Nuclear Fuel Services, Inc.
P.O. Box 337, MS 123
Erwin, TN 37650

(423) 743-9141

21G-97-0043
GOV-01-60
ACF-97-064

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

March 21, 1997

Mr. G. Alan Farmer, Chief
RCRA Branch
Waste Management Division
Environmental Protection Agency
Region IV
100 Alabama Street, S.W.
Atlanta, GA 30303

Mr. Thomas Tiesler, Director
Division of Solid Waste Management
TN Department of Environment
and Conservation
Fifth Floor, L&C Tower
401 Church Street
Nashville, TN 37243-1535

REFERENCE: *HSWA Permit for 1984 RCRA Amendments*
Nuclear Fuel Services, Inc., Erwin, TN
EPA ID: TND 003 095 635

Dear Messrs. Farmer and Tiesler:

As required by the above reference, Condition II.E.3.a. and Condition II.F.3.a., Nuclear Fuel Services, Inc. (NFS) is enclosing the quarterly RCRA Facility Investigation (RFI) and Interim Measures (IM) Progress Reports as Attachments I and II. The next quarterly RFI/IM Progress Reports will be submitted by June 19, 1997.

If you have any questions or need further information, please contact me or Ms. Marie Moore, Environmental Safety Manager, at (423) 743-1737. Please reference our unique document identification number (21G-97-0043) in any correspondence concerning this letter.

Sincerely,

NUCLEAR FUEL SERVICES, INC.

Thomas S. Baer, PhD
Vice President
Safety and Regulatory

TSB/BMM/rcy

Enclosure

cc: Regional Administrator
U.S. Nuclear Regulatory Commission
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IE07

21G-97-0043
GOV-01-60
ACF-97-064

ATTACHMENT I

To Letter Dated March 21, 1997
T. S. Baer to Mr. G. Alan Farmer and Mr. Thomas Tiesler

RFI Progress Report

(8 pages to follow)

RFI PROGRESS REPORT
NUCLEAR FUEL SERVICES, INC.
EPA ID NO. TND 00 309 5635

1.0 SWMU 20 (Building 130 Scale Pit)

1.1 Work Completed

As requested by EPA Region IV, NFS continues to pump the Building 130 scale pit (SWMU 20). The scale pit is pumped monthly and water is transferred to the Groundwater Treatment Facility. The groundwater is sampled and then treated in accordance with applicable regulations. The scale pit has been pumped twice since the last reporting period.

1.2 Findings and Observations

The analytical results for samples obtained from the scale pit are presented in Table 1, Attachment. Two groundwater samples were obtained since the last reporting period. PCE concentrations in these samples were 0.039 mg/L and 0.071 mg/L. TCE, 1,2-DCE and vinyl chloride were not detected

1.3 Work Projected (Second Quarter 1997)

Monthly pumping and sampling of the Building 130 scale pit (SWMU 20) will continue until EPA Region IV approves closure. The findings will be reported in the RFI progress report.

2.0 Off-Site Groundwater Investigation

2.1 Work Completed

Groundwater samples were obtained from the eleven off-site monitoring wells in January 1997. Analytical results were received from the contracted laboratory, and the data were reviewed, validated, and tabulated. Data evaluation and report preparation began in March 1997 and is expected to be completed in May 1997.

2.2 Findings and Observations

Groundwater samples were obtained from eleven off-site monitoring wells and analyzed for the following constituents: PCE, TCE, 1,2-DCE (cis and trans), vinyl chloride, isotopic uranium and technetium 99. Analytical results are discussed below. Due to high concentrations of PCE found in some of the groundwater samples, a dilution was required to accurately quantify this constituent. Diluting the sample resulted in PQLs greater than the MCL for TCE, 1,2-DCE (cis and trans) and vinyl chloride. Post dilution results are presented for PCE and pre-dilution results are presented for TCE, 1,2-DCE (cis and trans) and vinyl chloride. Pre-dilution data are qualified as estimated. Sample locations are depicted in Figure 1 and data are presented in Tables 2 and 3.

