

1. CONTRACT (Proc. Inv. Ident.) NO NRC-02-81-050		2. EFFECTIVE DATE		3. REQUISITION/PURCHASE REQUEST/PROJECT NO NMS-81-050		4. CERTIFIED FOR NATIONAL DEFENSE UNDER REG. 2 AND/OR DMS REG. 1. RATING	
5. ISSUED BY U.S. NUCLEAR REGULATORY COMMISSION Division of Contracts Washington, D.C. 20555		6. ADMINISTERED BY (If other than block 5)		7. DELIVERY FOR DESTINATION <input checked="" type="checkbox"/> NATION <input type="checkbox"/> OTHER (See below)		8. DISCOUNT FOR PROMPT PAYMENT	
9. CONTRACTOR NAME AND ADDRESS Science Applications, Inc. 1710 Goodridge Drive P. O. Box 1303 McLean, Virginia 22102		FACILITY CODE		10. SUBMIT INVOICES (4 copies unless otherwise specified) TO ADDRESS SHOWN IN BLOCK As specified in the attached Billing Instructions		11. SHIP TO/MARK FOR	
12. PAYMENT WILL BE MADE BY U.S. Nuclear Regulatory Commission Office of the Controller Washington, DC 20555		13. THIS PROCUREMENT WAS <input type="checkbox"/> ADVERTISED, <input checked="" type="checkbox"/> NEGOTIATED, PURSUANT TO: <input type="checkbox"/> 10 U.S.C. 2304 (a)(1) <input checked="" type="checkbox"/> 41 U.S.C. 252 (a)(10)		14. ACCOUNTING AND APPROPRIATION DATA B&R No.: 50-19-01-01 FIN No.: B7319-1 OBLIGATE: \$49,913.00		15. ITEM NO.	

15. ITEM NO.	16. SUPPLIES/SERVICES	17. QUANTITY	18. UNIT	19. UNIT PRICE	20. AMOUNT
	Environmental Assessment of Low Level Waste Storage At TVA Browns Ferry Nuclear Plant in Limestone County, Georgia This contract is to be performed in accordance with the terms of the Statement of Work delineated herein; the requirements of Basic Ordering Agreement NRC-02-80-035, and the SAI Proposal dated February 6, 1981 (1-246-71-810-21) COST-PLUS-FIXED-FEE CONTRACT FULLY FUNDED				
				ESTIMATED COST \$45,796.00 FIXED FEE 4,117.00 COST-PLUS-FIXED FEE \$49,913.00	

21. TOTAL COST-PLUS-FIXED FEE \$ 49,913.00	
CONTRACTING OFFICER WILL COMPLETE BLOCK 22 OR 26 AS APPLICABLE	
22. <input checked="" type="checkbox"/> CONTRACTOR'S NEGOTIATED AGREEMENT (Contractor is required to sign this document and return 3 copies to issuing office.) Contractor agrees to furnish and deliver all items or perform all the services set forth or otherwise identified above and on any continuation sheets for the consideration stated herein. The rights and obligations of the parties to this contract shall be subject to and governed by the following documents: (a) this award/contract, (b) the solicitation, if any, and (c) such provisions, representations, certifications, and specifications, as are attached or incorporated by reference herein. (Attachments are listed herein)	26. <input type="checkbox"/> AWARD (Contractor is not required to sign this document.) Your offer on Solicitation Number _____ including the additions or changes made by you which additions or changes are set forth in full above, is hereby accepted as to the items listed above and on any continuation sheets. This award consummates the contract which consists of the following documents: (a) the Government's solicitation and your offer, and (b) this award/contract. No further contractual document is necessary.
23. NAME OF CONTRACTOR DAVE E. FINDLEY (Signature of person authorized to sign)	27. UNITED STATES OF AMERICA BY M. J. Matthea (Signature of Contracting Officer)
24. NAME AND TITLE OF SIGNER (Type or print) DAVE E. FINDLEY SA. CONTRACT REPRESENTATIVE	25. DATE SIGNED 2-20-81
28. NAME OF CONTRACTING OFFICER (Type or print) M. J. Matthea	

TABLE OF CONTENTS

This Contract Consists of:

