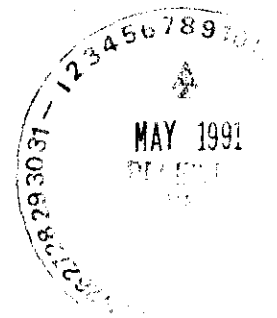


ENCLOSURE

cc: RG Frain  
SR Lockhaven  
WE Stavig  
GS Welch  
LB

October 22, 1990  
CWM:90:150

Department of Energy  
Richland Operations Office  
Attn: Mr. Leo E. Little  
Assistant Manager for Environmental Management  
P. O. Box 550  
Richland, WA 99352



Dear Mr. Little:

**LANDFILL INVESTIGATION RESPONSE**

This is in response to your letter of September 26, 1990 to Mr. R. G. Frain, and confirms that the attachment to that letter fairly represents certain actions and responsibilities which have been agreed to during discussion between the Department of Energy (DOE), Advanced Nuclear Fuels Corporation (ANF), and subcontractor personnel. This action plan is a continuation of limited cooperation by ANF with DOE in support of its' remedial investigation of the Horn Rapids landfill as previously stated in my letter of April 6, 1990 to Mr. R. D. Izatt, DOE-Richland Operations Office.

It is our understanding that the near-term activities by DOE and/or its representatives on ANF property will involve certain surveys including soil gas sampling at the South Pit area and certain other areas north of the ANF security fence. To accomplish these activities, personnel from DOE and their contractors and subcontractors, as well as personnel from other federal and state agencies may be involved. No special ANF badging will be required. Personnel are requested to carry their own Companies' or organizations' identification passes. It is the opinion of ANF General Counsel that an Agreement of Indemnification needs to be executed prior to the beginning of such work on ANF property. A copy of the required Agreement is enclosed. Please return the executed Agreement to R. G. Frain. Any questions with respect to this agreement should be direct to G. S. Welch, Esq. His telephone number is (206) 453-4359.

With respect to the Note at the end of the attachment to your letter of September 26, 1990, the report XN-JUB-82-86, which was transmitted to you by my letter dated April 6, 1990, contains the only well log we are aware of. It does not contain monitoring well designs. The

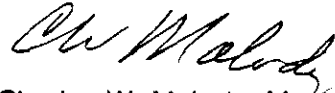
WE Stavig	RG Frain	GS Welch			
<i>W. Stavig</i>	<i>RG Frain</i>	<i>G.S. Welch</i> <i>10-12-90</i>			

Mr. Leo E. Little  
October 22, 1990  
Page 2

CWM:90:150

monitoring well designs were transmitted as separate pieces of paper enclosed, along with other data, with the same letter.

Very truly yours,



Charles W. Malody, Manager

**Agreement of Indemnification**

**Between**

**the United States**

**Department of Energy**

**and**

**Advanced Nuclear Fuels Corporation**

The United States Department of Energy (DOE) acting for and on behalf of the United States Government and others, hereby agrees to assume all liability for and indemnifies and holds harmless Advanced Nuclear Fuels Corporation (ANF), and any or all of ANF's directors, officers, employees, agents and ANF contractors and subcontractors from any property loss or damage or any injury (including death) to persons or any other claim, loss, damage, liability or expense that may be incurred or suffered by ANF and any or all of ANF's directors, officers, employees, agents and ANF contractors and subcontractors, arising out of, or resulting directly or indirectly from any act or omission of DOE or any other agency or agencies of the United States Government, or agency or agencies of the state of Washington or any of their respective contractors or subcontractors and relating to activities associated with the Phase II Remedial Investigation of areas adjacent to the Horn Rapids Landfill which are to be conducted on ANF property (as generally described in the DOE letter of September 26, 1990 and Attachment thereto, a copy of which is appended hereto).

For U.S. Department of Energy

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_



## Department of Energy

Richland Operations Office  
P.O. Box 550  
Richland, Washington 99352

SEP 28 1990

90-ERB-100

Mr. R. G. Frain  
Vice President, Operations  
Advanced Nuclear Fuels Corporation  
P. O. Box 130  
Richland, Washington 99352-0130

Dear Mr. Frain:

### COOPERATION OF ADVANCED NUCLEAR FUELS CORPORATION (ANF) IN REMEDIAL INVESTIGATION (RI) OF THE HORN RAPIDS LANDFILL AREA

As you know, the Department of Energy, Richland Operations Office (DOE-RL), is conducting a Remedial Investigation/Feasibility Study (RI/FS) of the 1100-EM-1 Operable Unit in compliance with the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the Hanford Federal Facility Agreement and Consent Order. Westinghouse Hanford Company (WHC) is managing the investigation for DOE-RL. Your company has been cooperating in the sampling of ground water wells on ANF property and in the sharing of data; our primary contacts with ANF have been Mr. Chuck Malody and Mr. Steve Lockhaven. Work to date with ANF has been part of Phase I of the RI.