PCE was detected in nine of eleven off-site monitoring wells. Concentrations of PCE ranged from 0.062 mg/L to 2.400 mg/L. Concentrations of PCE detected in groundwater samples obtained from alluvial wells are in general agreement with PCE concentrations predicted by the model. Groundwater samples obtained from wells screened in the upper bedrock contained PCE at greater concentrations than associated alluvial wells. The groundwater model did not predict PCE contamination in the bedrock. PCE concentrations are depicted in Figure 1.

TCE was detected in eight of eleven off-site monitoring wells at concentrations equal to, or greater than, the 0.005 mg/L MCL. Concentrations of TCE ranged from 0.005 mg/L to 0.091 mg/L. TCE was not detected in the three remaining wells at concentrations greater than the PQL; however, the PQLs were greater than the 0.005 mg/L action level.

Cis-1,2-DCE was detected in one of eleven off site monitoring wells at an estimated concentration of 0.110 mg/L which is greater than the 0.07 mg/L MCL. Detected concentrations of cis-1,2-DCE in the remaining samples ranged from 0.003 mg/L to 0.014 mg/L. Trans-1,2-DCE was not detected.

Vinyl chloride was detected in one of eleven off-site monitoring wells at a concentration equal to the MCL. Well 118B contained vinyl chloride at a concentration of 0.002 mg/L. Vinyl chloride was not detected in the remaining wells; however, the PQLs were greater than the MCL in four samples.

Total uranium was not detected in off-site wells at concentrations greater than the proposed 30 pCi/L MCL. Total uranium concentrations ranged from 0.5 pCi/L to 5.23 pCi/L. The mean concentration of total uranium in the background well, Well 52, was 0.5 pCi/L. Uranium was detected in only 1 out of 11 wells at a concentration above background. The concentration of total uranium in Well 118A was 5.23 pCi/L. The concentrations and range of isotopic ratios (U-234:U238) for the remaining wells are similar to that seen for Background Well 52.

Technetium 99 was not detected or was detected at concentrations less than the estimated MCL of 3790 pCi/L in the offsite wells. The estimated MCL was based on the drinking water standard of 4 mrem/yr (40 CFR, Part 141). The three detected concentrations ranged from 19.72 to 28.58 pCi/L.

2.3 Work Projected (Second Quarter 1997)

Results of the Off-Site Groundwater Investigation and SWMU 20/Well 103A Investigation will be combined into one report. Work on this document began in March and is expected to be completed in May 1997. Concurrent with report preparation, a workplan will be developed to define the vertical extent of groundwater contamination.

3.0 Areas of Concern 2 (Building 111 Boiler Blowdown/Backwash) and 4 (Plant Drainage System)

3.1 Work Completed

The AOCs 2 (Building 111 Boiler Blowdown Backwash) and 4 (Plant Drainage System) RFI Report was submitted for NFS Management review on March 13, 1997.

3.2 Work Projected (Second Quarter 1997)

The RFI Report for AOCs 2 and 4 will be submitted to the EPA, NRC, and TDEC during the Second Quarter of 1997.

4.0 SWMU 10 (Demolition Landfill)

4.1 Work Completed

Completed characterization of materials excavated from one of the three trenches (Trench M) comprising the Demolition Landfill (SWMU 10). Results indicate that radioactively contaminated materials are present in the Demolition Landfill; therefore, further characterization was suspended. Due to the presence of radioactively contaminated materials, the contents of the landfill will be removed and disposed of at Envirocare of Utah.

4.2 Work Projected (Second Quarter 1997)

Excavation, shipping and disposal at Envirocare of Utah of the contents of the SWMU 10 Trenches (K, L and M) is scheduled to begin in the Second Quarter.

5.0 SWMU 16 RFI (Radiological Incinerator)

5.1 Work Completed

The review of the RFI report for SWMU 16 (Radiological Incinerator) was completed by NFS management in February 1997.

5.2 Work Projected (Second Quarter)

The RFI report for SWMU 16 will be submitted to the NRC, EPA and TDEC in March 1997

4.0 General Information

Work has resumed on the groundwater risk assessment to incorporate the sampling results from the off-site monitoring wells. Findings will be addressed in the Groundwater Risk Assessment Report which will be submitted to the EPA and TDEC in the Second Quarter 1997.

