



AEC/MED INVOLVEMENT AT SITE

**Control**

- AEC/MED managed operations
- AEC/MED responsible for accountability
- AEC/MED overviewed operations
- Contractor had total control
- unknown

- Health Physics Protection**
  - ~~Little or None~~
  - AEC/MED responsibility
  - Contractor responsibility

MATERIALS HANDLED:

Type (on basis of records reviewed)

- No **Radioactive**
- Natural Radioactive** from Feed **Materials** Production
  - Ore
  - Refined **Source Material**
  - Residue
- Natural **Radioactive Material** from Non-Nuclear **Activities**
- Man-Made
- Other** \_\_\_\_\_

**Comment** \_\_\_\_\_  
\_\_\_\_\_

Quantities (on the basis of records reviewed)

- None  Production Quantities
- Small Amounts**

**Comment** Research \_\_\_\_\_  
\_\_\_\_\_

OTHER PERTINENT FACTS:

- Facility was Licensed**
  - ~~During AEC/MED-Related Operations~~
  - ~~For Similar Activities~~
  - For Other Activities

**Comment** \_\_\_\_\_  
\_\_\_\_\_

- Commercial Production Involving Radioactive Material during AEC/MED Operations**

- Facility was Decontaminated and Released**

- Availability of Close Out Records**

~~Insufficient~~  ~~Insufficient~~  **Sufficient**

~~Radioactive~~ **Radioactive** Statue: YES MAYBE PROBABLY NOT  
NOT

<b>Contaminated Potential</b>	for	---	---	---	<del>X</del>
		Exposure (accessible)	---	---	---

QUANTITY OF RECORDS AVAILABLE:

Very Little                       Some                       Sufficient

PROBABILITY OF FINDING ADDITIONAL RECORDS:

Low                       Possible                       High

RECOMMENDATIONS:

Eliminate  
 Consider for Remedial Action  
 Collect More Data

Comment \_\_\_\_\_  
\_\_\_\_\_

REFERENCES: Controlled # AT (49-6)-923  
AT (49-1)-500  
Letter dtd 5/2/79 - note to Hurley  
\_\_\_\_\_  
\_\_\_\_\_

SUMMARY No survey was performed because the facility  
was torn down + removed -- there is no  
original soil in the area. Site now is  
the location of 5,000,000 - sq-ft complex  
no further action by DOE-FUSRAP is required  
\_\_\_\_\_

1.11  
2.4.1

B0815-J

MAY 2 1979

**Mr. David Hurley**  
Manager  
Arther D. Little Company  
San Francisco, California

Dear Mr. Hurley:

As you may know, the Department of Energy (DOE) is involved in a program to characterize the radiological condition of sites formerly used by the Manhattan Engineer District (MED) and/or Atomic Energy Commission (AEC) in the development of nuclear energy. As part of this program, DOE is preparing a series of brief summaries of the history of the MED/AEC related activities and conditions at the specific sites. The summaries are to document the activities from the initiation of a contract with MED/AEC to the termination of the ffnna? MED/AEC contract. The historical summaries also briefly describe the current condition of each site.

Enclosed is a copy of a preliminary summary describing work conducted at a portion of your facility for the AEC. DOE is still in the process of reviewing MED/AEC operations records in order to obtain all available information. The enclosed draft is based upon data collected to date and is submitted to you so that your review and comment can be received in a timely manner.

The second enclosure lists the specific information that should ideally be included in the attached site summaries. As you can see, a portion of the information has not yet been identified. I would appreciate receiving (if possible by May 10, 1979) any supplemental information you can supply that might fill in some of the incomplete areas. I would also like to solicit any additional information regarding other facilities involved in the feed materials program of MED/AEC.

Sincerely,

S

William E. Mott, Acting Director  
Environmental Control Technology  
Division

Enclosures:  
As stated

bcc: R. E. Allen                      B. D. Shipp (CH)  
W. E. Mott                            A. J. Whitman  
R. W. Ramsey                        Aerospace ✓

ECT  
REAllen  
4/1/79

ECT AD/N  
RW Ramsey  
5/1/79

ECT  
W. Mott  
5/2/79

ARTHUR D. LITTLE  
(Merrill Company)  
322 Battery Street  
San Francisco, California

