Fernald Environmental

FERMCO (now renamed Fluor Daniel Fernald)
Restoration Management Corporation P.O. Box 398704 Cincinnati, Ohio 45239-8704 (513) 738-6200

6-106.12

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July 14, 1997

Fernald Environmental Management Project
Letter No. C:SWP(ARP):97-0026

Mr. Thomas A. Winston, District Chief
Southwest District Office
Ohio Environmental Protection Agency
401 East Fifth Street
Dayton, OH 45402-2911

Dear Mr. Winston

NONCOMPLIANCE REPORT - JUNE 1997 - FERNALD ENVIRONMENTAL MANAGEMENT PROJECT - NPDES PERMIT NO. 1IO00004*ED

Enclosed is a Noncompliance Report for June 1997. Included in this report is a discussion of a pH monitoring issue. The continuous pH meter at Outfall 4001 was reading a pH above 9.0, however, further investigation revealed that it was likely the pH meter was either out of calibration or malfunctioning. While not reported as a noncompliance we feel it important that your office have this information. Mr. Joe Bartoszek of your staff was kept apprised of this situation and we appreciate his cooperation in this matter. Copies of the June 1997 Discharge Monitoring Reports are enclosed to aid in your review.

Sincerely,

David J. Brettschneider, Project Manager
Aquifer Restoration and Wastewater Project

DJB:FLJ
Enclosures

Fernald Environmental
FERMCO
Restoration Management Corporation
(now renamed Fluor Daniel Fernald)

c: S. M. Beckman, Fluor Daniel Fernald, MS 52-3
D. J. Carr, Fluor Daniel Fernald, MS 9
K. A. Chaney, EM-423,QO
L. C. Goidell, Fluor Daniel Fernald, MS 65-2
E. H. Henry, Fluor Daniel Fernald, MS 52-5
W. A. Hertel, Fluor Daniel Fernald, MS 52-5
F. L. Johnston, Fluor Daniel Fernald, MS 52-2
J. D. Kappa, DOE-FEMP, MS45
M. M. Landrum, Fluor Daniel Fernald, MS 52-5
C. G. Siefert, Fluor Daniel Fernald, MS 52-5
E. P. Skintik, DOE-FEMP, MS 45
T. J. Walsh, Fluor Daniel Fernald, MS 65-2
AR Coordinator, MS 78
EDC File No. 52700

NONCOMPLIANCE REPORT
NPDES PERMIT NO. 1IO00004*ED
FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
U. S. DEPARTMENT OF ENERGY

The following table describes the June 1997 instances of noncompliance with the discharge limitations specified in the FEMP NPDES Permit. This table lists the outfall, date of noncompliance, parameter, permit limit and actual measurement.

OUTFALL: SEWAGE TREATMENT PLANT EFFLUENT - 4601

Date	Parameter	Permit Limit	Actual Measurement
June 18, 1997	TSS	40 mg/l	72.8 mg/l
June 18, 1997	TSS	24.2 kg/d	25.8 kg/d

Ohio EPA Southwest District Office Division of Surface Water was informed of this violation on June 19, 1997. As explained at that time, and later confirmed, the cause of these effluent violations are a result of losing the scraper mechanisms on both secondary clarifiers on June 17. At 0830 on June 17, the shift operator observed that several systems had lost power including the digester piston pump, ultraviolet disinfection system, and the secondary clarifier scraper drive motor. The piston pump and UV system were restarted by re-setting the circuit breakers. However, the scraper drive motor was damaged and could not be immediately re-started. The scrapers are driven by a single motor with a dual chain drive. The motor was eventually repaired on 6/20 such that it could operate one scraper at a time but would not drive both. Operators are alternating the drives every shift (every four hours) until the motor can be replaced. This scheme has worked well and no further noncompliances are expected.

This report also serves to explain a situation with respect to continuous pH measurement at the Parshall Flume (Outfall 4001). While not reported as a non-compliance, the FEMP pH meter was continuously reading a pH above 9.0 beginning approximately 0500 on June 24, 1997 lasting through 2230 June 27, 1997. The FEMP believes these readings to be erroneous.

