MARCH 31, 1978

REQUEST FOR PROPOSAL NO. ET-78-R-08-0003

GEOTHERMAL RESERVOIR ASSESSMENT
CASE STUDY, NORTHERN BASIN
AND RANGE PROVINCE

CLOSING DATE: MAY 30, 1978
The type of participation envisioned for obtaining new data from a drilling program is a cost-sharing contract with DOE to share in costs by reimbursing the Contractor at a fixed rate per foot of drilled hole. In the case(s) involving new data from a nondrilling program and for contracts to obtain existing data, a fixed-price contract on a shared basis is envisioned. Notwithstanding the above, other types of contracts such as cost reimbursement or reimbursement for third party services may be proposed. A draft contract is included as Enclosure 8 for information purposes.

Twelve (12) copies of your proposal should be forwarded to the U.S. Department of Energy, Nevada Operations Office, Post Office Box 14100, Las Vegas, Nevada 89114, Attention: Mr. Joseph N. Fiore, Chairman, Source Evaluation Panel, and be received not later than 4:30 p.m., local time, on May 30, 1978, subject to the conditions in Enclosure 5, "Late Proposals, Modifications, and Withdrawals." In the event you wish to hand deliver your proposal, it shall be delivered prior to the time specified above for receipt by the undersigned at 2753 South Highland Drive, Las Vegas, Nevada.

The SEP plans to retain one copy of each proposal received. All other copies will be destroyed following award(s) unless otherwise specifically requested to be returned.

A preproposal conference is scheduled for 1:00 p.m., local time, on April 25, 1978, at the Nevada Operations Office of the Department of Energy, 2753 South Highland Drive, Las Vegas, Nevada. Any questions regarding this RFP should be submitted in writing to the undersigned for receipt not later than April 18, 1978, so that they may be discussed at the preproposal conference. After the preproposal conference, responses to questions which are deemed material in nature will be distributed as an RFP Amendment to all RFP recipients.

DOE requests that you complete and mail the enclosed self-addressed card:

1. Acknowledging receipt of the RFP.
2. Indicating whether or not you intend to submit a proposal and/or attend the preproposal conference.
3. Indicating whether or not you wish to be retained on our mailing list.
If you have any questions regarding this request for proposal, you may contact Cleon Nedrow, SEP Secretary, telephone 702-734-3166.

Sincerely,

Joseph N. Fiore
Chairman, SEP

Enclosures:

1. Background
2. Program Technical Scope
3. Instructions for Preparing Proposals
4. Evaluation of Proposals
5. Late Proposals, Modifications, and Withdrawals
6. GSA Optional Form 60—Contract Pricing Proposal
7. GSA Form 19B—Representations and Certifications
8. Draft Contract
This is to acknowledge receipt of the subject RFP and to request that my name be (removed from retained on) your mailing list.

PREPROPOSAL CONFERENCE APRIL 25, 1978

____ We plan to attend the Preproposal Conference. Number of people ___.

____ We do not plan to attend.

PROPOSAL

____ We intend to submit a proposal.

____ We are undecided.

____ We do not intend to submit a proposal.

Company Name __________________________________________

Authorized Signature ____________________________________

Typed or Printed Name ____________________________ Date ________
UNITED STATES DEPARTMENT OF ENERGY
NEVADA OPERATIONS OFFICE
ATTN: Cleon Nedrow
P.O. Box 14100
Las Vegas, Nevada 89114
BACKGROUND

The Department of Energy (DOE) is responsible for providing viable options for exploitation of the nation's energy resources. The Division of Geothermal Energy is responsible for that portion of the federal program that will make possible an environmentally acceptable, time-phased commercial development of geothermal energy.

Because so few geothermal systems have been exploited, a great deal remains to be learned about this resource. The characteristics of different types of reservoirs and the kinds of geophysical reservoir assessment techniques that will succeed in different geological settings are not well understood. As a result, the risk of "dry holes" is unduly high in an exploration program, thereby increasing the cost of geothermal energy and discouraging investments.

In addition, severe barriers to development of this alternate energy source arise after exploration has produced a successful well. In order for one well to be transformed into a power plant, the existence of a suitable reservoir must be established; that is, a reservoir that will deliver a given volume of hot water at a given temperature over a predictable period of time. Unfortunately, the reservoir engineering techniques and methodology required to establish the suitability of such a reservoir are still under development, and investment capital for field development is accordingly hard to attract.

As an important way in which to reduce the risk and cost of exploration and reservoir assessment, and the uncertainty of reservoir engineering, the Division of Geothermal Energy proposes to document and publish case histories of reservoirs representative of the different geothermal resource types. Through cost-sharing and/or fixed-price contracts, information on the results of exploration wells in these reservoirs will be sought. In addition, a wide range of reservoir assessment and engineering information will also be sought. Through such "case history" contributions, a clearer picture of different reservoirs will be obtained and disseminated to the industry and public at large. The principles illuminated by these case histories can then be applied to the discovery and development of new geothermal reservoirs.

In the first of a series of solicitations, an RFP was issued to investigate the geothermal resources in southwestern Utah. As a result of the RFP, six contracts were awarded for work in the Roosevelt Hot Springs and Cove Fort-Sulfurdale known geothermal resource areas. This subsequent RFP addresses a high heat flow anomaly, the Battle Mountain Heat Flow High, in the northern portion of the physiographic region known as the Basin and Range province (see Figures 1 and 2).

The area selected for this solicitation shows promise of a very large resource, most of it hidden at this time. It is in the best interest of establishing a viable geothermal industry to stimulate the discovery of large, high-grade resources, and to document the nature of these resources for the information of the industry through the proposed case study program.
PHYSIOGRAPHIC UNITS

1. PACIFIC BORDER MOUNTAIN AND VALLEY COMPLEXES
2. CASCADE MOUNTAIN
3. SIERRA NEVADA
4. COLUMBIA PLATEAU
5. SNAKE RIVER PLATEAU
6. BASIN AND RANGE
7. NORTHERN ROCKY MOUNTAIN
8. MIDDLE ROCKY MOUNTAIN
9. WYOMING BASIN
10. SOUTHERN ROCKY MOUNTAIN
11. COLORADO PLATEAU
PROGRAM TECHNICAL SCOPE

A. **Definition:** "Data" means recorded information, regardless of form or character, of a scientific or technical nature. It may include, but is not limited to, surveys, maps, charts, displays, analyses, evaluations, and studies.

B. **Program Scope:** The scope of the proposed program to offer data which is submitted in response to this RFP shall provide for furnishing data from geothermal well(s), and/or from surface or reservoir engineering investigations. Such data may be already in existence or proposed to be acquired.

C. **Technical Scope:**

1. New or existing geothermal well data desired include, but are not limited to:
   a. Drilling, completion, and well bore treatment
   b. Mud logging
   c. Temperature logging
   d. Geophysical logging
   e. Lithologic logging
   f. Fluid chemistry
   g. Coring and analysis
   h. Drill stem testing
   i. Flow testing

2. New or existing surface investigation data desired include, but are not limited to:
   a. Geophysical survey data, including electrical, active and passive seismic, heat flow, gravity, and magnetic
   b. Geochemical data of hot springs and hot water wells
   c. Associated geological mapping
   d. Local and regional hydrologic data
3. New or existing geothermal reservoir engineering data desired include, but are not limited to:
   a. Pressure buildup and drawdown data on individual wells
   b. Long-term flow test data, including flow rates, fluid chemistry, temperature profiles, and pressure profiles
   c. Interference data

D. Reporting Requirements:

There will be considerable variation in the types of reports and plans required under contracts resulting from this RFP because of the wide range and varying scope of programs which are anticipated. Management and cost plans and progress, cost, and final reports are generally required for all programs involving the acquisition of geothermal data. For those programs which offer existing data, plans and reports may consist solely of a delivery schedule, costs, and any report which is a part of the data offered. For programs involving the acquisition of new data, the following reports and plans will generally be applicable and shall be submitted.

1. **Management Plan** - A plan to be submitted with the proposal and updated upon contract award if necessary. It will be the proposer's plan to manage the effort described in the Program Technical Scope. It will contain management methodologies, control procedures to be used and include milestone charts and other planning schedules, organizational identification and descriptions, and special critical plans such as test plans. Work breakdown structures, key personnel identification, and methods for monitoring progress toward objectives shall be included.

2. **Cost Plan** - A plan submitted upon contract execution. It shall be the baseline for incurring costs on the contract and used to measure progress in terms of cost.

3. **Cost Management Report** - A monthly report of the status of costs compared to the Cost Plan. It will show estimated, actual, and projected costs.

4. **Program Status Report** - A quarterly report to communicate to DOE management an assessment of contract status and explain variances, achievements, and identify actual or potential problems.

5. **Technical Progress Report** - A monthly report summarizing the activities during the past month, planned activities for the succeeding month, and identifying significant problems and solutions encountered or expected.
6. **Final Technical Report** - A report submitted at program completion summarizing the results of the program including well drilling and completion histories if applicable.

7. **Informal Reports** - Telephone communications on a weekly or daily basis depending on the status of the program may be required.

Specific submittal instructions for the above reports and plans including addressees, due dates, number of copies, and report formats will be in accordance with contract requirements.
INSTRUCTIONS FOR PREPARING PROPOSALS

To expedite the review and evaluation of proposals by the SEP, proposers will follow the format shown below:

A. Proposer's Name and Address

B. Technical Proposal

1. Investigation Site or Area
   a. Legal description—Section, Township, etc.
   b. Status of ownership/accessibility, including any unitization arrangements, if appropriate.
   c. Geologic description—in relation to known or postulated geothermal reservoir boundaries. Include maps where feasible.
   d. Technical reasons for site selection.

2. Program Data Offered—Describe in detail the data offered under any or all of the following categories:
   a. Subsurface
   b. Surface
   c. Reservoir Engineering Studies

3. Program Description
   a. Subsurface—Where well data are offered, provide detailed descriptions of the drilling, testing, and other program elements including, but not limited to, the following:
      (1) State whether new or existing. If existing, state when drilled, completed, tested, by and for whom.
      (2) Drilling and completion procedures proposed or previously used.
         (a) Total depth
         (b) Hole sizes and depths
         (c) Drilling fluids
         (d) Casing
(e) Cementing

(f) Other

(3) Mud logging

(4) Coring and analysis

(5) Drill stem testing

(6) Logging (geophysical and lithological)

(7) Flow testing

(8) Fluid chemistry

(9) Wellbore treatments

b. Surface Investigations—Where surface data are offered, provide a description of the investigations including, but not limited to, the following program elements:

(1) State whether new or completed investigation. If completed, state when performed and by whom.

(2) Type of survey—electrical, seismic, thermal, and others.

c. Reservoir Engineering Studies

(1) State whether based on new or existing data. If existing, state when performed and by whom.

(2) Describe measurements and analyses.

4. Schedule—Indicate the sequence of proposed program investigation activities, and the date of the earliest availability of data and/or the date it can be released by the DOE.

5. Environmental Evaluation—The proposer will provide a brief environmental evaluation of the investigation site(s) or areas if for a proposed program activity. The evaluation should include but not be limited to the following:

a. Description of the environment affected

b. Analysis of the potential environmental impact

c. Potential for conflicts with existing land use patterns and programs
C. Cost

1. Estimated or actual total program cost—Present a detailed breakdown of the total costs. Prepare GSA Optional Form 60, "Contract Pricing Proposal" (Enclosure 6), together with supporting schedules in sufficient detail to permit a meaningful review and analysis of the various cost elements.

2. Proposed cost to the Government.

D. Business and Management

1. Describe experience in activities similar to those proposed. Submit a list of organizations having cognizance over any of your activities or, if applicable, the activities of your investigators in the last five years which are similar to the proposed technical investigations to be conducted or which have been previously conducted.