#### Site Function

The Merrill Company had R&D contracts for the separation and recovery of uranium from various ores and the concentration and upgrading of the uranium product. The contracts ran from 1948 through 1956 and included AT(49-6)-923, AT(49-1)-439, and AT(49-1)-540. Specific research included recovery of uranium and vanadium from alkaline carbonate leach solutions of domestic ores. (Refs. 2, 3, and 4)

#### Site Description

The facility was torn down as part of San Francisco's redevelopment program. A 5,000,000-square-foot complex called the Embarcadero Center now occupies the land. (Ref. 1)

#### Owner History

In the 1948 through 1956 period, the Merrill Company was located at 582 Market Street, San Francisco (the laboratory may have been located at 322 Battery Street). Some type of relationship between this company and A.D. Little prevailed after May 1954, with former Merrill employees working for Little. The site was visited by DOE and Argonne National Laboratory in December of 1977. The visit confirmed that no additional survey effort was required. (Ref. 2)

#### Radiological History and Status

Because there is no facility to survey nor original soil in the area, there is no useful radiological survey of the area that can be accomplished. (Ref. 1)

#### Category and Status

No further DOE action is required. The site was cleared for unrestricted use on December 23, 1977. (Ref. 1)

#### References

1. Letter, "Arthur D. Little," R.H. Bauer (Chicago Operations) to J.L. Liverman (DOE Headquarters), December 23, 1977 (19055).

2. "Summary of Available Data on Specified Division of Raw Materials Contractors," files of R. Allen (Environmental Control Technology), date unknown.
3. AEC Contract **AT(49-1)-540**, June 13, 1951.
4. AEC Contract **AT(49-6)-923**, July 27, 1954.

JAN 5 1979

CONTENTS OF SITE SUMMARIES

Each site summary should ideally answer the following questions under the respective categories..

1. Name of Site or Facility where site is located, Address of Current Owner
2. Site Functions
  - a. **What** was the site used for?
  - b. **What** were the dates of operation?
  - c. Who operated the **site**?
  - d. **What** contract number and who was the contractor during MED/AEC operations?
3. Physical Characteristics
  - a. **What** was physical layout of site during use?
  - b. What remains of old site?
  - c. What are the new physical characteristics of the site and what led to any changes?
  - d. **What** is the description of any off-site location affected?
4. Owner History
  - a. **What** was the ownership history from the initiation of operations to the present?
5. Radiological History and Status
  - a. **What** was the radiological history (**including** contamination and surveys performed) to the present?
  - b. **Was** any material or equipment used in the conduct of the AEC/MED contracts removed from the **site**? **If** so what was its disposition?
  - c. What is the **current** status?
  - d. **What** is the magnitude of any expected contamination off-site as well as on-site and what surveys were performed to date?
  - e. **What** actions were taken to decontaminate **and/or** certify the **site for release to the public**?
6. Category and Status
7. References (List of all **available material** supporting the data **in the** summary)

CONTRACT NO. AT(49-1)-540

THIS CONTRACT, entered into the 13<sup>th</sup> day of June, effective April 10, 1951, by and between the UNITED STATES OF AMERICA (hereinafter called the "Government") as represented by the UNITED STATES ATOMIC ENERGY COMMISSION (hereinafter called the "Commission") and THE MERRILL COMPANY, a corporation of the State of California having an office at 582 Market Street, San Francisco, California, (hereinafter called the "Contractor");

## WITNESSETH THAT:

WHEREAS, the Government desires the Contractor to perform certain research and development work and the Contractor is willing to do so; and

WHEREAS, the Commission certifies that this negotiated contract is authorized by and executed under the Atomic Energy Act of 1946, as amended, in the interest of the common defense and security;

NOW, THEREFORE, the parties hereto do agree as follows:

ARTICLE I - STATEMENT OF WORK

1. The Contractor shall conduct research and development work as designated by the Commission for the separation and recovery of uranium and associated valuable elements from uranium ores and the concentration and upgrading of the uranium product. In so doing, specific and early attention will be given to recovery of uranium and vanadium from alkaline carbonate leach solutions of domestic uranium ores so that a product readily amenable to existing refining operations may be obtained. An important objective of the contract work is the attainment of high efficiencies of uranium recovery at low costs of processing and reduced reagent consumption. The Contractor shall devote its best efforts, know-how and ability to performance of the contract work, shall proceed as and to the extent the Commission may from time to time request in its accomplishment and shall furnish the necessary personnel, facilities, equipment and supplies needed for performance of the work.

