omitted from Appendix A during reproduction.
   Action: The statistical analysis results for Certification Unit 3 are provided as an attachment to these comments on the Draft Certification Report for Area 6, Phase I – Part One.
   DOE will ensure that the all copies of the Final Certification Report for Area 6, Phase I – Part One are distributed with the statistical analysis results for all of the Certification Units (i.e. Certification Units 3 through 14).

CERTIFICATION UNIT 3

	Primary COCs					Secondary COCs								
Sample ID	Radium-226	Radium-228	Thorium-228	Thorium-232	Uranium, Total	Technetium-99	Thorium-230	Arsenic	Beryllium	1,1-Dichloroethene	Aroclor-1254	Aroclor-1260	Benzo(a)anthracene	Benzo(a)pyrene
A6P1-C-03-2	0.984 -	0.909 -	0.921 -	0.909 -	6.64 -	1.69 U	6.15 U	12.4 J	0.794 -	1.2 U	4.1 U	4.1 U	41 U	41 U
A6P1-C-03-3	0.862 -	0.747 -	0.741 -	0.747 -	4.27 -	1.65 U	12.1 U	8.80 J	0.683 -	1.1 U	3.7 U	3.7 U	37 U	37 U
A6P1-C-03-4	0.677 -	0.572 -	0.581 -	0.572 -	5.08 -	1.61 U	3.89 U	7.44 J	0.451 -	1.1 U	3.6 U	3.6 U	36 U	36 U
A6P1-C-03-5	1.16 -	1.12 -	1.21 -	1.12 -	7.33 -	1.65 U	5.73 U	4.35 J	0.762 -	1.2 U	4.1 U	4.1 U	41 U	41 U
A6P1-C-03-6	0.851 -	1.12 -	1.05 -	1.12 -	9.47 -	1.71 U	11.7 U	4.2 J	0.763 -	1.2 U	4.0 U	4.0 U	40 U	40 U
A6P1-C-03-8	0.995 -	1.02 -	1.04 -	1.02 -	7.51 -	1.73 U	4.53 U	9.47 J	0.685 -	1.2 U	3.9 U	3.9 U	39 U	39 U
A6P1-C-03-10	0.936 -	1.16 -	1.16 -	1.16 -	7.69 -	1.76 U	10.9 U	5.28 J	0.709 -	1.2 U	4.1 U	4.1 U	41 U	41 U
A6P1-C-03-11	0.910 -	0.975 -	0.960 -	0.975 -	11.8 -	1.61 U	12.0 U	7.53 J	0.671 -	1.2 U	13.6 -	3.4 J	39 U	68 -
A6P1-C-03-11-D	0.996 -	0.951 -	0.948 -	0.951 -	12.2 -	1.76 U	11.5 U	5.33 J	0.596 -	1.2 U	40.8 -	9.5 -	39 U	87 -
A6P1-C-03-12	1.01 -	1.15 -	1.22 -	1.15 -	7.89 -	1.72 U	5.43 U	5.18 J	0.772 -	1.2 U	4.0 U	4.0 U	40 U	40 U
A6P1-C-03-13	1.03 -	1.04 -	1.05 -	1.04 -	10.9 -	1.78 U	3.27 U	6.31 J	0.763 -	1.2 U	4.1 U	4.1 U	41 U	150 -
A6P1-C-03-14	1.05 -	1.07 -	1.06 -	1.07 -	4.43 -	1.78 U	10.4 U	7.05 J	0.800 -	1.2 U	4.1 U	4.1 U	41 U	41 U
A6P1-C-03-15	0.943 -	0.970 -	0.960 -	0.970 -	7.29 -	1.83 U	10.0 U	6.10 J	0.746 -	1.1 U	4.0 U	4.0 U	40 U	40 U
Limit	1.7	1.8	1.7	1.5	82	30	280	12	1.5	410	130	130	1000 (BTV)	1000 (BTV)
Units	pCi/g	pCi/g	pCi/g	pCi/g	mg/kg	pCi/g	pCi/g	mg/kg	mg/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Conf. Level	95%	95%	95%	95%	95%	90%	90%	90%	90%	90%	90%	90%	90%	90%
Max. Result	1.16	1.16	1.22	1.16	12.2	1.83 U	12.1 U	12.4	0.8	1.2 U	40.8	9.5	41 U	150
Max. >= Limit	No	No	No	No	No	No	No	Yes	No	No	No	No	No	No
W-statistic Prob. #	--	--	--	--	--	--	--	92.1% (LN)	--	--	--	--	--	--
Test Procedure	--	--	--	--	--	--	--	Lognormal	--	--	--	--	--	--
Sample Size	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Nondetects	0	0	0	0	0	12	12	0	0	12	11	11	12	10
% Nondetects	0%	0%	0%	0%	0%	100%	100%	0%	0%	100%	92%	92%	100%	83%
Est. Mean*	--	--	--	--	--	--	--	7.03	--	--	--	--	--	--
UCL	--	--	--	--	--	--	--	8.09	--	--	--	--	--	--
Prob. > Limit	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Pass / Fail	--	--	--	--	--	--	--	pass	--	--	--	--	--	--
a posteriori Sample	--	--	--	--	--	--	--	3	--	--	--	--	--	--
Size calculation	--	--	--	--	--	--	--	Pass	--	--	--	--	--	--