2. Provide names and resumes of the principal program personnel.

3. Provide a management plan which includes the information described in Enclosure 2, paragraph D.1.

4. Provide names, addresses, and telephone numbers of proposer's primary business and technical contacts with whom the Government may discuss the proposal.

5. Indicate the acceptability of the provisions of the draft contract as a basis for contract negotiations. Identify any unacceptable provisions.

6. State that the "Program Technical Scope" set forth in the RFP has been reviewed and that all of the data which will be furnished pursuant to a contract may be published.

7. Provide the latest certified annual report, financial statement, or other evidence of the proposer's financial capability to carry out the program.

8. Indicate that the proposal will remain in effect for at least 120 days from the date designated for receipt of proposals.

9. Indicate that the person signing the proposal has the authority to commit the proposer to all provisions of the proposal.

10. Complete GSA Form 19B, "Representations and Certifications" (Enclosure 7). Note: Only one copy of these "Representations and Certifications" is required with your submittal.
Any data that the offeror does not want used or disclosed other than for evaluation of the proposal should be so noted. The offeror will provide a cover sheet for the proposal with the following legend, specifying pages of the proposal that are restricted in accordance with the conditions of the legend:

"Data contained in pages _____ of this proposal shall not be used or disclosed, except for evaluation purposes, provided that if a contract is awarded to this proposer as a result of or in connection with the submission of this proposal, the Government shall have the right to use or disclose any data to the extent provided in the contract. This restriction does not limit the Government's right to use or disclose any technical data obtained from another source without restriction."

Each page of the proposal containing proprietary information must be clearly identified.
EVALUATION OF PROPOSALS

Proposals will be reviewed and rated by the DOE Source Evaluation Panel in accordance with the following criteria:

1. **Location**: Preference will be given to locations having the greatest potential for providing data applicable to the evaluation of geothermal resources in the area of interest as specified.

2. **Data Type**: Preference will be given to subsurface data and to data from new geothermal exploratory investigations in the area of interest as specified.

3. **Technique**: Investigative techniques will be evaluated to determine the potential quality of the data offered.

4. **Data Quantity**: Preference will be given to proposals which offer the greater range of data applicable to the evaluation of a geothermal resource.

5. **Personnel**: Technical qualifications and experience of investigative personnel will be considered.

6. **Schedule**: Preference will be given to those investigations that offer the earliest data release date.

7. **Unitization**: Preference will be given to programs which involve unitization activities where appropriate.

Criteria 1 and 2 are of equal importance and each carries more weight than each of the remaining criteria. The remaining criteria, 3 through 7, are weighted in descending order of importance.

8. **Cost**: The cost to the Government will not be weighted but will be used in the final evaluation as a standard against which to judge the value of the data to be furnished.
LATE PROPOSALS, MODIFICATIONS OF PROPOSALS,
AND WITHDRAWALS OF PROPOSALS

A. Any proposal received at the office designated in the solicitation after
the exact time specified for receipt will not be considered unless it is
received before award is made, and:

1. It was sent by registered or certified mail not later than the fifth
calendar day prior to the date specified for receipt of offers (e.g.,
an offer submitted in response to a solicitation requiring receipt
of offers by the 20th of the month must have been mailed by the 15th
or earlier);

2. It was sent by mail (or telegram if authorized) and it is determined
by the Government that the late receipt was due solely to mishandling
by the Government after receipt at the Government installation; or

3. It is the only proposal received.

B. Any modification of a proposal, except a modification resulting from the
Contracting Officer's request for "best and final" offer, is subject to
the same conditions as in A.1. and A.2. of this provision.

C. A modification resulting from the Contracting Officer's request for "best
and final" offer received after the time and date specified in the request
will not be considered unless received before award and the late receipt
is due solely to mishandling by the Government after receipt at the Govern-
ment installation.

D. The only acceptable evidence to establish:

1. The date of mailing of a late proposal or modification sent either
by registered or certified mail is the U.S. Postal Service postmark
on the wrapper or on the original receipt from the U.S. Postal
Service. If neither postmark shows a legible date, the proposal or
modification shall be deemed to have been mailed late. (The term
"postmark" means a printed, stamped, or otherwise placed impression
that is readily identifiable without further action as having been
supplied and affixed on the date of mailing by employees of the
U.S. Postal Service.)

2. The time of receipt at the Government installation is the time-date
stamp of such installation on the proposal wrapper or other documen-
tary evidence of receipt maintained by the installation.

E. Notwithstanding A., B., and C. of this provision, a late modification of
an otherwise successful proposal which makes its terms more favorable to
the Government will be considered at any time it is received and may be
accepted.
F. Proposals may be withdrawn by written or telegraphic notice received at any time prior to award. Proposals may be withdrawn in person by an offeror or his authorized representative, provided his identity is made known and he signs a receipt for the proposal prior to award.
## CONTRACT PRICING PROPOSAL

**RESEARCH AND DEVELOPMENT**

This form is for use when (i) submission of cost or pricing data (see FPR 1-3.807-3) is required and (ii) substitution for the Optional Form 59 is authorized by the contracting officer.

<table>
<thead>
<tr>
<th>NAME OF OFFEROR</th>
<th>SUPPLIES AND/OR SERVICES TO BE FURNISHED</th>
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<tr>
<th>HOME OFFICE ADDRESS</th>
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<tr>
<th>DIVISION(S) AND LOCATION(S) WHERE WORK IS TO BE PERFORMED</th>
<th>TOTAL AMOUNT OF PROPOSAL</th>
<th>GOVT SOLICITATION NO.</th>
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### DETAIL DESCRIPTION OF COST ELEMENTS

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<thead>
<tr>
<th>1. DIRECT MATERIAL (Items on Exhibit A)</th>
<th>EST COST ($)</th>
<th>TOTAL EST COST</th>
<th>REFERENCE</th>
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<tbody>
<tr>
<td>a. PURCHASED PARTS</td>
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<td>b. SUBCONTRACTED ITEMS</td>
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<td>c. OTHER—(1) RAW MATERIAL</td>
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<td>(2) YOUR STANDARD COMMERCIAL ITEMS</td>
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<td>(3) INTERDIVISIONAL TRANSFERS (As other than cost)</td>
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<td>TOTAL DIRECT MATERIAL</td>
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<tr>
<th>2. MATERIAL OVERHEAD* (Rate % OF BASE)</th>
<th>ESTIMATED HOURS</th>
<th>RATE/MOUR</th>
<th>EST COST ($)</th>
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| TOTAL DIRECT LABOR                     |                |          |              |

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<th>4. LABOR OVERHEAD (Specify Department or Cost Center)*</th>
<th>O.H. RATE</th>
<th>% BASE</th>
<th>EST COST ($)</th>
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<tr>
<td>TOTAL LABOR OVERHEAD</td>
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<tr>
<th>5. SPECIAL TESTING (Including field work at Government installations)</th>
<th>EST COST ($)</th>
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<tr>
<td>TOTAL SPECIAL TESTING</td>
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| 6. SPECIAL EQUIPMENT (If direct charge) (Items on Exhibit A) | EST COST ($) |
|                                                            |              |
| TOTAL SPECIAL TESTING                                       |              |

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<tr>
<th>7. TRAVEL (If direct charge) (Give details on attached Schedule)</th>
<th>EST COST ($)</th>
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<tr>
<td>a. TRANSPORTATION</td>
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<td>b. PER DIEM OR SUBSISTENCE</td>
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<td>TOTAL TRAVEL</td>
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| 8. CONSULTANTS (Identify—purpase—rate) | EST COST ($) |
|                                       |              |
| TOTAL CONSULTANTS                                                                 |

| 9. OTHER DIRECT COSTS (Items on Exhibit A) | TOTAL DIRECT COST AND OVERHEAD |
|                                          |                              |

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<th>10. GENERAL AND ADMINISTRATIVE EXPENSE (Rate % OF cost element Nos.)</th>
<th>TOTAL ESTIMATED COST</th>
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<td>11. ROYALTIES *</td>
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<td>12.</td>
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<td>14. Fee or Profit</td>
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<td>15. TOTAL ESTIMATED COST AND FEE OR PROFIT</td>
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This proposal is submitted for use in connection with and in response to (Describe RFP, etc.) and reflects our best estimates as of this date, in accordance with the Instructions to Offerors and the Footnotes which follow.

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<th>TYPED NAME AND TITLE</th>
<th>SIGNATURE</th>
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<tr>
<td>NAME OF FIRM</td>
<td>DATE OF SUBMISSION</td>
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**EXHIBIT A—SUPPORTING SCHEDULE** *(Specify. If more space is needed, use reverse)*

<table>
<thead>
<tr>
<th>COST EL NO.</th>
<th>ITEM DESCRIPTION (See footnote 5)</th>
<th>EST COST ($)</th>
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I. HAS ANY EXECUTIVE AGENCY OF THE UNITED STATES GOVERNMENT PERFORMED ANY REVIEW OF YOUR ACCOUNTS OR RECORDS IN CONNECTION WITH ANY OTHER GOVERNMENT PRIME CONTRACT OR SUBCONTRACT WITHIN THE PAST TWELVE MONTHS?

- YES [ ] NO [ ] *(If yes, identify below:)*

**NAME AND ADDRESS OF REVIEWING OFFICE AND INDIVIDUAL**

**TELEPHONE NUMBER/EXTENSION**

II. WILL YOU REQUIRE THE USE OF ANY GOVERNMENT PROPERTY IN THE PERFORMANCE OF THIS PROPOSED CONTRACT?

- YES [ ] NO [ ] *(If yes, identify on reverse or separate page:)*

III. DO YOU REQUIRE GOVERNMENT CONTRACT FINANCING TO PERFORM THIS PROPOSED CONTRACT?

- YES [ ] NO [ ] *(If yes, identify:)*

- ADVANCE PAYMENTS [ ] PROGRESS PAYMENTS OR [ ] GUARANTEED LOANS

IV. DO YOU NOW HOLD ANY CONTRACT (OR, DO YOU HAVE ANY INDEPENDENTLY FINANCED (IR&D) PROJECTS) FOR THE SAME OR SIMILAR WORK CALLED FOR BY THIS PROPOSED CONTRACT?

- YES [ ] NO [ ] *(If yes, identify:)*

V. DOES THIS COST SUMMARY CONFORM WITH THE COST PRINCIPLES SET FORTH IN AGENCY REGULATIONS?

- YES [ ] NO [ ] *(If no, explain on reverse or separate page:)*

See Reverse for Instructions and Footnotes
INSTRUCTIONS TO OFFERORS

1. The purpose of this form is to provide a standard format by which the offeror submits to the Government a summary of incurred and estimated costs (and attached supporting information) suitable for detailed review and analysis. Prior to the award of a contract resulting from this proposal the offeror shall, under the conditions stated in FPR 1-3.807-3 be required to submit a Certificate of Current Cost or Pricing Data (See FPR 1-3.807-3(h) and 1-3.807-4).

2. In addition to the specific information required by this form, the offeror is expected, in good faith, to incorporate in and submit with this form any additional data, supporting schedules, or substantiation which are reasonably required for the conduct of an appropriate review and analysis in the light of the specific facts of this procurement. For effective negotiations, it is essential that there be a clear understanding of:
   a. The existing, verifiable data.
   b. The judgmental factors applied in projecting from known data to the estimate, and
   c. The contingencies used by the offeror in his proposed price.

In short, the offeror's estimating process itself needs to be disclosed.