Table 1

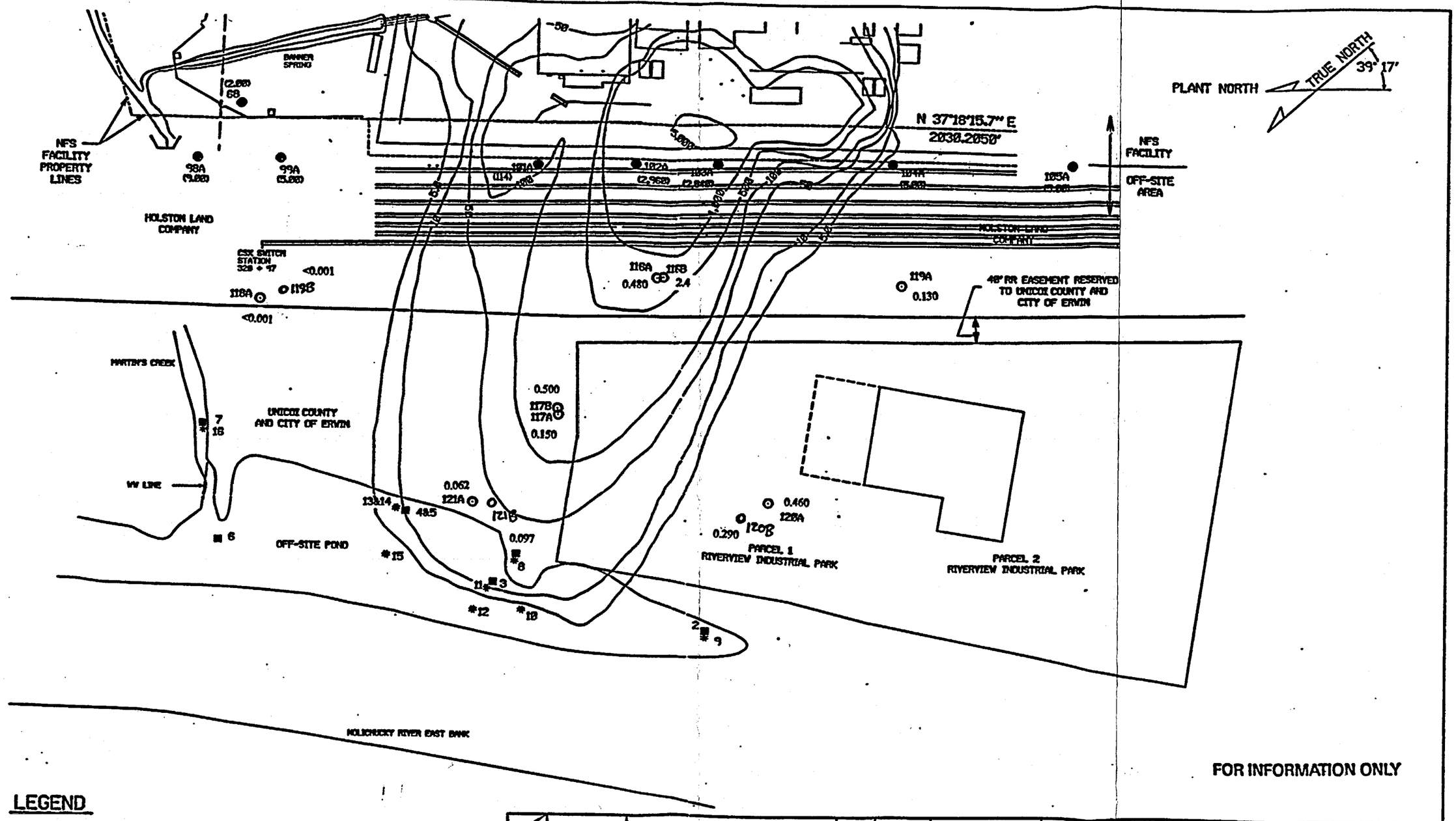
Analytical Results for SWMU 20
Groundwater

