START

0032934

9308812

Department of Energy
Richland Field Office
P.O. Box 550
Richland, Washington 99352

AUG 03 1993

RECEIVED
DEC 8 1993
CORRESPONDENCE CONTROL

93-ERB-203

Mr. H. Larry Penberthy
631 South 96th Street
Seattle, Washington 98108

Dear Mr. Penberthy:

RESPONSE TO COMMENT ON THE 100 AREA EXCAVATION TREATABILITY TEST PLAN

Thank you for your effort to review and comment on the subject document (letter to J. D. Wagoner from H. L. Penberthy, "Request for Comments -- 100 Area Excavation Treatability Test Plan," dated June 10, 1993). At past-practice waste sites on the Hanford Site, the U.S. Department of Energy, Richland Operations Office (RL), Environmental Restoration (ER) Program works with the U.S. Environmental Protection Agency (EPA) and State of Washington Department of Ecology (Ecology) to identify and test contaminant and contaminated waste treatment technology process options in the context of the Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement). At this point in time in evaluation of contaminated waste treatment technology alternatives, the RL ER Program is interested in continuing evaluation of numerous process options including soil washing and exsitu vitrification systems.

As signatories to the Tri-Party Agreement, RL, EPA, and Ecology agreed to conduct past-practice waste site investigations through a process functionally equivalent with Remedial Investigation/Feasibility Study (RI/FS) processes identified in standard EPA guidance. In implementation of this agreement, RL, EPA, and Ecology unit managers for 100 and 300 Area operable units agreed to conduct treatability studies as an integral part of the RI/FS process. The tests provide site specific data to evaluate the ability of treatment technology process options to cost effectively attain acceptable remediation levels in a timely manner. EPA and Ecology will ultimately select final remedies for Hanford Site past-practice waste site remediation based in part on results from treatability studies.

Test objectives as stated in the "100 Area Excavation Treatability Study" (DOE/RL-93-04, Rev. 0) are to demonstrate soil removal techniques specific to 100 area waste site types and configurations, measure and control of excavation generated dust and airborne contamination, and verify field analytical system capabilities. Treatability study testing on disposal of materials excavated is not within the scope of the subject test plan. "The plan does note that the execution of this treatability test may produce up to 500 yd^3 of contaminated soil which will be used in future treatability tests. These tests may include soil washing with vitrification of the soil washing

9413093.0813

DEC 1993
RECEIVED
EPIC

fines. Other tests will be conducted if soil washing is not a viable alternative" (DOE/RL-93-04, Rev. 0). However, actual tests that may be conducted as future actions have not been selected, and such activities, if selected, will be documented in separate test plans.

Currently, the RL ER Program is giving consideration of potential treatability tests for technologies in several general response actions including removal/disposal, insitu treatment, and removal/treatment/disposal. Consideration of process options associated with commercially available process/equipment includes, but is not limited to insitu vitrification, exsitu vitrification, grouting, physical separation, soil washing, effluent treatment, and physical removal. Consistent with RL's highest priority, to maintain a safe working environment for workers, results from these and other treatability tests will enable RL to optimize contaminated waste treatment systems that minimize worker exposure to hazardous situations to acceptable levels while achieving remediation objectives.

When RL selects a particular process option for evaluation through agreement with EPA and Ecology operable unit managers, a determination is made whether current Hanford Site services and equipment can be used to meet the requirements for test objectives. In May 1993, RL determined current Hanford Site services and equipment provided and operated by companies under existing RL contract were adequate to meet the excavation related test objectives identified in the "100 Area Excavation Treatability Test Plan." The budget for this entire treatability test is approximately $1.3 M for completion of necessary project documentation, purchase of materials, analytical laboratory services, and completion of test activities.

It is expected that increased use of waste volume reduction process options will occur at Hanford as more past-practice waste sites are addressed. One of the major cost drivers for the RL ER Program now, and forecasted for the future, is waste disposal. At this time, it appears cost/benefit ratios for waste disposal may be beneficially enhanced by volume reducing bulk contaminated soils and solid waste prior to disposal. For example, results from soil washing bench scale testing of contaminated soils from Hanford Site's 300 Area indicates these soils may be particularly well suited to soil washing (or physical separation) because of soil particle size distribution and the nature and distribution of site specific contaminants. Similar bench scale testing is ongoing in the 100 Areas. Scale up of soil washing testing to pilot scale in the 300 Area is underway to test volume reduction and cost efficiencies. Although I appreciate your comments, there is no basis for making financial awards for comments on test plans.

At this time, RL is not ready to initiate testing exsitu vitrification processes on bulk contaminated soils, although it is considering the bench scale and small pilot scale testing of various solidification/stabilization process options on soil washing residuals and solid waste.

9413093.0814

I encourage your continued participation in reviewing the remediation effort at Hanford, as future opportunities for use of vitrification for solidification/stabilization for past-practice waste are possible.

Sincerely

Leo E. Little, Assistant Manager
for Environmental Management

ERD:EDG

cc: S. N. Balone, EM-442
P. S. Innis, EPA
R. E. Lerch, WHC
J. K. Patterson, WHC
R. W. Scheck, Dames and Moore
R. D. Wojtasek, WHC
J. G. Woolard, WHC
T. A. Wooley, Ecology

9413083.0015

CORRESPONDENCE DISTRIBUTION COVERSHEET

Author	Addressee	Correspondence No.
Leo E. Little, RL (J. M. Frain, WHC) 1666	H. L. Penberthy, Seattle	Incoming 9308812 Xref 9354487D

Subject: RESPONSE TO COMMENT ON THE 100 AREA EXCAVATION TREATABILITY TEST PLAN

INTERNAL DISTRIBUTION

Approval	Date	Name	Location	w/att
		Correspondence Control	A3-01	
		M. R. Adams	H6-01	
		L. D. Arnold	B2-35	
		B. A. Austin	B2-35	
		G. W. Jackson	H6-21	
		R. E. Lerch	B3-63	
		P. J. Mackey	B3-15	
		H. E. McGuire, Level 1	B3-63	
		S. R. Moreno	B3-06	
		J. K. Patterson	H6-27	
		J. A. Rivera	B2-16	
		T. M. Wintczak, Assignee	H6-27	
		J. G. Woolard	H6-05	
		EPIC	H6-08	
		File Custodian	H6-08	
		JMF:JGW LB	H6-05	

Reissued to reflect correct incoming distribution protocol.

9413093.1816