2. The Contractor shall prepare and submit to the Commission such periodic reports and special reports as the Commission shall request and a final report summarizing the Contractor's activities, findings and conclusions in connection with the work. Said reports shall be in the quantity, frequency, and form requested by the Commission.

ARTICLE II - ESTIMATES

1. The presently estimated cost of the work under this contract is \$35,000 exclusive of the Contractor's fixed fee. The Contractor's fixed fee is \$1,500. The total of the foregoing initial estimate of cost and fixed fee constitute the amount of appropriated funds presently obligated with respect to this contract.



1618-6

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CONTRACT NO. AT(49-1)-540

CONTRACT

CONTRACTOR AND ADDRESS:

THE MERRILL COMPANY  
Hoi-m-t Building  
582 Market Street  
San Francisco, California

CONTRACT FOR:

RESEARCH AND DEVELOPMENT

ESTIMATED COST:

\$35,000

SUBMIT INVOICES TO:

United States Atomic Energy Commission  
Tempo 3 Building, 16th Street and  
Constitution Avenue, Washington 25,  
D. C. Chief of Finance, Accounting  
Operations Section,

*Ed. Spingarn*

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*Co. to Mr. Spingarn*

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k. Subcontracts, purchase orders and other commitments.

1. Costs and expenses of litigation by, against, or otherwise with third parties arising out of performance of this contract, including judgments and court costs, reasonable attorneys' fees for private counsel when the Government does not furnish Government counsel, settlements made with the approval of the Commission and allowances rendered or awarded in connection with suits for wages, overtime or salaries.

**ARTICLE V - PAYMENTS**

1. The fixed fee set out in Article II shall be paid in equal monthly installments.
2. The Commission shall reimburse the Contractor for costs and expenses once each month, or at more frequent intervals if deemed desirable, upon submission to and approval by the Commission of public vouchers together with underlying supporting data or other evidence satisfactory to the Commission. The Commission may withhold all or any part of the final reimbursement payment until property accounting and all reports required under the contract have been received.
3. The Commission reserves the right upon ten days' written notice from the Commission to the Contractor to pay directly to the person concerned any charges for services, materials or freight which otherwise would be allowable under this contract. Any payments so made shall discharge the Government of all-liability to the Contractor therefor.

**ARTICLE VI - TERM**

The period of performance under this contract shall commence on April 10, 1951 and shall end September 10, 1951.

**ARTICLE VII - INSPECTION OF CONTRACTOR'S ACTIVITIES: REPORTS**

1. The Commission shall have the right to inspect in such manner and at such times as it deems appropriate all activities of the Contractor arising in the course of the work under this contract, and the Contractor will permit such audits and examinations of its books and account as the Commission may request.
2. The Contractor shall make such reports to the Commission, with respect to the Contractor's activities under this contract, as the Commission may require from time to time.

**ARTICLE VIII - ASSIGNMENT**

1. Neither this contract nor any interest therein nor claim thereunder shall be assigned or transferred by the Contractor, except as expressly authorized in writing by the Commission.

services or advice in connection with special phases of a highly technical character the Contractor may, with the approval of the Commission, engage or otherwise obtain such supplemental professional services.

- g. **Safety;** The Contractor shall initiate and take all reasonable steps and precautions to protect health and minimize danger from all hazards to life and property and shall make all reports and permit all inspections as required by the Commission and shall conform to all minimum health and safety regulations and requirements of the Commission.
- h. **Eight-hour Law:** No laborer or mechanic doing any part of the work contemplated by this contract, in the employ of the Contractor or any subcontractor contracting for any part of said work contemplated, shall be required or permitted to work more than 8 hours in any one calendar day upon such work at the site thereof, except upon the condition that compensation is paid to such laborer or mechanic in accordance with the provisions of this paragraph. The wages of every laborer and mechanic employed by the Contractor or any subcontractor engaged in the performance of this contract shall be computed on a basic day rate of 8 hours per day and work in excess of 8 hours per day is permitted only upon the condition that every such laborer and mechanic shall be compensated for all hours worked in excess of 8 hours per day at not less than one and one-half times the basic rate of pay. For each violation of the requirements of this paragraph a penalty of Five Dollars (\$5.00) shall be imposed upon the Contractor for each laborer or mechanic for every calendar day in which such employee is required or permitted to labor more than 8 hours upon said work without receiving compensation computed in accordance with this paragraph, and all penalties thus imposed shall be withheld for the use and benefit of the Government. It is understood that the foregoing shall be subject in all respects to applicable exceptions and provisions now or hereafter provided by law.
- i. **Convict Labor:** The Contractor, in performing the work under this contract, shall not employ any person undergoing sentence of imprisonment at hard labor. This provision shall not be construed to prevent the Contractor or any subcontractor hereunder from obtaining any of the supplies, or any component parts

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This document consists of 22 pages  
No. 2 of 15 copies, Series 14.