1. Cover Page
2. Table of Contents
3. Schedule

Article I Statement of Work
Article II Period of Performance
Article III Consideration and Payment
Article IV Overhead/General and Administrative Rates
Article V Provisions Applicable to Direct Costs
Article VI Key Personnel
Article VII Project Officer
Article VIII Conflict of Interest
Article IX General Provisions/Alterations

4. Attachments

Appendix A - General Provisions (Rev. 11/80)
Appendix B - Billing Instructions for Cost-Type Contracts

ENVIRONMENTAL ASSESSMENT OF
LOW LEVEL WASTE STORAGE
AT TVA BROWNS FERRY NUCLEAR PLANT

1.0 Background

TVA prepared Environmental Impact Statements in support of their applications to construct and operate the nuclear power plant units at Browns Ferry in Limestone County, Alabama. The Statements covered the collection, treatment and storage of low-level waste associated with the operation of the reactors. TVA now plans to store low level waste for five years, an activity not originally contemplated and not associated with the operation of the reactors. This activity is essentially an additional step in the fuel cycle.

2.0 Work Required

The contractor shall gather data, analyze the data, and perform an environmental assessment based on the analysis, consideration of site and surrounding characteristics, and the applicant's Environmental Assessment. This assessment shall be tiered on previous Environmental Impact Statements for the Browns Ferry Nuclear Plant and shall include the following topics to the extent that they are not redundant.

1. Description of the Site Environment

- a. Site Location
- b. Demography
- c. Land Use
- d. Geology
- e. Hydrology (Groundwater and Surface Water)
- f. Meteorology and Climatology
- g. Background Radiological Characteristics
- h. Ecology (Terrestrial and Aquatic Biota)

2. The Facility

- a. External Appearance
- b. Summary of Operations Processes

3. Waste Confinement and Effluent Control

- a. Gaseous Effluents
- b. Liquid Effluents
- c. Solid Wastes (Including packaging integrity verification)

4. Environmental Impacts of Facility Operations
 - a. Radiological
 - b. Non-radiological
5. Description of Environmental and Occupational Measurement and Monitoring Programs
 - a. Radiological
 - b. Non-radiological
6. Impact of Accidents
 - a. Radiological Accidents
 - b. Non-radiological Accidents
 - c. Evaluation of Potential Environmental and Occupational Impact of Accidents
7. Summary and Conclusion of Environmental Impacts of Construction and Operation

In addition, the contractor shall provide a discussion of reasonable alternatives available for reducing or avoiding adverse environmental effects and alternative uses of resources. The discussion of alternatives will include the environmental impacts of each in proportion to its significance and balancing environmental, economic and technical costs and benefits of the proposed action and each alternative considered.

3.0 Additional Materials to be Furnished by NRC

- Final Environmental Impact Statement - TVA Browns Ferry Unit # 1
- Final Environmental Impact Statement - TVA Browns Ferry Unit # 2
- Final Environmental Impact Statement - TVA Browns Ferry Unit # 3
- TVA Licensing Submittal - LLW Storage Facility

5.0 Travel

After initial review of NRC-furnished materials, the contractor shall visit the EFMP to acquire site specific data and additional information necessary to perform the environmental impact assessment. It is expected that several contractor personnel will be required to spend a few days each at the site on two separate occasions. At times to be designated by the NRC Project Officer, the contractor will meet with the NRC in Silver Spring, MD to discuss the problems, progress and technical aspects of the assessment. Approximately three meetings, not to exceed one day each in duration, are anticipated.

6.0 Reports

Report requirements shall be as specified in the Basic Ordering Agreement, NRC-02-80-035.

The Draft Final Report shall be submitted three months after the effective date of the contract.

ARTICLE II PERIOD OF PERFORMANCE

The period of performance shall be from the effective date of contract thru October 18, 1981 at which time all work shall be completed and all reports shall have been delivered to the NRC as required by Article I, above.

