

DOE Interagency Agreement No. DE-AI05-91OR21917
Performing Agency: U.S. Army Corps of Engineers
Modification: A002

I. Purpose

The purpose of this modification is to (1) provide funding in the amount of \$106,920; and (2) expand the scope of work to add Tasks 3 and 4 with no change in the term of the agreement.

III. Scope of Work

The scope of work involves engineering and construction support for White Oak Creek Embayment (WOCE) interim corrective measures.

White Oak Creek is the primary surface water drainage for ORNL. White Oak Creek originates north of Bethel Valley Road on the southern slopes of Chestnut Ridge approximately 1.6 miles northeast of ORNL. The creek flows west through the main Laboratory area of ORNL in Bethel Valley turning southwest 1.5 miles down to White Oak Lake. White Oak Dam is located 0.6 miles above the confluence with the Clinch River. The WOCE is an area located between White Oak Dam and the Clinch River.

Sampling conducted in August 1990 in the Embayment indicates the presence of higher than expected levels of cesium-137, a radioactive isotope historically produced in research reactor operations at ORNL, in the top 2-4 inches of sediment. Earlier samples taken in 1978 and 1984 indicated that the cesium-137 contamination was buried 1-2 feet below the surface. Measures are to be taken to control the further migration of the sediment down White Oak Creek Embayment and to prevent the sediments from entering the Clinch River.

Support from the U.S. Army Corps of Engineers is required for the following tasks:

Task 3.

Develop construction plans and specifications for the selected alternate from Task 2, a cofferdam/rockfill structure near the mouth of White Oak Creek. The plans and specifications should take into account all known geotechnical, hydraulic, hydrological and topographical data developed in Tasks 1 and 2. A design analysis and a detailed cost estimate will also be submitted with the plans and specifications. The cost estimate will reflect the total cost of construction except for those costs associated with health and safety, working in a radioactive environment, and the overhead charged to hired labor. The plans and specifications will be reviewed by the U.S. Department of Energy and Martin Marietta Energy Systems, Inc., and all appropriate comments will be incorporated into the final design. The deliverables for this task will be the construction plans, specifications, design analysis, and cost estimate.

III. Scope of Work (cont'd)

Task 4.

Provide construction oversight and associated engineering services during the construction phase of the project. This will encompass on-site monitoring of construction methods, materials, and procedures as well as specific engineering services as required. Completion of this task will coincide with the completion of construction.

V. Cost

The DOE hereby obligates \$106,920 for actual cost to support this work through August 31, 1991. This obligation is based on the following budget estimate:

Task 3	Labor	\$ 62,920
Task 4	Labor	44,000
	Total	\$106,920

VI. Deliverables/Reports

The deliverables/reports referred to in Section III shall be submitted to:

S. D. Van Hoesen
Oak Ridge National Laboratory
P. O. Box 2008
Oak Ridge, Tennessee 37831-6338

VIII. Program Officers

DOE and performing agency - See Blocks 6 and 7, Face Page.

USACE - Tom McGee, Technical Contact and Fiscal and Contractual Matters (FTS 852-5617)

USACE - John Hall, Technical Contact (FTS 852-5966)

ORNL - Dirk Van Hoesen, Technical Contact (FTS 624-7264)

ORNL - Tom Ethridge, Alternate Technical Contact (FTS 624-0115)

DOE - Margie W. Henderson, Fiscal and Contractual Matters (FTS 626-0714)

IX. Obligation of Funds

The total amount obligated by the U.S. Department of Energy is \$185,855. As stated in Block 5.d. of the Face Page and Section V. Cost, the current obligation is \$106,920.

Sections II, IV, X, XI, XII, XIII, XIV, XV, XVI, XVII, and XVIII shall remain unchanged.