Upon discovery of these readings, FEMP compliance personnel began evaluating the waste streams contributing to the Parshall Flume during this time period. South Plume Wells 1, 2, 3, and 4 were operational. Because of the low SWRB inventory, the majority South Plume Groundwater was treated through a combination of the South Plume Interim Treatment (SPIT), Interim Advanced Wastewater Treatment system (IAWWT), and Phase 1 of the Advanced Wastewater Treatment facility (AWWT). The following table captures the South Plume/AWWT flow rates:

AWWT/SOUTH PLUME FLOW MEASUREMENTS

Date	BSL Treated @ AWWT	S. Plume Treated @ AWWT	S. Plume Treated @ SPIT	S. Plume Treated @ IAWWT	S. Plume bypassed to GMR	SWRB Treated @ AWWT
6/24/97	0	845,000	280,000	424,000	585,000	0
6/25/97	216,000	1,007,000	284,000	422,000	266,000	0
6/26/97	99,000	996,000	283,000	364,000	306,000	0
6/27/97	93,000	640,000	278,000	408,000	702,000	0

The Sewage Treatment Plant (STP) was the remaining source of flow to the Parshall Flume on these days. STP pH measurements were 7.6, 7.8, 7.5, and 7.5 respectively from June 24 - June 27. STP pH measurements are collected once per day by grab sample.

AWWT Operator round sheets were pulled for the days in question. Grab sample pH measurements are made once per shift (0600, 1400, and 2200) on the AWWT Phase 1 system (groundwater/stormwater feed), AWWT Phase 2 system (Bio-Surge Lagoon feed), and the combined Phase 1/Phase 2 effluent. The following Table lists these measurements:

AWWT PH MEASUREMENTS

Date	AWWT Phase 1			AWWT Phase 2			Combined Effluent		
	0600	1400	2200	0600	1400	2200	0600	1400	2200
6/24/97	7.78	7.83	7.23	7.06	7.03	7.84	7.65	7.71	7.22
6/25/97	7.88	7.88	7.91	7.08	7.14	7.22	7.74	7.76	7.77
6/26/97	7.91	7.92	7.92	7.27	7.37	7.42	7.79	7.79	7.80
6/27/97	7.76	7.74	7.95	6.99	7.01	7.29	7.66	7.50	7.79

Further indication of a instrumentation problem is evidenced by the samples collected at the Parshall Flume itself. Twice per shift, operators note the instantaneous reading from the continuous meter and perform a grab sample pH for comparison purposes. The following table summarizes this information. The first value listed is the reading from the continuous meter while the second value is the result from the bench test:

PARSHALL FLUME PH MEASUREMENTS

June 24		June 25		June 26		June 27	
Chart	Bench	Chart	Bench	Chart	Bench	Chart	Bench
8.78	7.59	9.23	7.46	9.44	7.50	9.33	7.35
8.83	7.60	9.48	7.46	9.43	7.51	9.49	7.37
9.19	7.52	9.27	7.47	9.40	7.51	9.55	7.36
9.21	7.66	9.47	7.35	9.25	7.27	9.75	6.90
9.02	6.97	9.58	7.45	9.48	7.48	9.46	7.28
9.09	7.43	9.60	7.46	9.43	7.32	9.51	7.25

In summary, there is no indication that any contributing effluent exceeded a pH of 8.0. The AWWT "Event Historian" (a database within the AWWT Distributed Control System which records all alarms/alerts) recorded no high pH alarms within the AWWT during the days in question. Further, the pH of groundwater is fairly steady ranging from 6.5 to 7.7 (Refer to the South Plume Removal Action Design Monitoring Evaluation Program Plan). Confirmatory sampling at the Parshall Flume indicate the pH meter was malfunctioning. All of this information leads to the conclusion that the FEMP effluent was compliant with the effluent limitation of 9.0.

Operators have been instructed to immediately report apparent malfunctions of the continuous pH meter. Historically, these malfunctions have been attributed to being out of calibration, insufficient flow in the sampling trough containing the pH probe, or a foreign substance becoming lodged in the probe causing interference. Calibration will continue to be performed once/week or as may be needed based on the confirmatory sampling described above.

9002 M 9501 900212

ONTHLY REPORT FORM

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U.S. DEPARTMENT OF ENERGY 1I000004001 JUN 1997 1 2 03/24/90 OH0009
Fernald Environmental
Management Project
P.O. Box 538704 4001 PARSHALL FLUME, EFFLUENT TO GREAT MIAMI RI
Cincinnati, OH 45253-8704 Hamilton