ARTICLE III - CONSIDERATION AND PAYMENT (Fully Funded CPFF)

A. Estimated Cost, Fixed Fee and Obligation

1. It is estimated that the total cost to the Government for full performance of this contract will be \$49,913.00 of which the sum of \$45,796.00 represents the estimated reimbursable costs, and of which \$4,117.00 represents the fixed fee.
2. Total funds currently available for payment and allotted to this contract are \$49,913.00 of which \$45,796.00 represents the estimated reimbursable costs, and of which \$4,117.00 represents the fixed fee.
3. It is estimated that the amount currently allotted will cover the period of performance which is scheduled to be completed five (5) months from the effective date of the contract.

B. Payment

The Government shall render payment to the contractor in approximately thirty (30) days after submission of proper and correct invoices and vouchers.

Additional provisions relating to payment are contained in Clause 5.1-3 of the General Provisions hereto.

ARTICLE IV - OVERHEAD/GENERAL AND ADMINISTRATIVE RATES

- A. Pending the establishment of final overhead rates which shall be negotiated based on audit of actual costs, the contractor shall be reimbursed for allowable indirect costs hereunder at a provisional engineering overhead rate of 84 percent of direct labor costs and at a provisional fringe benefit rate of 38.6 percent of direct labor costs.
- B. Pending the establishment of final general and administrative rates which shall be negotiated based on audit of actual costs, the contractor shall be reimbursed for allowable indirect costs hereunder at the provisional rate of 12.6 percent of total direct cost and overhead.
- C. Notwithstanding A. and B. of this Article, said provisional overhead and G&A rates may be adjusted as appropriate during the term of the contract upon the acceptance of such revised rates by the Contracting Officer.

ARTICLE V - PROVISIONS APPLICABLE TO DIRECT COSTS

Items Unallowable Unless Otherwise Provided

Notwithstanding Clause No. 5 -- ALLOWABLE PAYMENT, And Clause No. 10-- SUBCONTRACT, of the General Provisions of this contract, unless authorized in writing by the Contracting Officer, the costs of the following items or activities shall be unallowable as direct costs:

1. Fees for Consultants
2. Overtime; shift or incentive payments
3. All travel outside of Canada and the United States and its territories and possessions.
4. Maintenance agreements, service contracts, or maintenance of Government equipment.

ARTICLE VI-KEY PERSONNEL

Pursuant to this ARTICLE (Key Personnel), the following individuals are considered to be essential to the successful performance of the work hereunder and shall not be replaced without the prior approval of the Contracting Officer. In such event, the contractor agrees to substitute persons possessing substantially equal abilities and qualifications satisfactory to the Contracting Officer.

Dr. J. Frank Wimpey

ARTICLE VII-PROJECT OFFICER

Peter Loysen is hereby designated as the Contracting Officer's authorized representative (hereinafter called Project Officer) for technical aspects of this contract. The Project Officer is not authorized to approve or request any action which results in or could result in an increase in contract cost; or terminate, settle any claim or dispute arising under the contract; or issue any unilateral directive whatever

The Project Officer is responsible for: (1) monitoring the Contractor's technical progress, including surveillance and assessment of performance, and recommending to the Contracting Officer changes in requirements; (2) interpreting the scope of work; (3) performing technical evaluation as required; (4) performing technical inspections and acceptances required by this contract; and (5) assisting the Contractor in the resolution of technical problems encountered during performance. Within the purview of this authority, the Project Officer is authorized to review all costs requested for reimbursement by contractors and submit recommendations for approval, disapproval, or suspension for supplies, services required under the contract. The Contracting Officer is responsible for directing or negotiating any changes in terms, conditions, or amount cited in the contract.

For guidance from the Project Officer to the Contractor to be valid, it must: (1) be consistent with the description of work set forth in the contract; (2) not constitute new assignment of work or change to the expressed terms, conditions or specifications incorporated into this contract; (3) not constitute a basis for an extension to the period of performance or contract delivery schedule; and as stated above, (4) not constitute a basis for any increase in the contract cost.

ARTICLE VIII - CONFLICT OF INTEREST

(a) Purpose. The primary purpose of this article is to aid in ensuring that the contractor: (1) is not placed in a conflicting role because of current or planned interest (financial, contractual, organizational, or otherwise) which relate to the work under this contract, and (2) does not obtain an unfair competitive advantage over other parties by virtue of its performance of this contract.