FOOTNOTES

1. Enter in this column those necessary and reasonable costs which in the judgment of the offeror will properly be incurred in the efficient performance of the contract. When any of the costs in this column have already been incurred (e.g., on a letter contract or change order), describe them on an attached supporting schedule. Identify all sales and transfers between your plants, divisions, or organizations under a common control, which are included at either the lower of cost to the original transferee or current market price.

2. When space in addition to that available in Exhibit A is required, attach separate pages as necessary and identify in this "Reference" column the attachment in which the information supporting the specific cost element may be found. No standard format is prescribed; however, the cost or pricing data must be accurate, complete and current, and the judgment factors used in projecting from the data to the estimates must be stated in sufficient detail to enable the Contracting Officer to evaluate the proposal. For example, provide the basis used for pricing materials such as by vendor quotations, shop estimates, or invoice prices; the reason for use of overhead rates which depart significantly from experienced rates (reduced volume, a planned major re-arrangement, etc.); or justification for an increase in labor rates (anticipated wage and salary increases, etc.). Identify and explain any contingencies which are included in the proposed price, such as anticipated costs of rejects and defective work, or anticipated technical difficulties.

3. When attachment of supporting cost or pricing data to this form is impracticable, the data will be described (with schedules as appropriate), and made available to the contracting officer or his representative upon request.

4. The formats for the "Cost Elements" and the "Proposed Contract Estimate" are not intended as rigid requirements. They may be presented in different format with the prior approval of the Contracting Officer if required for more effective and efficient presentation. In all other respects this form will be completed and submitted without change.

5. By submission of this proposal the offeror grants to the Contracting Officer, or his authorized representative, the right to examine, for the purpose of verifying the cost or pricing data submitted, those books, records, documents and other supporting data which will permit adequate evaluation of such cost or pricing data, along with the computations and projections used therein. This right may be exercised in connection with any negotiations prior to contract award.

5. Provide a list of principal items within each category indicating known or anticipated source, quantity, unit price, competition obtained, and basis of establishing source and reasonableness of cost.

CONTINUATION OF EXHIBIT A—SUPPORTING SCHEDULE AND REPLIES TO QUESTIONS II AND V.
REPRESENTATIONS AND CERTIFICATIONS

(Centntueien and Architect-Engineer Contract)
(For use with Standard Forms 19, 21 and 252)

NAME AND ADDRESS OF BIDDER (No., Street, City, State, and ZIP Code)

DATE OF BID

In negotiated procurements, "bid" and "bidder" shall be construed to mean "offer" and "offeror."

The bidder makes the following representations and certifications as a part of the bid identified above. (Check appropriate boxes.)

1. SMALL BUSINESS
   He □ is, □ is not, a small business concern. (A small business concern for the purpose of Government procurement is a concern, including its affiliates, which is independently owned and operated, is not dominant in the field of operations in which it is bidding on Government contracts, and can further qualify under the criteria concerning number of employees, average annual receipts, or other criteria as prescribed by the Small Business Administration. For additional information see governing regulations of the Small Business Administration (13 CFR Part 121)).

2. MINORITY BUSINESS ENTERPRISE
   He □ is, □ is not a minority business enterprise. A minority business enterprise is defined as a "business, at least 50 percent of which is owned by minority group members or, in case of publicly owned businesses, at least 51 percent of the stock of which is owned by minority group members." For the purpose of this definition, minority group members are Negroes, Spanish-speaking American persons, American-Orientals, American-Indians, American-Eskimos, and American-Aleuts.

3. CONTINGENT FEE
   (a) He □ has, □ has not, employed or retained any company or person (other than a full-time bona fide employee working solely for the bidder) to solicit or secure this contract, and (b) he □ has, □ has not, paid or agreed to pay any company or person (other than a full-time bona fide employee working solely for the bidder) any fee, commission, percentage or brokerage fee, contingent upon or resulting from the award of this contract; and agrees to furnish information relating to (a) and (b) above as requested by the Contracting Officer. (For interpretation of the representation, including the term "bona fide employee." see Code of Federal Regulations, Title 41, Subpart 1-1-5.)

4. TYPE OF ORGANIZATION
   He operates as an □ individual, □ partnership, □ joint venture, □ corporation, incorporated in State of

5. INDEPENDENT PRICE DETERMINATION
   (a) By submission of this bid, each bidder certifies, and in the case of a joint bid each party thereto certifies as to his own organization, that in connection with this procurement:
      (1) The prices in this bid have been arrived at independently, without consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor;
      (2) Unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to opening, in the case of a bid, or prior to award, in the case of a proposal, directly or indirectly to any other bidder or to any competitor; and
      (3) No attempt has been made or will be made by the bidder to induce any other person or firm to submit or not to submit a bid for the purpose of restricting competition.
   (b) Each person signing this bid certifies that:
      (1) He is the person in the bidder's organization responsible within that organization for the decision as to the prices being bid herein and that he has not participated, and will not participate, in any action contrary to (a)(1) through (a)(3) above; or
      (2) (i) He is not the person in the bidder's organization responsible within that organization for the decision as to the prices being bid herein but that he has been authorized in writing to act as agent for the persons responsible for such decision in certifying that such persons have not participated, and will not participate, in any action contrary to (a)(1) through (a)(3) above; and (ii) as their agent he does hereby so certify; and (iii) he has not participated, and will not participate, in any action contrary to (a)(1) through (a)(3) above.
   (c) This certification is not applicable to a foreign bidder submitting a bid for a contract which requires performance or delivery outside the United States, its possessions, and Puerto Rico.
   (d) A bid will not be considered for award where (a)(1), (a)(3), or (b) above, has been deleted or modified. Where (a)(2) above, has been deleted or modified, the bid will not be considered for award unless the bidder furnishes with the bid a signed statement which sets forth in detail the circumstances of the disclosure and the head of the agency, or his designee, determines that such disclosure was not made for the purpose of restricting competition.

NOTE:—Bids must set forth full, accurate, and complete information as required by this invitation for bids (including attachments). The penalty for making false statements in bids is prescribed in 18 U.S.C., 1001.

STANDARD FORM 19-B. JUNE 1976 EDITION
GENERAL SERVICES ADMINISTRATION
FED. PROC REG. (41 CFR) 1-16.401 AND 1-16.701
THE FOLLOWING NEED BE CHECKED ONLY IF BID EXCEEDS $10,000 IN AMOUNT.

6. EQUAL OPPORTUNITY

He ☐ has, ☐ has not, participated in a previous contract or subcontract subject to the Equal Opportunity Clause herein, the clause originally contained in Section 501 of Executive Order No. 10925, or the clause contained in Section 201 of Executive Order No. 11114; he ☐ has, ☐ has not, filed all required compliance reports; and representations indicating submission of required compliance reports, signed by proposed subcontractors, will be obtained prior to subcontract awards.

The above representations need not be submitted in connection with contracts or subcontracts which are exempt from the equal opportunity clause.

7. PARENT COMPANY AND EMPLOYER IDENTIFICATION NUMBER

Each bidder shall furnish the following information by filing in the appropriate blocks:

(a) Is the bidder owned or controlled by a parent company as described below? ☐ Yes ☐ No. (For the purpose of
this bid, a parent company is defined as one which either owns or controls the activities and basic business policies of the bidder. To own another company means the parent company must own at least a majority (more than 50 percent) of the voting rights in that company. To control another company, such ownership is not required; if another company is able to formulate, determine, or veto basic business policy decisions of the bidder, such other company is considered the parent company of the bidder. This control may be exercised through the use of dominant minority voting rights, use of proxy voting, contractual arrangements, or otherwise.)

(b) If the answer to (a) above is "Yes," bidder shall insert in the space below the name and main office address of the parent company.

NAME OF PARENT COMPANY

EMPLOYER IDENTIFICATION NUMBER OF PARENT COMPANY

BIDDER

8. CERTIFICATION OF NONSEGREGATED FACILITIES

(Applicable to (1) contracts, (2) subcontracts, and (3) agreements with applicants who are themselves performing federally assisted construction contracts, exceeding $10,000 which are not exempt from the provisions of the Equal Opportunity clause.)

By the submission of this bid, the bidder, offeror, applicant, or subcontractor certifies that he does not maintain or provide for his employees any segregated facilities at any of his establishments, and that he does not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. He certifies further that he will not maintain or provide for his employees any segregated facilities at any of his establishments, and that he will not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The bidder, offeror, applicant, or subcontractor agrees that a breach of this certification is a violation of the Equal Opportunity clause in this contract. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, or national origin, because of habit, local custom, or otherwise. He further agrees that (except where he has obtained identical certifications from proposed subcontractors for specific time periods) he will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding $10,000 which are not exempt from the provisions of the Equal Opportunity clause; that he will retain such certifications in his files; and that he will forward the following notice to such proposed subcontractors (except where the proposed subcontractors have submitted identical certifications for specific time periods):

NOTICE TO PROSPECTIVE SUBCONTRACTORS OF REQUIREMENT FOR CERTIFICATIONS OF NONSEGREGATED FACILITIES

A Certification of Nonsegregated Facilities must be submitted prior to the award of a subcontract exceeding $10,000 which is not exempt from the provisions of the Equal Opportunity clause. The certification may be submitted either for each subcontract or for all subcontracts during a period (i.e., quarterly, semiannually, or annually).

NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

9. CLEAN AIR AND WATER

(Applicable if the bid or offer exceeds $100,000, or the contracting officer has determined that orders under an indefinite quantity contract in any year will exceed $100,000, or a facility to be used has been the subject of a conviction under the Clean Air Act (42 U.S.C. 1857c-6(c)(1)) or the Federal Water Pollution Control Act (33 U.S.C. 1319(c)) and is listed by EPA, or is not otherwise exempt.)

The bidder or offeror certifies as follows:

(a) Any facility to be utilized in the performance of this proposed contract has ☐, has not ☐, been listed on the Environmental Protection Agency List of Violating Facilities.

(b) He will promptly notify the contracting officer, prior to award, of the receipt of any communication from the Director, Office of Federal Activities, Environmental Protection Agency, indicating that any facility which he proposes to use for the performance of the contract is under consideration to be listed on the EPA List of Violating Facilities.

(c) He will include substantially this certification, including this paragraph (c), in every nonexempt subcontract.

STANDARD FORM 19-B (Back) JUNE 1976 EDITION
SUPPLEMENT TO REPRESENTATIONS AND CERTIFICATIONS

10. BUY AMERICAN CERTIFICATE

The bidder or offeror hereby certifies that each end product, except the end products listed below, is a domestic source end product (as defined in the clause entitled "Buy American Act"); and that components of unknown origin have been considered to have been mined, produced, or manufactured outside the United States.

Excluded end products (show country of origin for each excluded end product):

11. AFFIRMATIVE ACTION PROGRAM

The following paragraphs are added:

a. The bidder or proposer represents that he (a) [ ] 1. has developed and has on file, [ ] 2. has not developed and does not have on file at each establishment an affirmative action program as required by the rules and regulations of the Secretary of Labor (41 CFR Part 60-1 and 60-2), or that he (b) [ ] has not previously had contracts subject to the written Affirmative Action Program requirement of the Secretary of Labor.

If such a program has not been developed, the bidder will complete the following:

The bidder does [ ], does not [ ] employ more than 50 employees and has [ ], has not [ ] been awarded a contract subject to Executive Order 11246 in the amount of $50,000 or more since July 1, 1968. If such a contract has been awarded since July 1, 1968, give the date of such contract, but do not list contracts awarded within the last 120 days prior to the date of this representation.

b. The bidder or proposer represents (a) that a full compliance review of the bidder's employment practices [ ] has, [ ] has not been conducted by an agency of the Federal Government; that such compliance review [ ] has, [ ] has not been conducted for the bidder's known first-tier subcontractors with a subcontract of $50,000 or more and having 50 or more employees and (b) that the most recent compliance reviews were conducted as follows:
c. The bidder or proposer represents that if the bidder has 50 or more employees and if this Contract is for $50,000 or more, and that for each subcontractor having 50 or more employees and a subcontract for $50,000 or more, and if he has not developed one, a written affirmative action plan will be developed for each of its establishments within 120 days from commencement of the Contract. A copy of the establishment's plan shall also be maintained at the establishment within 120 days from the date of commencement of the Contract.