FORM

	1	1	1	3	2	3	3	2	2	2
	999	999	999	1	998	1	1	998	998	998
	CONDUI FLOW MGD	pH (MIN) S.U.	pH (MAX) S.U.	WATER TEMP. C	TOT.SUSP SOLIDS MG/L	DISS. OXYGEN MG/L	O & G TOTAL MG/L	NITRO NH3-N MG/L	NITRO NO2+NO3 MG/L	FLUOR TOTAL MG/l
	50050	00402	00401	00010	00530	00300	00550	00610	00630	0095
01	5.192	7.8	8.4	15	4.8					
02	4.895	7.8	8.3	15	6.8	9.7	AA	AA	1.1	0.3
03	4.922	7.9	8.2	15	6.4					
04	3.967	7.8	8.0	15	2.4					
05	3.802	7.7	7.9	15	AA					
06	3.826	7.7	8.0	15	AA					
07	3.964	7.8	8.0	15	2.8					
08	3.852	7.7	7.9	15	2.0					
09	5.005	7.9	8.0	15	10.0					
10	4.947	8.0	8.1	15	6.5	9.2	AA	AA	1.4	0.3
11	3.921	7.7	8.1	15	AA					
12	3.987	8.0	8.2	15	AA					
13	3.875	7.9	8.1	17	AA					
14	3.282	7.8	8.1	16	2.4					
15	3.267	7.7	8.0	16	2.0					
16	3.085	7.7	8.0	16	2.4					
17	3.324	7.4	7.9	17	AA					
18	3.527	7.6	8.4	17	5.2	9.3	AA	AA	1.4	0.
19	3.282	7.2	7.9	17	3.6					
20	3.208	7.6	7.9	17	2.0					
21	2.949	7.8	8.5	17	AA					
22	2.991	7.9	8.2	17	AA					
23	3.081	8.0	9.0	18	AA					
24	2.400	AE	AE	17	AA					
25	2.384	AE	AE	16	AA					
26	2.327	AE	AE	16	AA	9.5	AA	AA	1.9	0.
27	2.230	AE	AE	17	AA					
28	2.285	7.9	8.6	16	AA					
29	2.230	8.2	8.3	16	AA					
30	2.218	7.5	7.9	17	3.2					
31										
	104.225	N/A	N/A	N/A	92.5	37.7	AA	AA	5.8	1.4
	3.474	N/A	N/A	16	3.4	9.4	AA	AA	1.4	0.3
	5.192	8.2	9.0	18	10.0	9.7	AA	AA	1.9	0.3
	2.218	7.2	7.9	15	AA	9.2	AA	AA	1.1	0.3

AA: 00530 - 2.0 mg/l; 00550 - 5.0 mg/l; 00610 - 0.10 mg/l; 00630 - 0.1 mg/l;
AA: 00951 - 0.01 mg/l.

AE:00401, 00402 - Continuous pH meter malfunctioning.

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ARP Project Mg

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U.S. DEPARTMENT OF ENERGY
Fernald Environmental
Management Project
P.O. Box 538704
Cincinnati, OH 45253-8704

1I00000400 1 JUN 1997 2 2 03/24/90 OH0009

4001 PARSHALL FLUME, EFFLUENT TO GREAT MIAMI RI
Hamilton

FORM

	2	3	2
	998	1	998
	COPPER TOT,REC UG/L	CHROMI HEX-DS UG/L	C-BOD 5 DAY MG/L
	01119	01220	80082
01			
02	AA	AA	AA
03			
04			
05			
06			
07			
08			
09			AA
10	AA	AA	
11			
12			
13			
14			
15			
16			AA
17			
18	AA	AA	
19			
20			
21			
22			
23			AA
24			
25			
26	AA	AA	
27			
28			
29			
30			AA
31			
TAL	AA	AA	AA
G.	AA	AA	AA
AX	AA	AA	AA
	AA	AA	AA

TIONAL REMARKS: ALL REPORTING CODES MUST BE EXPLAINED IN THIS SECTION

AA: 01119 - 14.0 ug/l; 01220 - 6.0 ug/l; 80082 - 2.0 mg/l.

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GREEN - REPORTER

I CERTIFY UNDER THE PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED IN THIS DOCUMENT AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT.