Sample ID	Pumping Date	Collection Date	PCE (mg/L)	TCE (mg/L)	1,2 DCE (mg/L)	Vinyl Chloride (mg/L)
Baseline						
1377124	9/11/95	9/11/95	0.0258	0.0021	0.0193	< 0.005
1377299	9/11/95	9/12/95	0.0428	0.0027	0.0191	0.0053
1379194	9/27/95	9/29/95	0.1846	0.0090	0.0583	< 0.005
1380354	10/11/95	10/12/95	0.1601	0.0039	0.0557	< 0.005
1381571	10/24/95	10/25/95	0.0022	< 0.00038	< 0.008	< 0.005
1382926	11/9/95	11/10/95	0.2079	< 0.00038	< 0.008	< 0.005
1384040	11/21/95	11/22/95	0.2045	0.0239	0.0253	< 0.005
1385232	12/6/95	12/7/95	1.2020	< 0.00038	0.0808	< 0.005
1388088	1/16/96	1/17/96	0.5455	< 0.00038	< 0.008	< 0.005
1389653	2/13/96	2/14/96	0.1732	0.3507	0.1742	< 0.005
1401424	9/18/96	9/18/96	0.1965	< 0.00038	0.0806	< 0.005
1402978	10/15/96	10/15/96	0.047	0.003 UJ	0.009	< 0.004
1404091	11/5/96	11/5/96	0.103	0.027	0.091	0.006
1405586	12/3/96	12/3/96	0.098	0.005	0.010	< 0.004
1409085	01/20/97	01/21/97	0.039	< 0.004	< 0.004	< 0.004
1411441	02/10/97	02/11/97	0.071	< 0.004	< 0.004	< 0.004
Mean			0.2185	0.0290	0.0424	0.0048
Standard Deviation			0.3013	0.0894	0.0482	0.0006
t-value			1.3450	1.3450	1.3450	1.3450
No of Observations			15	15	15	15
90% UCL			0.3231	0.0600	0.0592	0.0050
Action Level (mg/L)			0.005	0.005	0.070	0.002

Notes
ND = no data
UJ = below detection limit; estimated value

REVISED:3/14/97
Scale pit data.xls

PCE Concentrations in Off-Site Groundwater Wells (mg/L)



LEGEND

- ○ PROPOSED MONITORING WELL
- ● EXISTING MONITORING WELL
- ■ SURFACE WATER SAMPLING LOCATIONS
- * PROPOSED CONFIRMATORY SURFACE WATER SAMPLING LOCATIONS
- —50— ESTIMATED PCE CONCENTRATIONS (µg/l) IN GROUNDWATER

FOR INFORMATION ONLY

BY	DATE	REVISION	
		REMOVED WELLS: 117A,117B & 128A RENUMBERED ACCORDINGLY	B
WCH / RLM	8-12-96	RELOCATED AND SURVEYED IN WELL NOS. 118A, 118B, 128A, 123A	A
MDK / JEG	04-19-96	ORIGINAL ISSUE	—

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TOLERANCE UNLESS SPECIFIED
FRACTIONAL ± 1/64"
ANGULAR ± 1/2°
DECIMAL
XX ± .01
XXX ± .001

NFS

REVIEWED BY: [illegible] 9/6/96
PROPOSED CONSTRUCTION DATE:
DRAFTER M.D. KEEVER
PROPOSED APPROVALS
ENG. L.M. Nichols

NUCLEAR FUEL SERVICES, INC.
ERWIN, TENNESSEE

PROPOSED SAMPLING LOCATIONS GROUNDWATER INVESTIGATION

DRAFTER
AS-BUILT APPROVALS
ENG.