The Affirmative Action Compliance Program will cover the items specifically set out in 41 CFR Part 60-2 and shall be signed by an executive of the Contractor.

d. Where the bid of the apparent low responsible bidder is in the amount of $1 million or more, the bidder and his known first-tier subcontractors which will be awarded subcontracts of $1 million or more will be subject to full, preaward equal opportunity compliance reviews before the award of the Subcontract for the purpose of determining whether the bidder and his subcontractors are able to comply with the provisions of the equal opportunity clause.

e. The bidder or proposer, if he has 100 or more employees, and all subcontractors having 100 or more employees are required to submit the Government Employer Information Report SF 100 (EEO-1), within 30 days after award, unless such report has been filed within 12 months preceding award. The EEO-1 report is due annually on or before March 31.

12. COST ACCOUNTING STANDARDS--EXEMPTION FOR CONTRACTS OF $500,000 OR LESS--CERTIFICATION

If this proposal is expected to result in the award of a contract of $500,000 or less and the offeror is otherwise eligible for an exemption, he shall indicate by checking the box below that the exemption to the Cost Accounting Standards clause (FPR 1-3.1204) under the provisions of 4 CFR 331.30(b)(8) (see FPR 1-3.1203(h)) is claimed. Where the offeror fails to check the box, he shall be given the opportunity to make an election in writing to the Contracting Officer prior to award. Failure to check the box below or make such an election shall mean that the offeror cannot claim the exemption to the Cost Accounting Standards clause or that the offeror elects to comply with such clause.
[ ] Certificate of Exemption for Contracts of $500,000 or Less.

The offeror hereby claims an exemption from the Cost Accounting Standards clause under the provisions of 4 CFR 331.30(b)(8) and certifies that he has received notification of final acceptance of all items of work on (i) any prime contract or subcontract in excess of $500,000 which contains the Cost Accounting Standards clause, and (ii) any prime contract or subcontract of $500,000 or less awarded after January 1, 1975, which contains the Cost Accounting Standards clause. The offeror further certifies he will immediately notify the Contracting Officer in writing in the event he is awarded any other contract or subcontract containing the Cost Accounting Standards clause subsequent to the date of this certificate but prior to the date of any award resulting from this proposal.

13. DISCLOSURE STATEMENT--COST ACCOUNTING PRACTICES AND CERTIFICATION

Any contract in excess of $100,000 resulting from this solicitation except (i) when the price negotiated is based on: (A) established catalog or market prices of commercial items sold in substantial quantities to the general public, or (B) prices set by law or regulation, or (ii) contracts which are otherwise exempt (see 4 CFR 331.30(b) and FPR 1-3.1203(a)(2)) shall be subject to the requirements of the Cost Accounting Standards Board. Any offeror submitting a proposal which, if accepted, will result in a contract subject to the requirements of the Cost Accounting Standards Board must, as a condition of contracting, submit a Disclosure Statement as required by regulations of the Board. The Disclosure Statement must be submitted as a part of the offeror's proposal under this solicitation (see I. below) unless (i) the offeror, together with all divisions, subsidiaries, and affiliates under common control, did not exceed the monetary exemption for disclosure as established by the Cost Accounting Standards Board (see II. below); (ii) the offeror exceeded the monetary exemption in the Federal Fiscal Year immediately preceding the year in which this proposal was submitted but, in accordance with the regulations of the Cost Accounting Standards Board, is not yet required to submit a Disclosure Statement (see III. below); (iii) the offeror has already submitted a Disclosure Statement disclosing the practices used in connection with the pricing of this proposal (see IV. below); or (iv) postaward submission has been authorized by the Contracting Officer. See 4 CFR 351.70 for submission of copy of Disclosure Statement to the Cost Accounting Standards Board.

CAUTION: A practice disclosed in a Disclosure Statement shall not, by virtue of such disclosure, be deemed to be a proper, approved, or agreed to practice for pricing proposals or accumulating and reporting contract performance cost data.
Check the appropriate box below:

[ ] I. CERTIFICATE OF CONCURRENT SUBMISSION OF DISCLOSURE STATEMENT(S)

The offeror hereby certifies that he has submitted, as a part of his proposal under this solicitation, copies of the Disclosure Statement(s) as follows: (i) original and one copy to the cognizant Contracting Officer; and (ii) one copy to the cognizant contract auditor.

Date of Disclosure Statement(s):______________________________

Name(s) and Address(es) of Cognizant Contracting Officer(s) where filed:__________________________________________

The offeror further certifies that practices used in estimating costs in pricing this proposal are consistent with the cost accounting practices disclosed in the Disclosure Statement(s).

[ ] II. CERTIFICATE OF MONETARY EXEMPTION

The offeror hereby certifies that he, together with all divisions, subsidiaries, and affiliates under common control, did not receive net awards of negotiated national defense prime contracts subject to Cost Accounting Standards totaling more than $10,000,000 in either Federal Fiscal Year 1974 or 1975 or net awards of negotiated national defense prime contracts and subcontracts subject to cost accounting standards totaling more than $10,000,000 in Federal Fiscal Year 1976 or in any subsequent Federal Fiscal Year preceding the year in which this proposal was submitted.

CAUTION: Offerors who submitted or who currently are obligated to submit a Disclosure Statement under the filing requirements previously established by the Cost Accounting Standards Board are not eligible to claim this exemption unless they have received notification of final acceptance of all deliverable items on all of their prime contracts and subcontracts containing the Cost Accounting Standards clause.

[ ] III. CERTIFICATE OF INTERIM EXEMPTION

The offeror hereby certifies that (i) he first exceeded the monetary exemption for disclosure, as defined in II. above, in the Federal Fiscal Year immediately preceding the year in which this proposal was submitted, and (ii) in accordance with the regulations of the Cost Accounting Standards Board (4 CFR 351.40(f)), he is not yet required to submit a Disclosure Statement. The offeror further certifies that if an award resulting from this proposal has not been made by March 31 of the current Federal Fiscal Year, he will immediately submit a revised certificate to the Contracting Officer, in the form specified
under I. above or IV. below, as appropriate, to verify his submission of a completed Disclosure Statement.

CAUTION: Offerors may not claim this exemption if they are currently required to disclose because they exceeded monetary thresholds in Federal Fiscal Years prior to Fiscal Year 1976. Further, the exemption applies only in connection with proposals submitted prior to March 31 of the year immediately following the Federal Fiscal Year in which the monetary exemption was exceeded.

IV. CERTIFICATE OF PREVIOUSLY SUBMITTED DISCLOSURE STATEMENT(S)

The offeror hereby certifies that the Disclosure Statement(s) were filed as follows:

Date of Disclosure Statement(s):

Name(s) and Address(es) of Cognizant Contracting Officer(s) where filed:

The offeror further certifies that practices used in estimating costs in pricing this proposal are consistent with the cost accounting practices disclosed in the Disclosure Statement(s).

14. ADDITIONAL COST ACCOUNTING STANDARDS APPLICABLE TO EXISTING CONTRACTS—CERTIFICATION

(a) Cost accounting standards will be applicable and effective as promulgated by the Cost Accounting Standards Board to any award as provided in the Federal Procurement Regulations Subpart 1-3.12. If the offeror presently has contracts or subcontracts containing the Cost Accounting Standards clause, a new standard becomes applicable to such existing contracts prospectively when a new contract or subcontract containing such clause is awarded on or after the effective date of such new standard. Such new standard may require a change in the offeror's established cost accounting practices, whether or not disclosed. The offeror shall specify, by an appropriate entry below, the effect on his cost accounting practice.

(b) The offeror hereby certifies that an award under this solicitation [ ] would, [ ] would not, in accordance with paragraph (a)(3) of the Cost Accounting Standards clause, require a change in his established cost accounting practices affecting existing contracts and subcontracts.
NOTE: If the offeror has checked "would" above, and is awarded the contemplated contract, he will also be required to comply with the clause entitled Administration of Cost Accounting Standards.

Firm: __________________________

Name: __________________________

Date: __________________________

Title: __________________________
DRAFT CONTRACT

LISTING OF CONTRACT ARTICLES

ARTICLE 1 SCOPE OF WORK
ARTICLE 2 PERIOD OF PERFORMANCE
ARTICLE 3 DELIVERABLES
ARTICLE 4 PAYMENT
ARTICLE 5 OWNERSHIP OF PROPERTY
ARTICLE 6 SERVICE CONTRACT ACT OF 1965, AS AMENDED
ARTICLE 7 AVAILABILITY OF APPROPRIATED FUNDS
ARTICLE 8 GENERAL PROVISIONS
ARTICLE 9 ALTERATIONS TO GENERAL PROVISIONS
ARTICLE 10 DOCUMENTS INCORPORATED
THE DRAFT CONTRACT SCHEDULE

ARTICLE 1. SCOPE OF WORK

The Contractor shall provide the necessary personnel, materials, facilities, documentation, and all other necessary items to perform the work set forth in Appendix A, Scope of Work.

ARTICLE 2. PERIOD OF PERFORMANCE

The period of performance of this Contract shall be for ________ months from ________, through ________, unless sooner terminated in accordance with the provisions of the Article of this Contract entitled "Termination for Default or for Convenience of the Government" or unless extended by mutual agreement of the parties.

ARTICLE 3. DELIVERABLES

A. The Contractor shall deliver the items of Deliverable Data set forth below:

B. Reports shall be prepared and submitted as prescribed in Appendix C, Reports.

ARTICLE 4. PAYMENT

a. For Existing Data. Upon delivery and acceptance by DOE of all the existing data included in Article 3, "Deliverables," the Contractor shall be paid the lump-sum amount of $________.

b. For Program to Acquire New Data

(1) Drilling Program. Upon completion and testing of the well(s) provided for in Article 1, "Scope of Work," and delivery and acceptance by DOE of all the remaining data provided for in Article 3, "Deliverables," the Contractor shall be paid at $________ per foot for the total footage of the well(s) drilled as measured vertically from the surface but not to exceed a maximum amount of $________.

(2) Non-Drilling Program. Upon delivery and acceptance by DOE of all the data provided for in Article 3, "Deliverables," the Contractor shall be paid the lump-sum amount of $________.