DATE REPORT SIGNED

7/14/97

ARP Project Mgr

NM NO EPA 4500 (8-91)

9002 M 9501 900212

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U.S. DEPARTMENT OF ENERGY
Fernald Environmental
Management Project
P.O. Box 538704
Cincinnati, OH 45253-8704

1I000004002 JUN 1997 1 2 03/24/90 OH0009

4002 SPILLWAY FROM STORMWATER RETENTION BASIN
Hamilton

FORM

	2	3	2	3	2	2	2	2	2	2
	4	1	4	1	4	4	4	4	4	4
	CONDUI FLOW MGD	pH S.U.	TOT.SUSP SOLIDS MG/L	O & G Total MG/L	NITRO NH3-N MG/L	NITRO NO2+NO3 MG/L	PHOS TOTAL MG/L	FLUORI TOTAL MG/L	NICKEL TOT,REC UG/L	SILV TOT,R UG/
	50050	00400	00530	00550	00610	00630	00665	00951	01074	0107
01	1.318	8.2	8.0	AA	AA	0.7	AA	0.48	AA	AA
02										
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31										
	1.318	8.2	8.0	AA	AA	0.7	AA	0.48	AA	AA
	1.318	8.2	8.0	AA	AA	0.7	AA	0.48	AA	AA
	1.318	8.2	8.0	AA	AA	0.7	AA	0.48	AA	AA
	1.318	8.2	8.0	AA	AA	0.7	AA	0.48	AA	AA

AA: 00530 - 2.0 mg/l; 00550 - 5.0 mg/l; 00610 - 0.10 mg/l; 00630 - 0.1 mg/l.
AA: 00665 - 0.1 mg/l; 00951 - 0.01 mg/l; 01074 - 17.0 ug/l; 01079 - 10.0 ug/

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ONTHLY REPORT FORM

U.S. DEPARTMENT OF ENERGY 1ID000004002 JUN 1997 2 2 03/24/90 OH0009
Fernald Environmental
Management Project
P.O. Box 538704 4002 SPILLWAY FROM STORMWATER RETENTION BASIN
Cincinnati, OH 45253-8704 Hamilton

FORM

	2 4	2 4	3 1	2 4
	CHROMI TOT,REC UG/L	COPPER TOT,REC UG/L	CHROMI HEX-DS UG/L	CHLORINE TOT,RESI MG/L
	01118	01119	01220	50060
01	AA	15.6	AA	AA
02				
03				
04				
05				
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31				
	AA	15.6	AA	AA
	AA	15.6	AA	AA
	AA	15.6	AA	AA
	AA	15.6	AA	AA

AA: 01118 - 6.0 ug/l; 01119 - 14.0 ug/l; 50060 - 0.1 mg/l.

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NTHLY REPORT FORM

U.S. DEPARTMENT OF ENERGY 1I000004003 JUN 1997 1 2 03/24/90 OH0009

Fernald Environmental
Management Project
P.O. Box 538704
Cincinnati, OH 45253-8704

4003 STORMWATER RUNOFF DISCHARGE TO PADDY'S RUN
Hamilton

FORM

	2 4	3 1	2 4	3 1	2 4	2 4	2 4	2 4	2 4	2 4
	CONDUI FLOW MGD	pH S.U.	TOT.SUSP SOLIDS MG/L	O & G Total MG/L	NITRO NH3-N MG/L	NITRO NO2+NO3 MG/L	PHOS TOTAL MG/L	FLUORIDE TOTAL MG/L	NICKEL TOT,REC UG/L	SILVE TOT,RE UG/L
	50050	00400	00530	00550	00610	00630	00665	00951	01074	0107
01										
02	10.500	7.9	36.4	AA	0.13	8.4	0.2	0.24	AA	AA
03										
04										
05										
06										
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28										
29										
30										
31										
TAL	10.500	N/A	36.4	AA	0.13	8.4	0.2	0.24	AA	AA
G	10.500	N/A	36.4	AA	0.13	8.4	0.2	0.24	AA	AA
AX	10.500	7.9	36.4	AA	0.13	8.4	0.2	0.24	AA	AA
IN	10.500	7.9	36.4	AA	0.13	8.4	0.2	0.24	AA	AA

AA: 00530 - 2.0 mg/l; 00550 - 5.0 mg/l; 00610 - 0.10 mg/l; 00630 - 0.1 mg/
AA: 00665 - 0.1 mg/l; 00951 - .01 mg/l; 01074 - 17.0 ug/l; 01079 - 10.0 ug

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FORM NO F-1 ASOC 3-91)

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U.S. DEPARTMENT OF ENERGY 1I000004003 JUN 1997 2 2 03/24/90 OH0009

Fernald Environmental
Management Project
P.O. Box 538704
Cincinnati, OH 45253-8704

4003 STORMWATER RUNOFF DISCHARGE TO PADDY'S RUN
Hamilton

FORM

	2 4 LEAD TOT,REC UG/L 01114	2 4 CHROMI TOT,REC UG/L 01118	2 4 COPPER TOT,REC UG/L 01119	2 4 CHROMI HEX-DIS UG/L 01220
01				
02	AA	AA	14.4	AA
03				
04				
05				
06				
07				
08				
09				
10				
11				
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13				
14				
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31				
TAL	AA	AA	14.4	AA
/G.	AA	AA	14.4	AA
Y	AA	AA	14.4	AA
N.	AA	AA	14.4	AA