CONTRACT NO. AT(49-6)-923

CONTRACT

CONTRACTOR AND ADDRESS:

ARTHUR D. LITTLE, INC.  
Memorial Drive at Kendall Square  
Cambridge 42, Massachusetts

CONTRACT FOR:

RESEARCH AND DEVELOPMENT

ESTIMATED COST:

\$200,884

SUBMIT INVOICES TO:

United States Atomic Energy Commission  
Tempo 3 Building, 16th Street and  
Constitution Avenue, Washington 25,  
D. C., Chief of Finance, Accounting  
Operations Section,

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CONTRACT NO. AT(49-6)-923

THIS CONTRACT, entered into this 27<sup>th</sup> day of July, 1954, effective as of June 10, 1954, by and between the UNITED STATES OF AMERICA (hereinafter called the "Government") acting through the UNITED STATES ATOMIC ENERGY COMMISSION (hereinafter called the "Commission") and ARTHUR D. LITTLE, INC., a corporation of the State of Massachusetts, having an office at Cambridge, Massachusetts (hereinafter called the "Contractor");

**WITNESSETH THAT:**

WHEREAS, the Commission desires the Contractor to perform certain research and development work and the Contractor is willing to do so;

WHEREAS the Commission certified that this negotiated contract is authorized by and executed under the Atomic Energy Act of 1946, as amended, in the interest of the common defense and security;

NOW, THEREFORE, the parties hereto do agree as follows:

**ARTICLE I - SCOPE AND TERM OF CONTRACT**

1. The Contractor shall conduct research and development work as directed by the Commission for the separation and recovery of uranium and associated valuable elements from uranium ores and the concentration and upgrading of the uranium product. In so doing, specific and early attention will be given to recovery of uranium and vanadium from alkaline carbonate leach solutions of domestic uranium ores so that a product readily amenable to existing refining operations may be obtained. An important objective of the contract work is the attainment of high efficiencies of uranium recovery at low costs of processing and reduced reagent consumption. The Contractor shall devote its best efforts, know-how and ability to performance of the contract work, shall proceed as and to the extent the Commission may from time to time request in its accomplishment and shall furnish the necessary personnel, facilities, equipment and supplies needed for performance of the work.

2. The Contractor shall prepare and submit to the Commission such periodic reports and special reports as the Commission shall request and a final report summarizing the Contractor's activities, findings and conclusions in connection with the work. Said reports shall be in the quantity, frequency, and Form requested by the Commission.

3. The term of this contract shall commence on June 10, 1954, and shall end on June 9, 1955, provided, however, that the term of this contract may be extended for further periods upon mutual agreement of the parties.

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Purchase orders shall not be entered into by the Contractor for items whose purchase is expressly prohibited by the written directions of the Commission. All subcontracts shall be submitted to the Commission for approval. The Government reserves the right at any time to require that the Contractor submit, any or all other contractual arrangements; including but not limited to purchase orders or classes of purchase orders, for approval, and provide information concerning methods, practices, and procedures used or proposed to be used in subcontracting and purchasing. The Contractor shall use methods, practices, or procedures in subcontracting or purchasing which are acceptable to the Commission. Subcontracts and purchase orders shall be made in the name of the Contractor, shall not bind nor purport to bind the Government, shall not relieve the Contractor of any obligation under this contract (including, among other things, the obligation properly to supervise and coordinate the work of subcontractors), and shall be in such form and contain such provisions 88 are required by this contract or as the Commission may prescribe.

2. Effect of Subcontracting on Fee. The subcontracting of any part of the work under this contract shall not entail any adjustment in the Contractor's fixed fee unless this contract has been entered into on the understanding, expressly stated in the article entitled "Scope and Term of Contract," that such part of the work would not be subcontracted, and in that event an equitable downward adjustment in the fixed fee shall be made and the contract shall be modified in writing accordingly. A failure to agree on an equitable adjustment under this paragraph shall be deemed to be a dispute within the meaning of the article entitled "Disputes."