ARTICLE 5. OWNERSHIP OF PROPERTY

It is understood that DOE will not acquire any rights, title, or interest in the leased land, well, and appurtenant facilities by virtue of this Contract.
ARTICLE 6. SERVICE CONTRACT ACT OF 1965, AS AMENDED

This Contract, to the extent that it is of the character to which the Service Contract Act of 1965 (79 Stat. 1034, 41 U.S.C. 351) applies, is subject to the following provisions and to all other applicable provisions of the Act and regulations of the Secretary of Labor thereunder.

a. Compensation. Each service employee employed in the performance of this Contract by the Contractor or any subcontractor shall be paid not less than the minimum monetary wage and shall be furnished fringe benefits in accordance with the wages and fringe benefits determined by the Secretary of Labor or his authorized representative, as specified in any attachment to this Contract. If there is such an attachment, any class of service employees which is not listed therein, but which is to be employed under this Contract, shall be classified by the Contractor so as to provide a reasonable relationship between such classifications and those listed in the attachment, and shall be paid such monetary wages and furnished such fringe benefits as are determined by agreement of the interested parties, who shall be deemed to be the contracting agency, the Contractor, and the employees who will perform on the Contract or their representative. If the interested parties do not agree on a classification or reclassification which is, in fact, conformable, the Contracting Officer shall submit the question, together with his recommendation, to the Office of Special Wage Standards, Employment Standards Administration (ESA), of the Department of Labor for final determination. Failure to pay such employees the compensation agreed upon by the interested parties or finally determined by the Administrator or his authorized representative shall be a violation of this Contract. No employee engaged in performing work on this Contract shall in any event be paid less than the minimum wage specified under Section 6(a)(1) of the Fair Labor Standards Act of 1938, as amended.

b. Adjustment. If, as authorized pursuant to Section 4(d) of the Service Contract Act of 1965, as amended, the term of this Contract is more than 1 year, the minimum monetary wages and fringe benefits required to be paid or furnished thereunder to service employees shall be subject to adjustment after 1 year and not less often than once every 2 years, pursuant to wage determinations to be issued by the Employment Standards Administration of the Department of Labor as provided in such Act.

c. Obligation to Furnish Fringe Benefits. The Contractor or subcontractor may discharge the obligation to furnish fringe benefits specified in the attachment or determined conformably thereto by furnishing any equivalent combinations or fringe benefits, or by making equivalent or differential payments in cash in accordance with the applicable rules set forth in 29 CFR Part 4, subparts B and C, and not otherwise.
d. **Minimum Wage.** In the absence of a minimum wage attachment for this Contract, neither the Contractor nor any subcontractor under this Contract shall pay any of his employees performing work under the Contract (regardless of whether they are service employees) less than the minimum wage specified by Section 6(a)(1) of the Fair Labor Standards Act of 1938. Nothing in this provision shall relieve the Contractor or any subcontractor of any other obligation under law or contract for payment of a higher wage to any employee.

e. **Obligations Attributable to Predecessor Contracts.** If this Contract succeeds a contract, subject to the Service Contract Act of 1965, as amended, under which substantially the same services were furnished and service employees were paid wages and fringe benefits provided for in a collective bargaining agreement, then in the absence of a minimum wage attachment for this Contract neither the Contractor nor any subcontractor under this Contract shall pay any service employee performing any of the contract work less than the wages and fringe benefits, provided for in such collective bargaining agreements, to which such employee would be entitled if employed under the predecessor contract including accrued wages and fringe benefits provided for under such agreement. No Contractor or subcontractor under this Contract may be relieved of the foregoing obligation unless the Secretary of Labor or his authorized representative determines that the collective bargaining agreement applicable to service employees employed under the predecessor contract was not entered into as a result of arms-length negotiations, or finds, after a hearing as provided for in Department of Labor regulations, 29 CFR 4.10, that the wages and fringe benefits provided for in such agreement are substantially at variance with those which prevail for services of a character similar in the locality.

f. **Notification to Employees.** The Contractor and any subcontractor under this Contract shall notify each service employee commencing work on this Contract of the minimum monetary wages and any fringe benefits required to be paid pursuant to this Contract or shall post a notice of such wages and benefits in a prominent and accessible place at the work site, using such poster as may be provided by the Department of Labor.

g. **Safe and Sanitary Working Conditions.** The Contractor or subcontractor shall not permit any part of the services called for by this Contract to be performed in buildings or surroundings or under working conditions provided by or under the control or supervision of the Contractor or subcontractor which are unsanitary or hazardous or dangerous to the health or safety of service employees engaged to furnish these services, and the Contractor or subcontractor shall comply with the safety and health standards applied under 29 CFR Part 1925.
h. **Records.** The Contractor and each subcontractor performing work subject to the Act shall make and maintain for 3 years from the completion of the work, records containing the information specified in subparagraphs (1) through (5) of this paragraph for each employee subject to the Act and shall make them available for inspection and transcription by authorized representatives of the Employment Standards Administration of the U.S. Department of Labor.

1. His name and address.

2. His work classification or classifications, rate or rates of monetary wages and fringe benefits provided, rate or rates of fringe benefit payments in lieu thereof, and total daily and weekly compensation.

3. His daily and weekly hours so worked.

4. Any deductions, rebates, or refunds from his total daily or weekly compensation.

5. A list of monetary wages and fringe benefits for those classes of service employees not included in the minimum wage attachment to the Contract, but for which such wage rates or fringe benefits have been determined by the interested parties or by the Administrator or his authorized representative pursuant to the Labor Standards clause in paragraph (a) of this Article. A copy of the report required in paragraph m.(1) of this Article shall be deemed to be such a list.

i. **Withholding of Payment and Termination of Contract.** The Contracting Officer shall withhold or cause to be withheld from the Government Prime Contractor such sums as he, or an appropriate officer of the Department of Labor, decides may be necessary to pay underpaid employees. Additionally, any failure to comply with the requirements of this Article relating to the Service Contract Act of 1965 may be grounds for termination of the right to proceed with the contract work. In such event, the Government may enter into other contracts or arrangements for completion of the work, charging the Contractor in default with any additional costs.

j. **Subcontractors.** The Contractor agrees to insert this Article relating to the Service Contract Act of 1965 in all subcontracts. The term "Contractor" as used in this Article in any subcontract shall be deemed to refer to the subcontractor, except in the term "Government Prime Contractor."

k. **Service Employee.** As used in this Article relating to the Service Contract Act of 1965, the term "service employee" means guards, watchmen, and any person engaged in a recognized trade or craft, or other skilled mechanical craft, or in unskilled, semiskilled, or
skilled manual labor occupations; and any other employee including a foreman or supervisor in a position having trade, craft, or laboring experience as the paramount requirement; and shall include all such persons regardless of any contractual relationship that may be alleged to exist between a Contractor or subcontractor and such persons.

1. Comparable Rates. The following classes of service employees expected to be employed under the Contract with the Government would be subject, if employed by the contracting agency, to the provisions of 5 U.S.C. 5341 and would, if so employed, be paid not less than the following rates of wages and fringe benefits:

<table>
<thead>
<tr>
<th>Employee class.</th>
<th>Monetary Wage-Fringe Benefits.</th>
</tr>
</thead>
</table>

See Comparable Rate Attachment

m. Contractor's Report

(1) If there is a wage determination attachment to this Contract, and one or more classes of service employees which are not listed thereon are to be employed under the Contract, the Contractor shall report to the Contracting Officer the monetary wages to be paid and the fringe benefits to be provided each such class of service employee. Such report shall be made promptly as soon as such compensation has been determined, as provided in paragraph a. of this Article.

(2) If wages to be paid or fringe benefits to be furnished any service employees employed by the Government Prime Contractor or any subcontractor under the Contract are provided for in a collective bargaining agreement which is or will be effective during any period in which the Contract is being performed, the Government Prime Contractor shall report such fact to the Contracting Officer, together with full information as to the application and accrual of such wage and fringe benefits, including any prospective increases, to service employees engaged in work on the Contract, and a copy of the collective bargaining agreements. Such report shall be made upon commencing performance of the Contract, in the case of collective bargaining agreements effective at such time, and in the case of such agreements or provisions or amendments thereof effective at a later time during the period of contract performance, such agreements shall be reported promptly after negotiation thereof.

n. Exemptions. This Article relating to the Service Contract Act of 1965 shall not apply to the following:
(1) Any contract of the United States or District of Columbia for construction, alteration, and/or repair, including painting and decorating of public buildings or public works.

(2) Any work required to be done in accordance with the provisions of the Walsh-Healey Public Contracts Act (49 Stat. 2036).

(3) Any contract for the carriage of freight or personnel by vessel, airplane, bus, truck, express, railway line, or oil or gas pipeline where published tariff rates are in effect, or where such carriage is subject to rates covered by Section 22 of the Interstate Commerce Act.

(4) Any contract for the furnishing of services by radio, telephone, telegraph, or cable companies, subject to the Communications Act of 1934.

(5) Any contract for public utility services, including electric light and power, water, steam, and gas.

(6) Any employment contract providing for direct services to a Federal agency by an individual or individuals.

(7) Any contract with the Post Office Department (U.S. Postal Service), the principal purpose of which is the operation of postal contract stations.

(8) Any services to be furnished outside the United States. For geographic purposes, the "United States" is defined in Section 8(d) of the Service Contract Act to include any state of the United States; the District of Columbia; Puerto Rico; the Virgin Islands; Outer Continental Shelf Lands, as defined in the Outer Continental Shelf Lands Act; American Samoa; Guam; Wake Island; Enewetak Atoll; Kwajalein Atoll; and Johnston Island. It does not include any other territory under the jurisdiction of the United States or any United States base or possession within a foreign country.

(9) Any of the following contracts exempted from all provisions of the Service Contract Act of 1965, pursuant to Section 4(b) of the Act, which exemptions the Secretary of Labor, prior to amendment of such section by Public Law 92-473, found to be necessary and proper in the public interests or to avoid serious impairment of the conduct of the Government business:

(i) Contracts entered into by the United States with common carriers for the carriage of mail by rail, air (except air star routes), bus, and ocean vessel, where such carriage is performed on regularly scheduled runs of the trains, airplanes, buses, and vessels over regularly
established routes and accounts for an insubstantial portion of the revenue therefrom.

(ii) Any contract entered into by the U.S. Postal Service with an individual owner-operator for mail services where it is not contemplated at the time the contract is made that such owner-operator will hire any service employee to perform the services under the contract except for short periods of vacation time or for unexpected contingencies or emergency situations such as illness or accident.

o. Special Employees. Notwithstanding any of the provisions in paragraphs b. through l. of this Article, relating to the Service Contract Act of 1965, the following employees may be employed in accordance with the following variations, tolerances, and exemptions, which the Secretary of Labor, pursuant to Section 4(b) of the Act prior to its amendment by Public Law 92-473, found to be necessary and proper in the public interest or to avoid serious impairment of the conduct of Government business:

(1) (i) Apprentices, student-learners, and workers whose earnings capacity is impaired by age, physical or mental deficiency, or injury may be employed at wages lower than the minimum wages otherwise required by Section 2a(1) or 2b(1) of the Service Contract Act of 1965, without diminishing any fringe benefits or cash payments in lieu thereof required under Section 2a(2) of that Act, in accordance with the procedures prescribed for the employment of apprentices, student-learners, handicapped persons, and handicapped clients of sheltered workshops under Section 14 of the Fair Labor Standards Act of 1938, in the regulations issued by the Administrator.

(ii) The Administrator will issue certificates under the Service Contract Act of 1965 for the employment of apprentices, student-learners, handicapped persons, or handicapped clients of sheltered workshops not subject to the Fair Labor Standards Act of 1938, or subject to different minimum rates of pay under the two acts, authorizing appropriate rates of minimum wages (but without changing requirements concerning fringe benefits or supplementary cash payments in lieu thereof), applying procedures prescribed by the applicable regulations issued under the Fair Labor Standards Act of 1938 (29 CFR Parts 520, 521, 524, and 525).

(iii) The Administrator will also withdraw, annul, or cancel such certificates in accordance with the regulations in Parts 525 and 528 of Title 29 of the Code of Federal Regulations.
(2) An employee engaged in an occupation in which he customarily and regularly receives more than $20 a month in tips may have the amount of his tips credited by his employer against the minimum wage required by Section 2a(1) or Section 2b(1) of the Act in accordance with the regulations in 29 CFR Part 531. Provided, however, that the amount of such credit may not exceed $1.00 per hour effective May 1, 1974; $1.05 per hour effective January 1, 1975; and $1.15 per hour after December 31, 1975.