SCALE 1" = 150'
DATE 09-09-96
DRAWING NO. 000-C0297-B

Figure 1

Table 2

Offsite Groundwater Analytical Results for Volatile Organic Compounds

Sample ID	Well Number	Tetrachloroethylene mg/L	Trichloroethylene mg/L	1,2-Dichloroethylene (cis) mg/L	1,2-Dichloroethylene (trans) mg/L	Vinyl chloride mg/L
OFG-MW-116A*	116A	0.480	< 0.020	< 0.020	< 0.020	< 0.020
OFG-MW-116B	116B	2.4	0.091 J	0.110 J	< 0.050	< 0.050
OFG-MW-117A	117A	0.150	< 0.012	< 0.012	< 0.012	< 0.012
OFG-MW-117B	117B	0.500	< 0.050	< 0.050	< 0.050	< 0.050
OFG-MW-118A	118A	< 0.001	0.005	0.003	< 0.001	< 0.001
OFG-MW-118B	118B	< 0.001	0.011	0.007	< 0.001	0.002
OFG-MW-119A	119A	0.13	0.011 J	0.003 J	< 0.002	< 0.002
OFG-MW-120A	120A	0.29	0.016 J	0.012 J	< 0.001	< 0.001
OFG-MW-120B	120B	0.46	0.018 J	0.014 J	< 0.001	< 0.001
OFG-MW-121A	121A	0.062	0.005 J	0.003 J	< 0.001	< 0.001
OFG-MW-121B	121B	0.097	0.005 J	0.003 J	< 0.001	< 0.001
	Mean	0.416	0.022	0.022	< 0.013	< 0.013
	Standard Deviation	0.685	0.026	0.032	0.019	0.019
	Observations	11	11	11	11	11
	t-value	1.812	1.812	1.812	1.812	1.812
	95% Upper confidence	0.790	0.036	0.039	0.023	0.023
	MCL	0.005	0.005	0.07	0.1	0.002

Notes
Data obtained 1/20/97 - 1/24/97. Analysis completed by IEA, Inc; Cary, N.C.
* Duplicate sample; results averaged
< = less than detection limit; value given is the quantitation limit.
J = Value is estimated.
MCL = Maximum Contaminant Level (EPA, 1996)

Table 3

Offsite Groundwater Analytical Results for Radionuclides

Sample ID	U-234 (pCi/l) Result	Error	MDC		U-235 (pCi/l) Result	Error	MDC		U-238 (pCi/L) Result	Error	MDC	Total U (pCi/L)		Tc-99 (pCi/l) Result	Error	MDC
OFG-MW116A	0.31	0.13	0.09	<J	0.07	0.09	0.14	<J	0.15	0.12	0.17	0.53	<J	-7.45	9.40	16.01
OFG-MW116B	0.36	0.17	0.20	<J	0.13	0.11	0.16		0.49	0.16	0.09	0.98		19.72	10.00	16.02
OFG-MW117A	0.33	0.17	0.21	<J	-0.01	0.08	0.18		0.29	0.13	0.11	0.63	<J	11.48	9.80	15.99
OFG-MW117B	0.34	0.15	0.15	<J	0.01	0.05	0.11		0.35	0.14	0.14	0.7		28.58	10.18	16.03
OFG-MW118A	3.51	0.44	0.11	<J	0.04	0.08	0.13		1.68	0.30	0.12	5.23	<J	-4.60	9.45	15.99
OFG-MW118B	0.47	0.17	0.18	<J	0.06	0.12	0.20		0.32	0.16	0.20	0.85	<J	-0.44	9.54	15.99
OFG-MW119A	0.48	0.19	0.20	<J	0.03	0.09	0.16		0.44	0.18	0.20	0.95	<J	-0.44	9.54	15.98
OFG-MW120A	0.29	0.13	0.11	<J	0.03	0.08	0.15		0.18	0.12	0.16	0.5		20.00	9.98	15.99
OFG-MW120B	0.43	0.16	0.14	<J	0.00	0.08	0.17		0.50	0.18	0.18	0.93	<J	6.82	9.71	16.01
OFG-MW121A	0.30	0.13	0.11	<J	0.08	0.07	0.04		0.32	0.13	0.12	0.7	<J	15.52	9.93	16.06
OFG-MW121B	0.27	0.13	0.14	<J	0.01	0.06	0.13		0.39	0.15	0.15	0.67	<J	13.68	9.84	15.98
Mean	0.645	0.179	0.149		0.041	0.083	0.143		0.465	0.161	0.149	1.152		9.352	9.761	16.005
Standard Deviation	0.953	0.089	0.043		0.041	0.020	0.042		0.418	0.051	0.037	1.363		11.520	0.254	0.025
Observations	11	11	11		11	11	11		11	11	11	11		11	11	11
t-value	1.372	1.372	1.372		1.372	1.372	1.372		1.372	1.372	1.372	1.372		1.372	1.372	1.372
90% Upper confidence	1.039	0.216	0.167		0.058	0.091	0.160		0.638	0.182	0.164	1.716		14.118	9.866	16.015
Action Level	ND				ND				ND			30 pCi/L		ND		