ARTICLE XIII - SAFETY AND FIRE PROTECTION - PERMITS

1. Safety Precautions. The Contractor shall take all reasonable precautions in the performance of the work under this contract to protect the health and safety of employees and of members of the public and to minimize danger from all hazards to life and property, and shall comply with all health, safety, and fire protection regulations and requirements (including reporting requirements) of the Commission. In the event that the Contractor fails to comply with safety regulations or requirements of the Commission, the Commission may without prejudice to any other legal or contractual rights of the Commission, issue an order stopping all or any part of the work; thereafter a start order for resumption of work may be issued at the discretion of the Commission. The Contractor shall make no claim for an extension of time or for compensation or damages by reason of or in connection with such work stoppage.

2. Permits. Except as otherwise directed by the Commission, the Contractor shall procure all necessary permits or licenses and abide by all applicable laws, regulations, and ordinances of the United States and Of the State, territory, and political subdivision in which the work under this contract is performed.

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FR: CH  
 BAUER ROBERT 14.  
 TO: LIVERMAN J. L.

ORIG. DATE: 12/23/77  
 RECD. DATE: 12/29/77  
 DUE DATE:  
 COMP. DATE:

ORIG. OFFICE:  
 CLASS.:  
 LTR T W X WHR ORL MEM PAR RPT MRS SOURCE:  
 BY WHOM:

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 B U G L E : REF NO. 19055  
 COPY:  
 ACTIVITY = A  
 MEM  
 FILE CODE:

ACT DIV/OFF BRCH ACTION: INFO: X AMF NO  
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SUBJECT: REGARDING ARTHUR D. LITTLE

ENCLOSURES:

*Requiring  
 action  
 completed  
 2/4/78  
 A*

REMARKS: REC'D IN BLUE POUCH

INFO COPIES TO:

REF TO: LIVERMAN 12/29/77  
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FORM HQ-284D (8-77)

CORRESPONDENCE ACTION CONTROL

U.S. DEPARTMENT OF ENERGY

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**MEMO ROUTE SLIP**  
Form ERDA-93 (1-75) ERDAM 0240

See me about this.  
Note and return.

For concurrence.  
For signature.

For action.  
For information.

TO (Name and unit) 3. L. Liverman, EV, HQ, 6128	INITIALS	REMARKS
	DATE	
TO (Name and unit)	INITIALS	REMARKS
	DATE	
TO (Name and unit)	INITIALS	REMARKS
	DATE	
FROM (Name and unit) Robert H. Bauer Manager, CH	REMARKS	
	<i>Blue Pouch</i> <i>Liverman</i> <i>2/10</i>	
PHONE NO.	DATE	19055

USE OTHER SIDE FOR ADDITIONAL REMARKS

GPO : 1975 O-577-369





Department of Energy  
Chicago Operations Office  
9800 South Cass Avenue  
Argonne, Illinois 60439

DEC 23 1977

**James L. Liverman**, Acting Assistant  
Secretary for Environment, HQ

ARTHUR D. LITTLE

On December 7, 1977, Edward J. Jascewsky, Department of Energy (DOE), and Walter H. Smith, Argonne **National** Laboratory (ANL), visited Arthur D. Little Company, San Francisco, California. The purpose of, the visit was to discuss the past operations at these facilities under Atomic Energy Commission (AEC), Contract **AT(49-6)-923** and **AT(49-1)-439**. Also discussed was the Merrill Company's ABC Contract **AT(49-1)-540** since Arthur D. Little bought out the Merrill Company in the mid 1950's. Discussion was held with David Hurley, Manager.

The ABC work activities were performed at a facility located at 322.. Battery Street in San Francisco. This facility was torn down as part of the city's redevelopment program. A five million square foot complex called the **Embarcadero** Center now occupies the land.

Since there is no facility to survey or original soil in the area, there is no useful radiological survey of the area that can be performed. I recommend that this site be removed from the resurvey list.

*Robert H. Bauer for*

Robert H. Bauer  
Manager

SD:EJJ

cc: R. Wynveen, ANL  
W. Smith, ANL  
D. Hurley, Arthur D. Little Company  
W. E. Mott, ECT, HQ

19055