ARTICLE 7. AVAILABILITY OF APPROPRIATED FUNDS

The duty of the Government to obligate $________ in future Government Fiscal Years under Article 4.b. hereof shall be subject to the availability of funds appropriated by the Congress which DOE may legally spend for such purposes. Should funds not be available to meet the maximum cost to be reimbursed by the Government as stated in the Article entitled "Payment," the obligations of the parties under this Contract shall be extinguished and this Contract shall terminate.

ARTICLE 8. GENERAL PROVISIONS

The General Provisions of this Contract are set forth in Appendix B, General Provisions.

ARTICLE 9. ALTERATIONS TO GENERAL PROVISIONS

The following alterations are made to the General Provisions:

ARTICLE 10. DOCUMENTS INCORPORATED

The following listed documents are physically incorporated in this Contract:

Cover Sheet
Listing of Contract Articles
Contract Articles
Appendix A
Appendix B
Appendix C
Award/Contract
The Schedule plus Sections 7.0 and 8.0
Statement of Work
General Provisions
Reports
Pursuant to paragraph 1, Article 6, of the Contract Schedule, the following wage rates and fringe benefits would be paid by the Department of Energy to the various classes of service employees if Section 5341 of Title 5, United States Code, were applicable:

<table>
<thead>
<tr>
<th>Wage Board Employees</th>
<th>Rate</th>
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<tbody>
<tr>
<td>Air Compressor Operator</td>
<td>$6.08</td>
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<tr>
<td>Installing Casing (laborer)</td>
<td>4.45</td>
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<td>Logging Technician</td>
<td>4.92</td>
</tr>
<tr>
<td>Cementing Technician</td>
<td>4.68</td>
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<td>Cementing Laborer</td>
<td>4.22</td>
</tr>
<tr>
<td>Driller Operator</td>
<td>7.24</td>
</tr>
<tr>
<td>Driller Helper</td>
<td>6.31</td>
</tr>
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</table>

The above "direct" employees would be eligible for the following fringe benefits:

2. Sick leave at the rate of 13 days per year.
3. Vacation schedule based on length of service.

   Less than 3 years—13 days
   3 to 15 years—20 days
   15 years and over—26 days

4. Participation in the health and welfare, life insurance, and retirement plan as applicable to Federal employees.
APPENDIX B
GENERAL PROVISIONS

(Fixed-Price R&D Contracts With Other Than Educational Institutions)

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**LEGEND:**

"FPR" denotes Federal Procurement Regulations.

"ERDA-PR" denotes Energy Research and Development Administration Procurement Regulations.

"(Mod.)" denotes that the referenced clause is modified in these General Provisions. However, all of the references shown above are provided only for the convenience of contractors in comparing these General Provisions with pertinent regulatory material, and in no manner form a part of this Contract.
1.0 GENERAL

1.1 DEFINITIONS

As used throughout this Contract, the following terms shall have the meanings set forth below:

a. The term "DOE" means the U.S. Department of Energy, the Secretary of the U.S. Department of Energy, or any duly authorized representative of the Secretary, including the Contracting Officer, except for the purposes of deciding an appeal under the clause entitled "Disputes."

b. The term "Secretary" means the Secretary of the U.S. Department of Energy.

c. The term "Contracting Officer" means the person executing this Contract on behalf of the Government, and any other officer or civilian employee who is a properly designated Contracting Officer; and the term includes, except as otherwise provided in this Contract, the authorized representative of a Contracting Officer acting within the limits of his authority.

d. Except as otherwise provided in this Contract, the term "subcontracts" includes purchase orders under this Contract.

1.2 ORDER OF PRECEDENCE

In the event of an inconsistency between provisions of this Contract, the inconsistency shall be resolved by giving precedence as follows: (a) schedule; (b) statement of work; (c) the general provisions; (d) other provisions of the Contract, whether incorporated by reference or otherwise; and (e) the Contractor's technical proposal, if incorporated in the Contract by reference or otherwise.

1.3 DISPUTES

a. Except as otherwise provided in this Contract, any dispute concerning a question of fact arising under this Contract which is not disposed of by agreement shall be decided by the Contracting Officer, who shall reduce his decision to writing and mail or otherwise furnish a copy thereof to the Contractor. The decision of the Contracting Officer shall be final and conclusive unless within 30 days from the date of receipt of such copy, the Contractor mails or otherwise furnishes to the...
Contracting Officer a written appeal addressed to the Secretary. The decision of the Secretary or his designee for the determination of such appeals shall be final and conclusive unless determined by a court of competent jurisdiction to have been fraudulent, or capricious, or arbitrary, or so grossly erroneous as necessarily to imply bad faith, or not supported by substantial evidence. In connection with any appeal proceeding under this Article, the Contractor shall be afforded an opportunity to be heard and to offer evidence in support of its appeal. Pending final decision of a dispute hereunder, the Contractor shall proceed diligently with the performance of the Contract and in accordance with the Contracting Officer's decision.

b. This "Disputes" clause does not preclude consideration of law questions in connection with decisions provided for in paragraph a. above, PROVIDED, that nothing in this Contract shall be construed as making final the decision of any administrative official, representative, or board on a question of law.

2.0 ADJUSTMENTS

2.1 CHANGES

The Contracting Officer may at any time, by a written order, and without notice to the sureties, if any, make changes, within the general scope of this Contract, in any one or more of the following: (i) drawings, designs, or specifications; (ii) method of shipment or packing; and (iii) place of inspection, delivery, or acceptance. If any such change causes an increase or decrease in the estimated cost of, or the time required for performance of, this Contract, or otherwise affects any other provisions of this Contract, whether changed or not changed by any such order, an equitable adjustment shall be made (i) in the contract price or time of performances, or both, and (ii) in such other provisions of the Contract as may be so affected, and the Contract shall be modified in writing accordingly. Any claim by the Contractor for adjustment under this clause must be asserted within thirty (30) days from the date of receipt by the Contractor of the notification of change; PROVIDED, HOWEVER, that the Contracting Officer, if he decides that the facts justify such action, may receive and act upon any such claim asserted at any time prior to final payment under this Contract. Failure to agree to any adjustment shall be a dispute concerning a question of fact within the meaning of the clause of this Contract entitled "Disputes." However, nothing in this clause shall excuse the Contractor from proceeding with the Contract as changed.
2.2 COST ACCOUNTING STANDARDS

(Applicable only if the Contract exceeds $100,000 and is not otherwise exempt under the provisions of FPR 1-3.1203(a)(1), (2), or (h)(1).)

a. Unless the Cost Accounting Standards Board, or the General Services Administration in the case of nondefense contracts, has prescribed rules or regulations exempting the Contractor or this Contract from standards, rules, and regulations promulgated pursuant to 50 USC App. 2168 (Public Law 91-379, August 15, 1970), or other statutory authority, the Contractor, in connection with this Contract, shall:

(1) By submission of a Disclosure Statement, disclose in writing its cost accounting practices as required by regulations of the Cost Accounting Standards Board. The required disclosures must be made prior to contract award unless the Contracting Officer provides a written notice to the Contractor authorizing postaward submission in accordance with regulations of the Cost Accounting Standards Board. The practices disclosed for this Contract shall be the same as the practices currently disclosed and applied on all other contracts and subcontracts being performed by the Contractor and which contain this "Cost Accounting Standards" clause. If the Contractor has notified the Contracting Officer that the Disclosure Statement contains trade secrets and commercial or financial information which is privileged and confidential, the Disclosure Statement will not be released outside of the Government.

(2) Follow consistently the cost accounting practices disclosed pursuant to (1) above in accumulating and reporting contract performance cost data concerning this Contract. If any change in disclosed practices is made for purposes of any contract or subcontract subject to Cost Accounting Standards Board requirements, the change must be applied prospectively to this Contract, and the Disclosure Statement must be amended accordingly. If the contract price or cost allowance of this Contract is affected by such changes, adjustment shall be made in accordance with subparagraph a.(4) or a.(5) below, as appropriate.

(3) Comply with all Cost Accounting Standards in effect on the date of award of this Contract or if the Contractor has submitted cost or pricing data, on the date of final agreement on price as shown on the Contractor's signed Certificate of Current Cost or Pricing Data. The Contractor shall also comply with any Cost Accounting Standard which hereafter becomes applicable to a contract or
subcontract of the Contractor. Such compliance shall be required prospectively from the date of applicability to such contract or subcontract.

(4) (a) Agree to an equitable adjustment (as provided in the "Changes" clause of this Contract, if any) if the contract cost is affected by a change which, pursuant to (3) above, the Contractor is required to make to its established cost accounting practices whether such practices are covered by a Disclosure Statement or not.

(b) Negotiate with the Contracting Officer to determine the terms and conditions under which a change to either a disclosed cost accounting practice or an established cost accounting practice, other than a change under (4)(a) above, may be made. A change to a practice may be proposed by either the Government or the Contractor; PROVIDED, HOWEVER, that no agreement may be made under this provision that will increase costs paid by the United States.

(5) Agree to an adjustment of the contract price or cost allowance, as appropriate, if it or a subcontractor fails to comply with an applicable Cost Accounting Standard or to follow any practice disclosed pursuant to subparagraphs a.(1) and a.(2) above and such failure results in any increased costs paid by the United States. Such adjustment shall provide for recovery of the increased costs to the United States together with interest thereon computed at the rate determined by the Secretary of the Treasury pursuant to Public Law 92-41, 85 Stat. 97, or 7 percent per annum, whichever is less, from the time the payment by the United States was made to the time the adjustment is effected.

b. If the parties fail to agree whether the Contractor or a subcontractor has complied with an applicable Cost Accounting Standard, rule, or regulation of the Cost Accounting Standards Board and as to any cost adjustment demanded by the United States, such failure to agree shall be a dispute concerning a question of fact within the meaning of the "Disputes" clause of this Contract.

c. The Contractor shall permit any authorized representatives of the head of the agency, of the Cost Accounting Standards Board, or of the Comptroller General of the United States to examine and make copies of any documents, papers, or records relating to compliance with the requirements of this clause.
d. The Contractor shall include in all negotiated subcontracts which it enters into the substance of this clause except paragraph b. and shall require such inclusion in all other subcontracts of any tier, except that this requirement shall apply only to negotiated subcontracts in excess of $100,000 where the price negotiated is not based on:

(1) Established catalog or market prices of commercial items sold in substantial quantities to the general public, or

(2) Prices set by law or regulation and except that the requirement shall not apply to negotiated subcontracts otherwise exempt from the requirement to accept the "Cost Accounting Standards" clause by reason of Section 331.30(b) of Title 4, Code of Federal Regulations (4 CFR 331.30(b)) or Section 1-3.1203(a)(2) of Title 41, Code of Federal Regulations (41 CFR 1-3.1203(a)(2)).

However, if this is a contract with an agency which permits subcontractors to appeal final decisions of the Contracting Officer directly to the head of the agency or his duly authorized representative, then the Contractor shall include the substance of paragraph b. as well.

NOTE:

(1) Subcontractors shall be required to submit their Disclosure Statements to the Contractor. However, if a subcontractor has previously submitted its Disclosure Statement to a Government Contracting Officer, it may satisfy that requirement by certifying to the Contractor the date of such Statement and the address of the Contracting Officer.