ITIONAL REMARKS (AH REPORTING CODES MUST BE EXPLAINED IN THIS SECTION

AA: 01114 - 21.6 ug/l; 01118 - 6.0 ug/l; 01119 - 14.0 ug/l; 01220 - 6.0 ug/l

DISTRIBUTION
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GREEN - REPORTER

ORM NO EPA 4500 (8-91)

CERTIFY UNDER THE PENALTY OF LAW THAT ... THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE ... AWARE THAT THERE ARE SIGNIFICANT PENALTIES ...

DATE REPORT COMPLETED 7/14/97

ARP Project Mgr

9002 M 9501 90:212

ONTHLY REPORT. FORM

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U.S. DEPARTMENT OF ENERGY
Fernald Environmental
Management Project
P.O. Box 538704
Cincinnati, OH 45253-8704

1I000004004 JUN 1997 1 2 03/24/90 OH0009

4004 STORMWATER RUNOFF - INACTIVE FLYASH PILE
Hamilton

FORM

	2 4	3 1	2 4	3 1	2 4	2 4	2 4	2 4	2 4	2 4
	CONDUI FLOW MGD	pH S.U.	TOT.SUSP SOLIDS MG/L	O & G Total MG/L	NITRO NH3-N MG/L	NITRO NO2+NO3 MG/L	PHOS TOTAL MG/L	FLUORIDE TOTAL MG/L	NICKEL TOT,REC UG/L	SILV TOT,R UG/
	50050	00400	00530	00550	00610	00630	00665	00951	01074	0107
01										
02	0.260	8.0	28.8	AA	AA	AA	0.1	0.37	AA	AA
03										
04										
05										
06										
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22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
TAL	0.260	N/A	28.8	AA	AA	AA	0.1	0.37	AA	AA
/G.	0.260	N/A	28.8	AA	AA	AA	0.1	0.37	AA	AA
AX	0.260	8.0	28.8	AA	AA	AA	0.1	0.37	AA	AA
N	0.260	8.0	28.8	AA	AA	AA	0.1	0.37	AA	AA

ITIONAL REMARKS (ALL REPORTING CODES MUST BE EXPLAINED IN THIS SECTION)
AA: 00530 - 2.0 mg/l; 00550 - 5.0 mg/l; 00610 - 0.10 mg/l; 00630 - 0.1 mg/
AA: 00665 - 0.1 mg/l; 00951 - .01 mg/l; 01074 - 17.0 ug/l; 01079 - 10.0 ug

DISTRIBUTION
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GREEN - REPORTER

CERTIFY UNDER THE PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMI... THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE ... INFORMATION IS TRUE, ACCURATE AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT.

DATE REPORT COMPLETED: 11/14/97 SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER

12

ARP Project Mg

RM NO EPA 4500 (8-91)

9002 M 9501 900212

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ONTHLY REPORT FORM

U.S. DEPARTMENT OF ENERGY 1I000004004 JUN 1997 2 2 03/24/90 OH0009

Fernald Environmental
Management Project
P.O. Box 538704
Cincinnati, OH 45253-8704

4004 STORMWATER RUNOFF - INACTIVE FLYASH PILE
Hamilton

FORM

	2 4 LEAD TOT,REC UG/L 01114	2 4 CHROMI TOT,REC UG/L 01118	2 4 COPPER TOT,REC UG/L 01119	2 4 CHROMI HEX-DIS UG/L 01220						
01										
02	AA	AA	16.9	AA						
03										
04										
05										
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31										
TAL	AA	AA	16.9	AA						
G.	AA	AA	16.9	AA						
	AA	AA	16.9	AA						
N.	AA	AA	16.9	AA						

TIONAL REMARKS (AH REPORTING CODES MUST BE EXPLAINED IN THIS SECTION)

AA: 01114 - 21.6 ug/l; 01118 - 6.0 ug/l; 01119 - 14.0 ug/l; 01220 - 6.0 ug/l

DISTRIBUTION
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GREEN - REPORTER

CERTIFY UNDER THE PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED AND BASED ON MY INQUIRY THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT

DATE REPORT COMPLETED 7/14/97

13

ARP Project Mgr

FORM NO EPA 4500 (8-91)