Notes:
< = less than the MDC
J = estimated result
Total uranium is the sum of the activities of U-234, U-235, and U-238
Samples obtained 1/20/97-1/24/97; Analysis conducted by IEA, Inc.; Cary, N.C.
Action levels based on EPA proposed maximum contaminant level (MCL) for radionuclides in drinking water (EPA, 1996)
ND = no data

ATTACHMENT II

To Letter Dated March 21, 1997
T. S. Baer to Mr. G. Alan Farmer and Mr. Thomas Tiesler

Interim Measures Progress Report

(4 pages to follow)

INTERIM MEASURES (IM) PROGRESS REPORT
SWMUs 2 ,4, AND 6
NUCLEAR FUEL SERVICES, INC.
EPA ID. NO. TND 00 309 5635

1.0 Work Completed

Since the last IM Progress Report dated December 20, 1996, excavation has continued on the CSX soil pile (SWMU7). Also, a small amount of waste material remaining in Building 410 was blended and packaged for disposal as a result of housekeeping activities. All accessible areas inside and outside of Building 410 have been excavated to 100% completion.

All excavated areas inside and outside of Building 410 have been visually examined and surveyed with metal detection equipment to verify waste and debris removal.

By March 10, removal of the CSX soil pile (SWMU7) by packaging into intermodal containers for off-site burial at Envirocare of Utah, has yielded approximately 62,200 cubic feet of soil.

Through February 28, 5,179,264 gallons of groundwater has been treated and discharged in accordance with applicable regulations to the Erwin POTW in the 919 days since start-up. The total groundwater being pumped from the adjacent ponds (Ponds 1, 2 and 3) has averaged 3.91 gallons per minute.

2.0 Findings and Observations

Generation rate information showed that waste and debris comprised approximately 42% of the total volume excavated inside and outside of Building 410. Excavated volume from the CSX soil pile is not included in this calculation. All wastes continue to be below the applicable TCLP and PCB regulatory levels for this quarter.

INFLUENT DATA

On November 22, 1996, the Pond 4 Groundwater drawdown project well operation was suspended. Ponds adjacent and upgradient of the work area have been pumped as necessary to maintain water levels. Water pumped from these Ponds was sampled prior to treatment at the Groundwater Treatment Facility. Analytical results from the Ponds influent water are not representative of Pond 4 groundwater and therefore are not presented. Pond 4 influent data will be presented when the drawdown operation resumes.

GROUNDWATER DATA

Monitoring Wells #26 and #28 are located in the Pond 4 area and are sampled monthly for PCE, vinyl chloride, and TBP as an indicator of groundwater quality in the Pond 4 area. Wells #101A and #102A are located along the western perimeter of the NFS site and area downgradient of the Pond 4 area. Wells #101A and #102A were sampled quarterly for PCE, vinyl chloride, and TBP through June 1995. In June 1995, the sampling frequency increased to monthly. Analytical results are presented in Attachment 1 and are summarized below.

Tetrachloroethylene - PCE was detected in 28 of 29 (97%) of samples obtained from Well #26. Concentrations of PCE were greater than the 0.005 mg/L action level in 11 of 29 (38%) samples. Concentrations of PCE above the MCL ranged from 0.006 mg/L to 2.068 mg/L. PCE was detected in 26 of 27 (96%) of samples obtained from Well #28. PCE concentrations above the MCL ranged from 0.213 mg/L to 2.173 mg/L.

PCE was detected in 17 of 23 (74%) of samples obtained from Well #101A. Concentrations of PCE were greater than the MCL in 16 of 23 (70%) samples. Concentrations of PCE above the MCL in Well #101A ranged from 0.005 mg/L to 0.949 mg/L.