(b) Scope. The restrictions described herein shall apply to performance or participation by the contractor as defined in 41 CFR § 20-1.5402(f) in the activities covered by this clause.

(c) Work for others. Notwithstanding any other provision of this contract, during the term of this contract, the contractor agrees to forego entering into consulting or other contractual arrangements with any firm or organization, the result of which may give rise to a conflict of interest with respect to the work being performed under this contract. The contractor shall ensure that all employees who are employed full time under this contract and employees designated as key personnel, if any, under this contract abide by the provision of this clause. If the contractor believes with respect to itself or any such employee that any proposed consultant or other contractual arrangement with any firm or organization may involve a potential conflict of interest, the contractor shall obtain the written approval of the contracting officer prior to execution of such contractual arrangement.

(d) Disclosure after award. (1) The contractor warrants that to the best of its knowledge and belief and except as otherwise set forth in this contract, it does not have any organizational conflicts of interest, as defined in 41 CFR §20-1.5402(a).

(2) The contractor agrees that if after award it discovers organizational conflicts of interest with respect to this contract, it shall make an immediate and full disclosure in writing to the contracting officer. This statement shall include a description of the action which the contractor has taken or proposes to take to avoid or mitigate such conflicts. The NRC may, however, terminate the contract for convenience if it deems such termination to be in the best interests of the government.

(e) Access to and use of information. (1) If the contractor in the performance of this contract obtains access to information, such as NRC plans, policies, reports, studies, financial plans, internal data protected by the Privacy Act of 1974 (Pub. L. 93-579), or data which has not been released to the public, the contractor agrees not to: (i) Use such information for any private purpose until the information has been released to the public; (ii) compete for work for the Commission based

on such information for a period of six (6) months after either the completion of this contract or the release of such information to the public, whichever is first, (iii) submit an unsolicited proposal to the government based on such information until one year after the release of such information to the public, or (iv) release the information without prior written approval by the contracting officer unless such information has previously been released to the public by the NRC.

(2) In addition, the contractor agrees that to the extent it receives or is given access to proprietary data, data protected by the Privacy Act of 1974 (Pub. L. 93-579), or other confidential or privileged technical, business, or financial information under this contract, the contractor shall treat such information in accordance with restrictions placed on use of the information.

(3) The contractor shall have, subject to patent and security provisions of this contract, the right to use technical data it produces under this contract for private purposes provided that all requirements of this contract have been met.

(f) Subcontracts. Except as provided in 41 CFR §20-1.5402(h), the contractor shall include this clause, including this paragraph, in subcontracts of any tier. The terms "contract," "contractor," and "contracting officer," shall be appropriately modified to preserve the government's rights.

(g) Remedies. For breach of any of the above proscriptions or for intentional nondisclosure or misrepresentation of any relevant interest required to be disclosed concerning this contract or for such erroneous representations as necessarily imply bad faith, the government may terminate the contract for default, disqualify the contractor from subsequent contractual efforts, and pursue other remedies as may be permitted by law or this contract.

(h) Waiver. A request for waiver under this clause shall be directed in writing through the contracting officer to the Executive Director for Operations (EDO) in accordance with the procedures outlined in §20-1.5411.

ARTICLE IX - GENERAL PROVISIONS/ALTERATIONS

A. This contract is subject to the attached provisions of Appendix A, General Provisions, entitled "Cost Type Research and Development Contracts With Commercial Organizations," dated 11/80.

B. Alteration - The following clause is hereby added to the general provisions:

UTILIZATION OF WOMEN-OWNED BUSINESS CONCERNS (Over \$10,000)

- (a) It is the policy of the United States Government that women-owned businesses shall have the maximum practicable opportunity to participate in the performance of contracts awarded by any Federal agency.
- (b) The Contractor agrees to use his best efforts to carry out this policy in the award of subcontracts to the fullest extent consistent with the efficient performance of this contract. As used in this contract, a "woman-owned business" concern means a business that is at least 51% owned by a woman or women who also control and operate it. "Control" in this context means exercising the power to make policy decisions. "Operate" in this context means being actively involved in the day-to-day management. "Women" mean all women business owners.

(reference Office of Federal Procurement Policy Letter 80/4 dated 4/29/80)