9002 M 9501 900212

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860

ONTHLY REPORT FORM

U.S. DEPARTMENT OF ENERGY 1I000004005 JUN 1997 1 2 03/24/90 OH0009
Fernald Environmental
Management Project
P.O. Box 538704
Cincinnati, OH 45253-8704

4005 STORMWATER RUNOFF - WEST OF PRODUCTION ARE
Hamilton

FORM

	2 4	3 1	2 4	3 1	2 4	2 4	2 4	2 4	2 4	2 4
	CONDUI FLOW MGD	pH S.U.	TOT.SUSP SOLIDS MG/L	O & G Total MG/L	NITRO NH3-N MG/L	NITRO NO2+NO3 MG/L	PHOS TOTAL MG/L	FLUORIDE TOTAL MG/L	NICKEL TOT,REC UG/L	SILV TOT,R UG/
	50050	00400	00530	00550	00610	00630	00665	00951	01074	0107
01										
02	1.540	7.8	73.2	AA	AA	0.9	0.1	0.48	AA	AA
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05										
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AL	1.540	N/A	73.2	AA	AA	0.9	0.1	0.48	AA	AA
	1.540	N/A	73.2	AA	AA	0.9	0.1	0.48	AA	AA
	1.540	7.8	73.2	AA	AA	0.9	0.1	0.48	AA	AA
	1.540	7.8	73.2	AA	AA	0.9	0.1	0.48	AA	AA

AA: 00530 - 2.0 mg/l; 00550 - 5.0 mg/l; 00610 - 0.10 mg/l; 00630 - 0.1 mg/
AA: 00665 - 0.1 mg/l; 00951 - .01 mg/l; 01074 - 17.0 ug/l; 01079 - 10.0 ug

DISTRIBUTION
WHITE - AGENCY
GREEN REPORTER

7/14/97

14

ARP Project Mg

9002 M 9501 900212 4500 860

MONTHLY REPORT FORM

U.S. DEPARTMENT OF ENERGY 1I000004005 JUN 1997 2 2 03/24/90 CH0009
Fernald Environmental
Management Project
P.O. Box 538704
Cincinnati, OH 45253-8704

4005 STORMWATER RUNOFF - WEST OF PRODUCTION ARE
Hamilton

FORM

	2 / 4	2 / 4	2 / 4	2 / 4						
	LEAD TOT,REC UG/L 01114	CHROMI TOT,REC UG/L 01118	COPPER TOT,REC UG/L 01119	CHROMI HEX-DIS UG/L 01220						
01										
02	AA	AA	AA	AA						
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30										
31										
TAL	AA	AA	AA	AA						
3.	AA	AA	AA	AA						
	AA	AA	AA	AA						
	AA	AA	AA	AA						

TIONAL REMARKS AH REPORTING CODES MUST BE EXPLAINED IN THIS SECTION.

AA: 01114 - 21.6 ug/l; 01118 - 6.0 ug/l; 01119 - 14.0 ug/l; 01220 - 6.0 ug/l

DISTRIBUTION
WHITE - AGENCY
GREEN - REPORTER

EPA 4500 (8-91)

I CERTIFY UNDER THE PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED IN THIS DOCUMENT AND ALL ATTACHMENTS AND THAT BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE INFORMATION IS TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT.

DATE REPORT 7/14/97

15

ARP Project Mg

9002 M 9501 900212

4500

860

ONTHLY REPORT FORM

U.S. DEPARTMENT OF ENERGY 1:300004006 JUN 1997 1 2 03/24/90 OH0009

Fernald Environmental
Management Project
P.O. Box 538704
Cincinnati, OH 45253-8704

4006 STORMWATER RUNOFF - NORTH END OF PROPERTY
Hamilton

FORM

	2 4	3 1	2 4	3 1	2 4	2 4	2 4	2 4	2 4	2 4
	CONDUI FLOW MGD	pH S.U.	TOT.SUSP SOLIDS MG/L	O & G Total MG/L	NITRO NH3-N MG/L	NITRO NO2+NO3 MG/L	PHOS TOTAL MG/L	FLUORIDE TOTAL MG/L	NICKEL TOT,REC UG/L	SILV TOT,R UG/
	50050	00400	00530	00550	00610	00630	00665	00951	01074	0107
01										
02	3.760	7.9	24.0	AA	AA	1.2	0.1	0.25	AA	AA
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31										
TAL	3.760	N/A	24.0	AA	AA	1.2	0.1	0.25	AA	AA
G.	3.760	N/A	24.0	AA	AA	1.2	0.1	0.25	AA	AA
AX	3.760	7.9	24.0	AA	AA	1.2	0.1	0.25	AA	AA
N.	3.760	7.9	24.0	AA	AA	1.2	0.1	0.25	AA	AA