PCE was detected at concentration greater than the MCL in 100% of the samples obtained from Well #102A. PCE concentrations above the MCL ranged from 0.084 mg/L to 1.904 mg/L.

Vinyl Chloride - Vinyl chloride has not been detected in Well #26, however, the PQL (0.005 mg/L) is greater than the 0.002 mg/L action level. Vinyl chloride was detected in 22 of 27 (81%) samples obtained from Well #28. Detected concentrations ranged from 0.006 mg/L to 0.360 mg/L.

Vinyl Chloride was detected in 11 of 23 (48%) samples obtained from Well #101A. Concentrations of vinyl chloride in Well #101A samples ranged form 0.007 mg/L to 0.120 mg/L which are greater than the 0.002 mg/L action level.

Vinyl chloride was detected in 2 of 21 samples (10%) obtained from Well #102A. These concentrations were 0.024 mg/L and 0.069 mg/L which are greater than the MCL.

Tributyl Phosphate - TBP was not detected in Wells #26, #101A or #102A at concentrations greater than the 0.2 mg/L provisional action level. TBP was detected in 1 of 27 samples obtained from Well #28. The August 1996 sample from Well #28 contained TBP at a concentration of 0.202 mg/L.

Additional data are needed to determine if groundwater quality in the vicinity of Pond 4 has improved. Wells #26, #28, #101A and #102A will continue to be monitored monthly.

3.0 Deviations from Workplan

There have been no deviations from the workplan during this quarter.

4.0 Problems and Solutions

Citing poor performance and the completion of excavation of all accessible areas at SWMUs 2, 4 and 6, the groundwater drawdown well operations continue to be suspended. Ponds 1, 2 and 3 adjacent to the work area will continue to be pumped as necessary to manage their levels. Periodic evaluation of the groundwater drawdown system will be completed as needed to determine if drawdown is necessary.

5.0 Work Completed

Work projected for the second quarter of 1997 includes:

- Continue excavation, packaging and shipping of CSX soil pile (SWMU7)
- Continue packaging and shipping of backlogged debris generated during 1996 from SWMUs 2, 4, and 6 excavation operations
- Begin work on the excavation of the Burial Ground on the North Site (SWMU10)