Note: Est. Mean = Estimated measure of central tendency(Normal: Mean; LogNormal: Est. Mean; Non-Parametric: Median)
The maximum value of the two duplicates was used in all statistical equations.
#: This is the highest reported probability of the Shapiro-Wilk W-statistic for tests for the validity of the normality assumption.
The test is performed on the raw data (untransformed) data (N) and the log-transformed data (LN) to test for lognormality.

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	Secondary COCs (con't)									
Sample ID	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Fluoranthene	Indeno(1,2,3-cd)pyrene	Phenanthrene	Pyrene	Tetrachloroethene
A6P1-C-03-2	41 U	41 U	41 U	41 U	41 U	29 J	41 U	41 U	23 J	1.2 U
A6P1-C-03-3	37 U	37 U	37 U	37 U	37 U	37 U	37 U	37 U	37 U	1.1 U
A6P1-C-03-4	36 U	36 U	36 U	36 U	36 U	36 U	36 U	36 U	36 U	1.1 U
A6P1-C-03-5	41 U	41 U	41 U	41 U	41 U	41 U	41 U	41 U	41 U	1.2 U
A6P1-C-03-6	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	1.2 U
A6P1-C-03-8	39 U	39 U	39 U	39 U	39 U	39 U	39 U	39 U	39 U	1.2 U
A6P1-C-03-10	41 U	41 U	41 U	41 U	41 U	41 U	41 U	41 U	41 U	1.2 U
A6P1-C-03-11	92 -	39 U	34 J	56 -	39 U	75 -	56 -	28 J	74 -	1.2 U
A6P1-C-03-11-D	120 -	39 U	39 U	83 -	39 U	140 -	61 -	59 -	130 -	1.2 U
A6P1-C-03-12	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	1.2 U
A6P1-C-03-13	180 -	140 -	41 U	140 -	41 U	210 -	100 -	74 -	190 -	1.2 U
A6P1-C-03-14	41 U	41 U	41 U	41 U	41 U	41 U	41 U	41 U	41 U	1.2 U
A6P1-C-03-15	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	1.1 U
Limit	1000 (BTV)	1000 (BTV)	1000 (BTV)	1000 (BTV)	88 (BTV)	10000 (BTV)	1000 (BTV)	5000 (BTV)	10000 (BTV)	3600
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Conf. Level	90%	90%	90%	90%	90%	90%	90%	90%	90%	90%
Max. Result	180	140	34	140	41 U	210	100	74	190	1.2 U
Max. >= Limit	No	No	No	No	No	No	No	No	No	No
W-statistic Prob. #	--	--	--	--	--	--	--	--	--	--
Test Procedure	--	--	--	--	--	--	--	--	--	--
Sample Size	12	12	12	12	12	12	12	12	12	12
Nondetects	10	11	12	10	12	10	10	10	10	12
% Nondetects	83%	92%	100%	83%	100%	83%	83%	83%	83%	100%
Est. Mean*	--	--	--	--	--	--	--	--	--	--
UCL	--	--	--	--	--	--	--	--	--	--
Prob. > Limit	--	--	--	--	--	--	--	--	--	--
Pass / Fail	--	--	--	--	--	--	--	--	--	--
a posteriori Sample	--	--	--	--	--	--	--	--	--	--
Size calculation	--	--	--	--	--	--	--	--	--	--

Note: Est. Mean = Estimated measure of central tendency(Normal: Mean; LogNormal: Est. Mean; Non-Parametric: Median)
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