



Department of Energy

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Mr. Paul T. Day
Hanford Project Manager
U. S. Environmental Protection Agency
Region 10
P.O. Box 550, Mail Stop A7-70
Richland, Washington 99352

Mr. Timothy L. Nord
Hanford Project Manager
State of Washington
Department of Ecology
Mail Stop PV-11
Olympia, Washington 98540-8711

Dear Messrs. Day and Nord:

LABORATORY ANALYTICAL SERVICES

The Environmental Protection Agency's (EPA) letter of December 19, 1991 discussed concerns related to the analytical capability at Hanford. More specifically, the capacity problem for Remedial Investigation/Feasibility Studies (RI/FS) soil samples that will exceed 10 nanocuries/gram. The December 19, 1991, letter requested specific information related to sample shipping, sample projections, laboratory capabilities, and any issues related to Milestone M-14-00. Some of this information is not available due to the short turn around time provided. Tri-Party Agreement Milestone M-10-05 requires a Sampling and Characterization Plan by March 1992. The enclosed document will provide you with the information requested concerning sample projections.

Originally, Hanford's strategy for performing sample analyses for the Operable Units was the following:

- o Commercial laboratories would analyze samples, of less than 10 mR/hr, for environmental services/monitoring, bioassay, groundwater, initial support for Operable Unit soil samples.
- o The low-level mixed waste laboratory would analyze process control samples, Operable Unit soil samples; as well as Resource Conservation and Recovery Act (RCRA), Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Safe Drinking Water Act (SDWA), Toxic Substance Control Act (TSCA), Clean Water Act (CWA), and Clean Air Act (CAA). A copy of pages 1 and 2 of the Conceptual Design Report for the laboratory are included for your information.



- o All samples greater than 10 mR/hr would be analyzed in one of Hanford's analytical laboratories.

Hanford's proposed strategy regarding Milestone M-14-00 is the following:

- o Commercial laboratories would analyze samples, of less than 10 mR/hr, for environmental services/monitoring, bioassay, groundwater, Operable Unit soil samples.
- o The low-level mixed waste laboratory would analyze process control samples, provide quality assurance oversight of the samples sent to the commercial laboratories, and have the same capabilities as the original facility.
- o All samples greater than 10 mR/hr would be analyzed in one of Hanford's analytical laboratories.

Restrictions related to radiation level of samples to commercial laboratories are subject to the NRC licenses of the commercial laboratories. Additionally, DOE-HQ is currently preparing guidance which corresponds with the radiation levels acceptable to the commercial laboratories.

If you have any questions or need further information, please contact Donna Wanek of the Waste Management Division on (509) 376-5778 or myself on (509) 376-6978.

Sincerely,


for Steven H. Wisness
Hanford Project Manager

WMD:DMW

Enclosure

cc w/encl:
Larry Goldstein, Ecology
George Hofer, EPA
Tim Venezaiano, WHC

CONCEPTUAL DESIGN REPORT
ENVIRONMENTAL SUPPORT LABORATORY
PROJECT W-011

I. INTRODUCTION

This report presents the conceptual design for a laboratory facility to be used for the analysis of low level and non-radioactive samples that are required for compliance with the requirements of environmental regulations and Department of Energy (DOE) Orders. In particular, this laboratory will be used to perform Resource Conservation and Recovery Act (RCRA)*/ Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)** sample analyses per the Environmental Protection Agency (EPA) protocol. Safe Drinking Water Act (SDWA), Toxic Substance Control Act (TSCA), Clean Water Act (CWA), and Clean Air Act (CAA) analyses will also be performed in this laboratory. This report has been prepared by Westinghouse Hanford Company (WHC) with the cooperation of Kaiser Engineers Hanford Company (KEH). Work Order ER-1393 provided authority for the KEH support. The conceptual project schedule, project cost estimate, and work breakdown structure are in Appendices A, B, and C.

The total estimated cost of this project is \$16,600,000.

* RCRA, as used in this report, includes the Washington Department of Ecology (WDOE)

** CERCLA, as used in this report, includes the Superfund Amendments Reauthorization Act (SARA)



II. SUMMARY

Project W-011, Environmental Support Laboratory (ESL), will provide:

- o A facility (including analysis instruments) in which all analyses of samples of less than 1 m^r/hr radioactivity and nonradioactive samples can be performed as required by RCRA, CERCLA, TSCA, CWA, and CAA
- o A counting room (including analysis instruments) which will provide analyses to meet Safe Drinking Water Act (SDWA) radionuclide detection levels
- o A building for supply storage, utilities, equipment spare parts storage, and shop
- o Administrative support building (including computer room and equipment)
- o Other structures (e.g. gas bottle storage, diesel generator pad, exhaust stack).

Studies (Reference 1) that have been conducted by WHC have indicated that there are no laboratories at Hanford which have the capacities and capabilities to perform low level environmental analysis that are required for RCRA and CERCLA.

Contacts with personnel at EG&G Idaho have provided information as to the cost and schedule associated with the use of factory manufactured modules for the construction of a new laboratory for the analysis of similar samples. This information has been used where applicable in the preparation of the cost estimate and schedule that are contained in Appendices A and B.

Site evaluation and selection for this facility is described in Reference 3.

CORRESPONDENCE DISTRIBUTION COVERSHEET

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Subject: LABORATORY ANALYTICAL SERVICES

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