Analytical Results for Wells 26,28,101A, and 102A

Date Collected	Tetrachloroethylene (mg/L)				Vinyl Chloride (mg/L)				Tributyl Phosphate (mg/L)			
	Well 26	Well 28	Well 101A	Well 102A	Well 26	Well 28	Well 101A	Well 102A	Well 26	Well 28	Well 101A	Well 102A
7/29/92	...	0.590	...	...	...	J 0.006	...	...	...	< 0.010	...	...
11/93	...	...	0.114	...	...	...	0.054	...	...	...	< 0.005	...
2/94	...	...	0.155	...	...	...	0.047	...	...	...	< 0.118	...
5/94	...	...	...	...	...	...	...	...	...	...	...	< 0.005
7/94	0.001	...	...	...	< 0.005	...	...	...	0.005	...	...	...
8/94	0.000	0.441	...	...	< 0.005	0.132	...	...	0.010	0.140	...	...
9/94	0.002	...	0.006	0.399	< 0.005	...	0.008	< 0.005	...	...	...	...
10/94	0.003	0.661	0.004	0.629	< 0.005	0.026	< 0.005	< 0.005	< 0.005	0.027	0.035	< 0.030
11/94	0.002	0.293	...	...	< 0.005	0.018	...	...	< 0.018	0.046	< 0.030	< 0.005
12/94	0.002	0.952	...	...	< 0.005	0.037	...	...	0.020	0.123	...	...
1/95	0.024	1.309	...	...	< 0.005	0.100	...	...	< 0.030	< 0.030	...	...
2/95	0.001	1.267	0.015	0.897	< 0.005	0.043	0.007	< 0.005	< 0.030	< 0.030	0.078	< 0.030
3/95	0.001	2.173	...	...	< 0.005	0.166	...	...	< 0.030	< 0.030	...	...
4/95	0.006	1.667	...	...	< 0.005	0.183	...	...	< 0.030	0.126	...	...
5/95	0.004	1.545	0.011	0.879	< 0.005	0.140	< 0.005	< 0.005	< 0.030	0.116	0.051	< 0.030
6/95	0.002	1.436	< 0.000	0.809	< 0.005	0.097	< 0.005	< 0.005	< 0.030	0.073	0.038	< 0.030
7/95	0.003	1.411	0.016	1.054	< 0.005	< 0.005	< 0.005	< 0.005	< 0.030	0.036	0.034	< 0.030
8/95	0.002	1.485	0.012	0.925	< 0.005	0.137	< 0.005	< 0.005	< 0.030	< 0.030	0.031	< 0.030
9/95	0.002	1.011	0.042	1.195	< 0.005	0.101	< 0.005	< 0.005	< 0.030	0.064	0.036	< 0.030
10/95	0.003	1.798	0.011	1.203	< 0.005	0.204	< 0.005	< 0.005	< 0.030	0.105	0.032	< 0.030
11/95	0.004	1.605	0.024	0.998	< 0.005	0.192	< 0.005	< 0.005	< 0.030	0.135	0.052	< 0.030
12/95	0.002	...	0.059	0.622	< 0.005	...	0.031	< 0.005	< 0.030	...	0.099	< 0.030
1/96	0.004	1.922	0.052	0.236	< 0.005	< 0.005	0.063	< 0.005	< 0.030	< 0.030	0.068	< 0.030
2/96	...	...	...	...	...	...	...	...	...	...	...	...
3/96	< 0.000	1.781	...	...	< 0.005	0.156	...	...	< 0.030	0.074	...	...
4/96	0.006	1.963	< 0.000	1.206	< 0.005	0.316	< 0.005	< 0.005	< 0.030	0.154	0.048	< 0.030
5/96	0.006	1.860	< 0.000	1.534	< 0.005	0.137	0.026	0.024	< 0.030	0.168	0.044	< 0.030
6/96	0.009	1.615	0.062	0.983	< 0.005	0.360	0.115	< 0.005	< 0.030	0.106	0.042	< 0.030
7/96	0.009	0.213	< 0.000	1.069	< 0.005	< 0.005	0.120	< 0.005	< 0.030	< 0.030	0.041	< 0.030
8/96	0.007	1.847	< 0.001	0.702	< 0.005	0.240	< 0.005	< 0.005	< 0.030	0.202	0.036	< 0.030
9/96	2.068	< 0.00008	< 0.00008	0.649	< 0.005	< 0.005	< 0.005	< 0.005	< 0.164	< 0.030	0.036	< 0.030
10/96	0.007	1.442	0.949	0.084	< 0.005	0.150	< 0.005	0.069	< 0.030	0.118	0.031	< 0.030
11/96	0.007	1.091	0.073	1.904	< 0.005	0.079	0.066	< 0.005	< 0.030	< 0.030	0.034	< 0.030
12/96	0.007	1.450	0.075	1.028	< 0.005	< 0.005	0.070	< 0.005	< 0.030	< 0.030	0.035	< 0.030
Mean	0.076	1.290	0.074	0.905	0.005	0.114	0.030	0.009	0.031	0.078	0.046	0.028
Standard Deviation	0.377	0.575	0.191	0.402	0.000	0.096	0.036	0.014	0.025	0.053	0.024	0.007
No. Observations	29	27	23	21	29	27	23	21	28	27	23	22
t-value	1.319	1.323	1.333	1.341	1.319	1.323	1.333	1.341	1.321	1.323	1.333	1.337
90% Conf. Limit	0.166	1.436	0.127	1.023	0.005	0.138	0.040	0.013	0.037	0.091	0.052	0.030
Action Level	0.005	0.005	0.005	0.005	0.002	0.002	0.002	0.002	0.2*	0.2*	0.2*	0.2*

NOTES:

Action Levels based on US EPA Maximum Contaminant Levels (MCL) for drinking water (February 1996).
* - Provisional action level based on Issue Paper (1992), verified with USEPA RCRA Health Assessment Office (May 1996)
< Less than detection limit
... No sample collected
Analysis performed by NFS

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Pond4-wells.xls