(2) In any case where a subcontractor determines that the Disclosure Statement information is privileged and confidential and declines to provide it to its Contractor or higher-tier subcontractor, the Contractor may authorize direct submission of that subcontractor's Disclosure Statement to the same Government offices to which the Contractor was required to make submission of its Disclosure Statement. Such authorization shall in no way relieve the Contractor of liability as provided in paragraph a.(5) of this clause. In view of the foregoing and since the Contract may be subject to adjustment under this clause by reason of any failure to comply with rules, regulations, and standards of the Cost Accounting Standards Board in connection with covered subcontracts, it is expected that the Contractor may wish to include a clause in each such subcontract requiring the subcontractor to appropriately indemnify the Contractor. However, the
inclusion of such a clause and the terms thereof are matters for negotiation and agreement between the Contractor and the subcontractor, provided that they do not conflict with the duties of the Contractor under its contract with the Government. It is also expected that any subcontractor subject to such indemnification will generally require substantially similar indemnification to be submitted by his subcontractors.

e. The terms defined in Section 331.20 of Part 331 of Title 4, Code of Federal Regulations (4 CFR 331.20) shall have the same meanings herein. As there defined, "negotiated subcontract" means "any subcontract except a firm, fixed-price subcontract made by a Contractor or subcontractor after receiving offers from at least two firms not associated with each other or such Contractor or subcontractor, providing (1) the solicitation to all competing firms is identical, (2) price is the only consideration in selecting the subcontractor from among the competing firms solicited, and (3) the lowest offer received in compliance with the solicitation from among those solicited is accepted."

2.3 ADMINISTRATION OF COST ACCOUNTING STANDARDS

(Applicable only if the Contract exceeds $100,000 and is not otherwise exempt under the provisions of FPR 1-3.1203(a)(1), (2), or (h)(1).)

For the purpose of administering Cost Accounting Standards requirements under this Contract, the Contractor shall:

a. Submit to the cognizant Contracting Officer a description of the accounting change and the general dollar magnitude of the change to reflect the sum of all increases and the sum of all decreases for all contracts containing the "Cost Accounting Standards" clause:

(1) For any change in cost accounting practices required to comply with a new Cost Accounting Standard in accordance with paragraphs a.(3) and a.(4)(a) of the clause of this Contract entitled "Cost Accounting Standards" within 60 days (or such other date as may be mutually agreed to) after award of a contract requiring such change;

(2) For any change to cost accounting practices proposed in accordance with paragraph a.(4)(b) of the clause of this Contract entitled "Cost Accounting Standards" not less than 60 days (or such other date as may be mutually agreed to) prior to the effective date of the proposed change; or
(3) For any failure to comply with an applicable Cost Accounting Standard or to follow a disclosed practice as contemplated by paragraph a.(5) of the clause of this Contract entitled "Cost Accounting Standards" within 60 days (or such other date as may be mutually agreed to) after the date of agreement of such noncompliance by the Contractor.

b. Submit a cost impact proposal in the form and manner specified by the cognizant Contracting Officer within 60 days (or such other date as may be mutually agreed to) after the date of determination of the adequacy and compliance of a change submitted pursuant to a.(1), (2), or (3) above.

c. Agree to appropriate contract and subcontract amendments to reflect adjustments established in accordance with paragraphs a.(4) and a.(5) of the clause of this Contract entitled "Cost Accounting Standards."

d. Include the substance of this clause in all negotiated subcontracts containing the clause entitled "Cost Accounting Standards." In addition, include a provision in these subcontracts which will require such subcontractors, within thirty (30) days after receipt of award, to submit the following information to the Contracting Officer cognizant of the subcontractor's facility:

(1) Subcontractor's name and subcontract number;

(2) Dollar amount and date of award;

(3) Name of Contractor making the award; and

(4) A statement as to whether the subcontractor has made or proposes to make any changes to accounting practices that affect prime contracts or subcontracts containing the "Cost Accounting Standards" clause, unless such changes have already been reported. If award of the subcontract results in making a Cost Accounting Standard(s) effective for the first time, this shall also be reported.

e. In the event an adjustment is required to be made to any subcontract hereunder, notify the cognizant Contracting Officer in writing of such adjustment and agree to an adjustment in the price or estimated cost and fee of this Contract, as appropriate, based upon the adjustment established under the subcontract. Such notice shall be given within 30 days after receipt of the proposed subcontract adjustment, and shall include a proposal for adjustment to such higher-tier subcontract or prime contract, as appropriate.
f. When the "Cost Accounting Standards" clause and this clause are included in subcontracts, the term "Contracting Officer" shall be suitably altered to identify the purchaser.

2.4 PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA

(Applicable only if the Contract exceeds $100,000.)

If any price, including profit or fee, negotiated in connection with this Contract or any cost reimbursable under this Contract was increased by any significant sums because:

a. The Contractor furnished cost or pricing data which was not accurate, complete, and current as certified in the Contractor's Certificate of Current Cost or Pricing Data;

b. A subcontractor, pursuant to the clause of this Contract entitled "Subcontractor Cost or Pricing Data" or "Subcontractor Cost or Pricing Data—Price Adjustments" or any subcontract clause therein required, furnished cost or pricing data which was not accurate, complete, and current as certified in the subcontractor's Certificate of Current Cost or Pricing Data;

c. A subcontractor or prospective subcontractor furnished cost or pricing data which was required to be accurate, complete, and current and to be submitted to support a subcontract cost estimate furnished by the Contractor but which was not accurate, complete, and current as of the data certified in the Contractor's Certificate of Current Cost or Pricing Data; or

d. The Contractor or a subcontractor or prospective subcontractor furnished any data, not within a., b., or c. above, which was not accurate as submitted; the price or cost shall be reduced accordingly and the Contract shall be modified in writing as may be necessary to reflect such reduction. However, any reduction in the contract price due to defective subcontract data of a prospective subcontractor, when the subcontract was not subsequently awarded to such subcontractor, will be limited to the amount (plus applicable overhead and profit markup) by which the actual subcontract, or actual cost to the Contractor if there was no subcontract, was less than the prospective subcontract cost estimate submitted by the Contractor; PROVIDED, the actual subcontract price was not affected by defective cost or pricing data.

(Note: Since the Contract is subject to reduction under this clause by reason of defective cost or pricing data submitted in connection with certain subcontracts, it is expected that the Contractor may wish to include a clause in each such subcontract.)
requiring the subcontractor to appropriately indemnify the Contractor. It is also expected that any subcontractor subject to such indemnification will generally require substantially similar indemnification for defective cost or pricing data required to be submitted by its lower-tier subcontractors.)

2.5 SUBCONTRACTOR COST OR PRICING DATA

(Applicable only if the Contract exceeds $100,000.)

a. The Contractor shall require subcontractors hereunder to submit, actually or by specific identification in writing, cost or pricing data under the following circumstances:

(1) Prior to the award of any subcontract, the amount of which is expected to exceed $100,000 when entered into;

(2) Prior to the pricing of any subcontract modification which involves aggregate increases and/or decreases in costs plus applicable profits expected to exceed $100,000; except where the price is based on adequate price competition, established catalog or market prices of commercial items sold in substantial quantities to the general public, or prices set by law or regulation.

b. The Contractor shall require subcontractors to certify, in substantially the same form as that used in the certificate by the Prime Contractor to the Government, that to the best of their knowledge and belief, the cost and pricing data submitted under a. above is accurate, complete, and current as of the date of agreement on the negotiated price of the subcontract or subcontract change or modification.

c. The Contractor shall insert the substance of this clause including this paragraph c., in each subcontract hereunder which exceeds $100,000 when entered into except where the price thereof is based on adequate price competition, established catalog or market prices of commercial items sold in substantial quantities to the general public, or prices set by law or regulation. In each such expected subcontract hereunder in excess of $100,000, the Contractor shall insert the substance of the following clause:

SUBCONTRACTOR COST OR PRICING DATA--PRICE ADJUSTMENTS

a. Paragraphs b. and c. of this clause shall become operative only with respect to any modification made pursuant to one or more provisions of this Contract which involves aggregate increases and/or decreases in costs plus applicable profits expected to exceed $100,000. The requirements of this clause shall be limited to such contract modifications.
b. The Contractor shall require subcontractors hereunder to submit, actually or by specific identification in writing, cost or pricing data under the following circumstances:

(1) Prior to award of any subcontract, the amount of which is expected to exceed $100,000 when entered into;

(2) Prior to the pricing of any subcontract modification which involves aggregate increases and/or decreases in costs plus applicable profits expected to exceed $100,000; except where the price is based on adequate price competition, established catalog or market prices of commercial items sold in substantial quantities to the general public, or prices set by law or regulation.

c. The Contractor shall require subcontractors to certify, in substantially the same form as that used in the certificate by the Prime Contractor to the Government, that to the best of their knowledge and belief, the cost and pricing data submitted under b. above is accurate, complete, and current as of the date of agreement on the negotiated price of the subcontract or subcontract change or modification.

d. The Contractor shall insert the substance of this clause, including this paragraph d., in each subcontract hereunder which exceeds $100,000 when entered into.

2.6 AUDIT

a. General. The Contracting Officer or his representative shall have the audit and inspection rights described in the applicable paragraphs b., c., and d. below.

b. Examination of Costs. If this is a cost-reimbursement type, incentive, time and materials, labor hour, or price redeterminable contract, or any combination thereof, the Contractor shall maintain, and the Contracting Officer or his representatives shall have the right to examine, books, records, documents, and other evidence and accounting procedures and practices, sufficient to reflect properly all direct and indirect costs of whatever nature claimed to have been incurred and anticipated to be incurred for the performance of this Contract. Such right of examination shall include inspection at all reasonable times of the Contractor's plants, or such parts thereof, as may be engaged in the performance of this Contract.

c. Cost or Pricing Data. If the Contractor submitted cost or pricing data in connection with the pricing of this Contract
or any change or modification thereto, unless such pricing was based on adequate price competition, established catalog or market prices of commercial items sold in substantial quantities to the general public, or prices set by law or regulation, the Contracting Officer or his representatives who are employees of the United States Government shall have the right to examine all books, records, documents, and other data of the Contractor related to the negotiation, pricing, or performance of such contract, change, or modification, for the purpose of evaluating the accuracy, completeness, and currency of the cost or pricing data submitted. Additionally, in the case of pricing any change or modification exceeding $100,000 to formally advertised contracts, the Comptroller General of the United States or his representative who are employees of the United States Government shall have such rights. The right of examination shall extend to all documents necessary to permit adequate evaluation of the cost or pricing data submitted, along with the computations and projections used therein.

d. Availability. The materials described in b. and c. above shall be made available at the office of the Contractor, at all reasonable times, for inspection, audit, or reproduction until the expiration of three years from the date of final payment under this Contract or such lesser time specified in Part 1-20 of the Federal Procurement Regulations (41 CFR Part 1-20) and for such longer period, if any, as is required by applicable statute, or by other clauses of this Contract, or by (1) and (2) below:

(1) If this Contract is completely or partially terminated, the records relating to the work terminated shall be made available for a period of three years from the date of any resulting final settlement.

(2) Records which relate to appeals under the "Disputes" clause of this Contract, or litigation or the settlement of claims arising out of the performance of this Contract, shall be made available until such appeals, litigation, or claims have been disposed of.

e. The Contractor shall insert a clause containing all the provisions of this clause, including this paragraph e., in all subcontracts hereunder except altered as necessary for proper identification of the contracting parties and the Contracting Officer under the Government prime contract.