TIONAL REMARKS (AH REPORTING CODES MUST BE EXPLAINED IN THIS SECTION)

AA: 00530 - 2.0 mg/l; 00550 - 5.0 mg/l; 00610 - 0.10 mg/l; 00630 - 0.1 mg/.
AA: 00665 - 0.1 mg/l; 00951 - .01 mg/l; 01074 - 17.0 ug/l; 01079 - 10.0 ug

DISTRIBUTION
WHITE - AGENCY
GREEN - REPORTER

I CERTIFY UNDER THE PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT.

DATE 7/14/97 SIGNATURE

16

ARP Project Mgr

FORM NO EPA 4500 (8-91)

9002 M 9501 900212 4500 860

ONTHLY REPORT FORM

U.S. DEPARTMENT OF ENERGY 1I000004006 JUN 1997 2 2 03/24/90 OH0009

Fernald Environmental
Management Project
P.O. Box 538704
Cincinnati, OH 45253-8704

4006 STORMWATER RUNOFF - NORTH END OF PROPERTY
Hamilton

FORM

	2 4 LEAD TOT,REC UG/L 01114	2 4 CHROMI TOT,REC UG/L 01118	2 4 COPPER TOT,REC UG/L 01119	2 4 CHROMI HEX-DIS UG/L 01220
01				
02	AA	AA	16.7	AA
03				
04				
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31				
TAL	AA	AA	16.7	AA
D	AA	AA	16.7	AA
X	AA	AA	16.7	AA
	AA	AA	16.7	AA

TIONAL REMARKS: AA- REPORTING CODES MUST BE EXPLAINED IN THIS SECTION.

AA: 01114 - 21.6 ug/l; 01118 - 6.0 ug/l; 01119 - 14.0 ug/l; 01220 - 6.0 ug/l

DISTRIBUTION
WHITE - AGENCY
GREEN - REPORTER

NO EPA 4500 (8-91)
EPA SURI

UNDER THE PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED ... INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION ... AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING ...

DATE REPORT COMPLETED 7/14/97 SIGNATURE

17

ARP Project Mgr

9005 M 9009 900212

4500

860

ONTHLY REPORT FORM

U.S. DEPARTMENT OF ENERGY 1I000004589 JUN 1997 1 1 03/24/90 OH0009
Fernald Environmental
Management Project
P.O. Box 538704
Cincinnati, OH 45253-8704

4589 SEWAGE SLUDGE AFTER PLANT 8 DEWATERING
Hamilton

FORM

	3 1 CADMIUM CD,TOT MG/KG 01028	3 1 CHROMI CR,TOT MG/KG 01029	3 1 COPPER CU,TOT MG/KG 01043	3 1 LEAD PB,TOT MG/KG 01052	3 1 NICKEL NI,TOT MG/KG 01068	3 1 ZINC ZN,TOT MG/KG 01093	3 1 SLUDGE WEIGHT D-TONS 70316	3 1 MERCURY HG,TOT MG/KG 71921		
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TIONAL REMARKS (AH REPORTING CODES MUST BE EXPLAINED IN THIS SECTION)

NO SLUDGE REMOVED DURING MONTH.

DISTRIBUTION
WHITE - AGENCY
GREEN - REPORTER

CERTIFY UNDER THE PENALTY OF LAW THAT I HAVE PERSONALLY EXAMINED AND AM FAMILIAR WITH THE INFORMATION SUBMITTED AND BASED ON MY INQUIRY OF THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFORMATION, I BELIEVE THE SUBMITTED INFORMATION IS TRUE, ACCURATE AND COMPLETE AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT

DATE 7/14/97 SIGNATURE

ARP Project Mgr

18

FORM NO EPA 4500 (8-91)

9002 M 9501 900212

4500

860

ONTHLY REPORT FORM

U.S. DEPARTMENT OF ENERGY 1I00000460 JUN 1997 1 2 03/24/90 OH0009
Fernald Environmental
Management Project
P.O. Box 538704
Cincinnati, OH 45253-8704