We have begun planning Phase II of the RI. On August 27, 1990, Mr. Bob Stewart of my staff participated in a meeting at ANF offices with Mr. Malody and Mr. Lockhaven regarding planning to date. The meeting included representatives from WHC (Mr. Steve Clark & Mr. Kelly Stalker), Golder Associates Inc., and the U. S. Environmental Protection Agency. The primary purpose of the meeting was to brief Mr. Malody and Mr. Lockhaven concerning results from Phase I of the RI and to discuss proposed ANF support and participation during Phase II. Since the meeting there have been several follow-up telephone conversations among Messrs. Stewart, Malody, and Clark to discuss specific issues related to ANF support/participation. These coordination efforts have resulted in informal agreements among the parties.

The purpose of this letter is to formally solicit your continued support during Phase II of the RI. As discussed in the August 27th meeting, anomalies discovered during Phase I of the RI are of concern; they are:

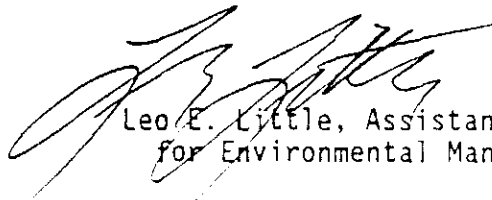
1. Monitoring of ground water wells at the Horn Rapids Landfill and data provided by ANF indicate there are elevated levels of trichloroethylene (TCE), in excess of drinking water standards, in the area ground water.
2. An apparent former disposal pit (hereinafter referred to as the South Pit) which may have been used to dispose of waste from Hanford Operations has been identified on your property across the road from the Horn Rapids

Landfill. Aerial photographs from 1948 and 1964 indicate that this site had been used for waste disposal and backfilled before the property was acquired by ANF. As a part of the Phase II RI, we need to characterize this area.

Specific cooperative efforts requested of ANF in the Phase II RI of the Horn Rapids Landfill are listed in the attachment to this letter. As mentioned, these efforts have been informally agreed-to by Messrs. Stewart, Malody and Clark. Also as agreed informally, all data acquired through this cooperative program is to be shared by both parties. Finally, ANF is invited to split samples at the time of collection for independent analysis.

If you have any questions about this letter or about the 1100-EM-1 RI/FS, please contact Mr. Stewart at (509) 376-6192.

Sincerely,



Leo E. Little, Assistant Manager  
for Environmental Management

ERD:RKS

Attachment

cc w/att:  
S. W. Clark, WHC  
C. Cline, Ecology  
D. Einan, EPA  
C. W. Malody, ANF  
T. M. Wintczak, WHC

DOE-RL REQUESTS OF ANF FOR THE PHASE II REMEDIAL INVESTIGATION (RI) OF AREAS  
ADJACENT TO THE HORN RAPIDS LANDFILL

I. DOE-RL requests permission for representatives of the U. S. Government and the State of Washington (DOE-RL, U. S. Environmental Protection Agency, U. S. Army Corps of Engineers, Washington State Department of Ecology, and contractors/subcontractors) to:

1. Investigate the South Pit area using surface geophysical surveys and soil gas surveys beginning immediately after October 1, 1990. This work may logically lead to a request to do exploratory drilling and soil sampling. If it is determined that drilling on ANF property is necessary, arrangements would be discussed at that time.
2. Conduct soil gas surveys on ANF property for the purpose of delineating the plume of trichloroethylene (TCE) found in the ground water at the Horn Rapids Landfill.

This work will be funded by DOE-RL unless evidence indicates potential responsibility by ANF for contamination. In such case, ANF will be contacted and discussions initiated regarding steps to be taken. In any event, none of the above work will be conducted at ANF expense without your express, written approval.

II. DOE-RL requests ANF to:

1. Provide the results of any previous determinations of TCE by ANF in ground water samples.
2. Measure ground water elevations at all ANF monitoring wells concurrent with sampling efforts by WHC at the wells in the Horn Rapids Landfill during the Phase II RI of the 1100-EM-1 Operable Unit.
3. Conduct ground water sampling and analyses of selected monitoring wells on ANF property as outlined below:
  - a. Sample wells #14, 15, and 16 and analyze for fluoride, nitrate and trichloroethylene. ANF will fund the analyses.
  - b. Sample wells #3, 4, 5, 6, and 7 and analyze for trichloroethylene. ANF will fund the analyses.
  - c. Take two 1000 ml samples from each of ANF monitoring wells #14, 15, and 16. Spike each sample with 2 ml of concentrated nitric acid. Deliver to WHC representatives for analyses for gross alpha, gross beta, and total radium. DOE-RL will fund these analyses.
  - d. All samples shall be collected and analyzed by approved EPA methods.

ANF is requested to fund the collection of data and samples. Funding of analyses will be performed as indicated.

\*This work is sufficient to continue the ongoing cooperative program to determine the nature and extent of contamination in the ground water around the Horn Rapids Landfill. If it becomes necessary to request additional samples or analyses justification will be presented at that time.

Note: WHC and subcontractors have requested geologists' logs and monitoring well construction diagrams available for ANF monitoring wells. According to C. W. Malody of ANF, available logs and well construction diagrams are published in the Exxon Nuclear Company, Inc., report XN-JUB-82-86, "Ground Water Quality and Flow Characteristics in the Vicinity of the Exxon Nuclear Company, Inc. Fuel Fabrication Facility," October 1982.