4601 SEWAGE TREATMENT PLANT EFFLUENT
Hamilton

FORM

	1	3	2	2	2	3
	999	1	998	998	998	1
	CONDUI FLOW MGD	pH S.U.	C-BOD 5 DAY MG/L	TOT.SUSP SOLIDS MG/L	AMMONI NH3-N MG/L	FEC CO MF-FCB #/100ML
	50050	00400	80082	00530	00610	31616
01	0.237	7.9				
02	0.209	7.7	AA	12.8	AA	AA
03	0.164	7.6				
04	0.111	7.5	AA	5.2		
05	0.155	7.7				
06	0.119	7.5				
07	0.157	7.6				
08	0.160	7.7				
09	0.206	7.9	AA	3.2		AA
10	0.142	8.3				
11	0.101	7.6	AA	32.8		
12	0.084	7.7				
13	0.101	7.8				
14	0.095	7.6				
15	0.074	8.3				
16	0.088	7.8	AA	4.8		53
17	0.088	7.3				
18	0.094	7.5	3.3	72.8	0.25	
19	0.086	7.4				
20	0.081	7.2				
21	0.052	7.7				
22	0.046	7.6				
23	0.092	8.1	AA	2.0		AA
24	0.075	7.6				
25	0.081	7.8	AA	2.4		
26	0.076	7.5				
27	0.070	7.5				
28	0.055	8.0				
29	0.051	7.8				
30	0.089	7.7	AA	6.0		AA
31						
TAL	3.239	N/A	19.3	142.0	0.35	133
VG.	0.108	N/A	2.1	14.4	0.15	24
AX	0.237	8.3	3.3	72.8	0.25	53
IN	0.046	7.2	AA	2.0	AA	AA

DITIONAL REMARKS (AH REPORTING CODES MUST BE EXPLAINED IN THIS SECTION

AA: 00530 - 2.0 mg/l; 00610 - 0.10 mg/l; 31616 - 20 colonies/100ml.
AA: 80082 - 2.0 mg/l.

DISTRIBUTION
WHITE - AGENCY
GREEN - REPORTER

CERTIFY UNDER THE PENALTY OF LAW THAT I HAVE PERSONALLY [illegible] THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING [illegible] AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMIT[illegible]

DATE REPORT COMPLETED 7/14/97

[illegible]

[illegible] AND BASED ON [illegible] AND IMPRISONMENT

19

ARP Project Mg

FORM NO EPA 4500 (8-91)
[illegible] EPA SUR

9005 M 9009 900212 **4500** 860

ONTHLY REPORT FORM

U.S. DEPARTMENT OF ENERGY 1I000004601 JUN 1997 2 2 03/24/90 OH0009
Fernald Environmental
Management Project
P.O. Box 538704 4601 SEWAGE TREATMENT PLANT EFFLUENT
Cincinnati, OH 45253-8704 Hamilton

FORM

	2 998 NICKEL TOT,REC UG/L 01074	2 998 ZINC TOT,REC UG/L 01094	2 998 CADMIUM TOT,REC UG/L 01113	2 998 LEAD TOT,REC UG/L 01114	2 998 CHROMI TOT,REC UG/L 01118	2 998 COPPER TOT,REC UG/L 01119	2 998 CHROMI HEX-DS UG/L 01220	2 998 MERCURY TOT,REC UG/L 99992		
01										
02	AA	47.1	AA	AA	6.8	29.0	AA	AA		
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TAL	AA	47.1	AA	AA	6.8	29.0	AA	AA		
.G.	AA	47.1	AA	AA	6.8	29.0	AA	AA		
EX	AA	47.1	AA	AA	6.8	29.0	AA	AA		
	AA	47.1	AA	AA	6.8	29.0	AA	AA		

ADDITIONAL REMARKS (AH REPORTING CODES MUST BE EXPLAINED IN THIS SECTION)

AA: 01074 - 17.0 ug/l; 01094 - 20.0 ug/l; 01113 - 5.0 ug/l; 01114 - 21.6 ug
AA: 01118 - 6.0 ug/l; 01119 - 14.0 ug/l; 01220 - 6.0 ug/l; 99992 - 0.2 ug/l

DISTRIBUTION
WHITE - AGENCY
GREEN - REPORTER

NO EPA 4500 (8-91)
PERIV EP& SUR

CERTIFY UNDER THE PENALTY OF LAW THAT I HAVE PERSONALLY EXAMIN
THOSE INDIVIDUALS IMMEDIATELY RESPONSIBLE FOR OBTAINING THE INFO
AWARE THAT THERE ARE SIGNIFICANT PENA
DATE REPORT COMPLETED 7/14/97

20

ARP Project Mgr