2.7 EXAMINATION OF RECORDS BY COMPTROLLER GENERAL

a. This clause is applicable if the amount of this Contract exceeds $10,000 and was entered into by means of negotiation,
including small business restricted advertising, but is not applicable if this Contract was entered into by means of formal advertising.

b. The Contractor agrees that the Comptroller General of the United States or any of his duly authorized representatives shall, until the expiration of three years after final payment under this Contract, unless DOE authorizes their prior disposition, have access to and the right to examine any directly pertinent books, documents, papers, and records of the Contractor involving transactions related to this Contract.

c. The Contractor further agrees to include in all its subcontracts hereunder a provision to the effect that the subcontractor agrees that the Comptroller General of the United States or any of his duly authorized representatives shall, until the expiration of three years after final payment under the subcontract, unless DOE authorizes their prior disposition, have access to and the right to examine any directly pertinent books, documents, papers, and records of such subcontractor involving transactions related to the subcontract. The term "subcontract," as used in this clause, excludes (i) purchase orders not exceeding $10,000 and (ii) subcontracts or purchase orders for public utility services at rates established for uniform applicability to the general public.

d. The periods of access and examination described in b. and c. above, for records which relate to (i) appeals under the "Disputes" clause of this Contract, (ii) litigation or the settlement of claims arising out of the performance of this Contract, or (iii) costs and expenses of this Contract as to which exception has been taken by the Comptroller General, or any of their duly authorized representatives, shall continue until such appeals, litigations, claims, or exceptions have been disposed of.

2.8 RENEGOTIATION

If this Contract is subject to the Renegotiation Act of 1951, as amended, the following provisions shall apply:

a. This Contract is subject to the Renegotiation Act of 1951 (50 USC, App. 1211, et seq.), as amended, and to any subsequent act of Congress providing for the renegotiation of contracts. Nothing contained in this clause shall impose any renegotiation obligation with respect to this Contract or any subcontract hereunder which is not imposed by an act of Congress heretofore or hereafter enacted. Subject to the foregoing, this Contract shall be deemed to contain all the provisions required by Section 104 of the Renegotiation Act of 1951, and by any such other act, without subsequent contract amendment specifically incorporating such provisions.
b. The Contractor agrees to insert the provisions of this clause, including this paragraph b., in all subcontracts, as that term is defined in Section 103.g. of the Renegotiation Act of 1951, as amended.

2.9 FEDERAL, STATE, AND LOCAL TAXES

a. As used throughout this clause, the term "contract date" means the date of this Contract. As to additional supplies or services procured by modification of this Contract, the term "contract date" means the date of such modification.

b. Except as may be otherwise provided in this Contract, the contract price includes, to the extent allocable to this Contract, all Federal, State, and local taxes which, on the contract date:

(1) By Constitution, statute, or ordinance, are applicable to this Contract, or to the transactions covered by this Contract, or to property or interests in property; or

(2) Pursuant to written ruling or regulation, the authority charged with administering any such tax is assessing or applying to, and is not granting or honoring an exemption for, a contractor under this kind of contract, or the transactions covered by this Contract, or property or interests in property.

c. Except as may be otherwise provided in this Contract, duties in effect on the contract date are included in the contract price, to the extent allocable to this Contract.

d. (1) If the Contractor is required to pay or bear the burden:

(a) Of any tax or duty which either was not to be included in the contract price pursuant to the requirements of paragraphs b. and c., or of a tax or duty specifically excluded from the contract price by a provision of this Contract; or

(b) Of an increase in rate of any tax or duty, whether or not such tax or duty was excluded from the contract price; or

(c) Of any interest or penalty on any tax or duty referred to in (a) or (b) above; the contract price shall be increased by the amount of such tax, duty, interest, or penalty allocable to this Contract: PROVIDED, that the Contractor, if requested by the Contracting Officer, warrants in writing that no amount of such
tax, duty, or rate increase was included in the contract price as a contingency reserve or otherwise; AND PROVIDED FURTHER, that liability for such tax, duty, rate increase, interest, or penalty was not incurred through the fault or negligence of the Contractor or its failure to follow instructions of the Contracting Officer.

(2) If the Contractor is not required to pay or bear the burden, or obtains a refund or drawback, in whole or in part, of any tax, duty, interest, or penalty which:

(a) Was to be included in the contract price pursuant to the requirements of paragraphs b. and c.;

(b) Was included in the contract price; or

(c) Was the basis of an increase in the contract price; the contract price shall be decreased by the amount of such relief, refund, or drawback allocable to this Contract, or the allocable amount of such relief, refund, or drawback shall be paid to the Government, as directed by the Contracting Officer. The contract price also shall be similarly decreased if the Contractor, through its fault or negligence or its failure to follow instructions of the Contracting Officer, is required to pay or bear the burden, or does not obtain a refund or drawback of any such tax, duty, interest, or penalty. Interest paid or credited to the Contractor incident to a refund of taxes shall inure to the benefit of the Government to the extent that such interest was earned after the Contractor was paid or reimbursed by the Government for such taxes.

(3) Invoices or vouchers covering any adjustment of the contract price pursuant to this paragraph d. shall set forth the amount thereof as a separate item and shall identify the particular tax or duty involved.

(4) This paragraph d. shall not be applicable to social security taxes; income and franchise taxes, other than those levied on or measured by (i) sales or receipts from sales, or (ii) the Contractor's possession of, interest in, or use of property, title to which is in the Government; excess profits taxes; capital stock taxes; unemployment compensation taxes; or property taxes, other than such property taxes, allocable to this Contract, as are assessed either on completed supplies covered by this Contract, or on the Contractor's possession of, interest in, or use of property, title to which is in the Government.
(5) No adjustment pursuant to this paragraph d. will be made under this Contract unless the aggregate amount thereof is or may reasonably be expected to be over $100.

e. Unless there does not exist any reasonable basis to sustain an exemption, the Government, upon request of the Contractor, without further liability, agrees, except as otherwise provided in this Contract, to furnish evidence appropriate to establish exemption from any tax which the Contractor warrants in writing was excluded from the contract price. In addition, the Contracting Officer may furnish evidence appropriate to establish exemption from any tax that may, pursuant to this clause, give rise to either an increase or decrease in the contract price. Except as otherwise provided in this Contract, evidence appropriate to establish exemption from duties will be furnished only at the discretion of the Contracting Officer.

f. (1) The Contractor shall promptly notify the Contracting Officer of all matters pertaining to Federal, State, and local taxes, and duties, that reasonably may be expected to result in either an increase or decrease in the contract price.

(2) Whenever an increase or decrease in the contract price may be required under this clause, the Contractor shall take action as directed by the Contracting Officer, and the contract price shall be equitably adjusted to cover the costs of such action, including any interest, penalty, and reasonable attorneys' fees.

2.10 PRICING OF ADJUSTMENTS

When costs are a factor in any determination of a contract price adjustment pursuant to the "Changes" clause or any other provision of this Contract, such costs shall be in accordance with the contract cost principles and procedures in Part 1-15 of the Federal Procurement Regulations (41 CFR 1-15), as supplemented or modified by ERDA-PR Part 9-15 (41 CFR 9-15) in effect on the date of this Contract.

3.0 PAYMENT

3.1 PAYMENTS

The Contractor shall be paid, upon submission of proper invoices or vouchers, the prices stipulated herein for work delivered or rendered and accepted, less deductions, if any, as herein provided. Unless otherwise specified, payment will be made upon acceptance of any portion of the work delivered or rendered for which a price is separately stated in the Contract.
3.2 ASSIGNMENT OF CLAIMS

a. Pursuant to the provisions of the Assignment of Claims Act of 1940, as amended (31 USC 203, 41 USC 15), if this Contract provides for payments aggregating $1,000 or more, claims for moneys due or to become due the Contractor from the Government under this Contract may be assigned to a bank, trust company, or other financing institution, including any Federal lending agency, and may thereafter be further assigned and reassigned to any such institution. Any such assignment or reassignment shall cover all amounts payable under this Contract and not already paid, and shall not be made to more than one party, except that any such assignment or reassignment may be made to one party as agent or trustee for two or more parties participating in such financing. Unless otherwise provided in this Contract, payments to assignee of any moneys due or to become due under this Contract shall not, to the extent provided in said Act, as amended, be subject to reduction or setoff. (The preceding sentence applies only if this Contract is made in time of war or national emergency as defined in said Act and is with the Department of Defense, the General Services Administration, the U.S. Department of Energy, the National Aeronautics and Space Administration, the Federal Aviation Administration, or any other department or agency of the United States designated by the President pursuant to Clause 4 of the proviso of Section 1 of the Assignment of Claims Act of 1940, as amended by the Act of May 15, 1951, 65 Stat. 41.)

b. In no event shall copies of this Contract or of any plans, specifications, or other similar documents relating to work under this Contract, if marked "Top Secret," "Secret," or "Confidential," be furnished to any assignee of any claim arising under this Contract or to any other person not entitled to receive the same. However, a copy of any part or all of this Contract so marked may be furnished, or any information contained therein may be disclosed, to such assignee upon the prior written authorization of the Contracting Officer.

3.3 INTEREST

Notwithstanding any other provision of this Contract, unless paid within 30 days, all amounts that become payable by the Contractor to the Government under this Contract (net of any applicable tax credit under the Internal Revenue Code) shall bear interest at the rate determined by the Secretary of the Treasury pursuant to Public Law 92-41, 85 Stat. 97. Amounts shall be due upon the earliest of (a) the date fixed pursuant to this Contract; (b) the date of the first written demand for payment, consistent with this Contract, including demand consequent upon default termination; (c) the date of transmittal by the Government to the Contractor of a proposed
supplemental agreement to confirm completed negotiations fixing the amount; or (d) if this Contract provides for revision of prices, the date of written notice to the Contractor stating the amount of refund payable in connection with a pricing proposal or in connection with a negotiated pricing agreement not confirmed by contract supplement.

3.4 PAYMENT OF INTEREST ON CONTRACTORS' CLAIMS

a. If an appeal is filed by the Contractor from a final decision of the Contracting Officer under the "Disputes" clause of this Contract, denying a claim arising under the Contract, simple interest on the amount of the claim finally determined owed by the Government shall be payable to the Contractor. Such interest shall be at the rate determined by the Secretary of the Treasury pursuant to Public Law 92-41, 85 Stat. 97, from the date the Contractor furnishes to the Contracting Officer its written appeal under the "Disputes" clause of this Contract, to the date of (1) a final judgment by a court of competent jurisdiction, or (2) mailing to the Contractor of a supplemental agreement for execution either confirming completed negotiations between the parties or carrying out a decision of a board of contract appeals.

b. Notwithstanding a. above, (1) interest shall be applied only from the date payment was due, if such date is later than the filing of appeal, and (2) interest shall not be paid for any period of time that the Contracting Officer determines the Contractor has unduly delayed in pursuing its remedies before a board of contract appeals or a court of competent jurisdiction.

4.0 PERFORMANCE

4.1.1 INSPECTION

(Applicable to the extent clause 4.1.2 is not specifically invoked in the Schedule.)

The Government, through any authorized representatives, has the right, at all reasonable times, to inspect or otherwise evaluate the work performed or being performed hereunder and the premises in which it is being performed. If any inspection or evaluation is made by the Government on the premises of the Contractor or a subcontractor, the Contractor shall provide and shall require its subcontractors to provide all reasonable facilities and assistance for the safety and convenience of the Government representatives in the performance of their duties. All inspections and evaluations shall be performed in such a manner as will not unduly delay the work.
4.1.2 INSPECTION

(Applicable only to the extent this clause is specifically invoked in the Schedule.)

a. All work under this Contract shall be subject to inspection and test by the Government, to the extent practicable, at all times (including the period of performance) and places, and in any event prior to acceptance. The Government, through any authorized representative, may inspect the premises of the Contractor or of any subcontractor engaged in the performance of this Contract.

b. The Government may reject any work that is defective or otherwise not in conformity with the requirements of this Contract. If the Contractor fails or is unable to correct or to replace such work, the Contracting Officer may accept such work at a reduction in price which is equitable under the circumstances. Failure to agree on the reduction in price shall be a dispute concerning a question of fact within the meaning of the clause of this Contract entitled "Disputes."

c. If any inspection or test is made by the Government on the premises of the Contractor or a subcontractor, the Contractor shall provide, without additional charge, all reasonable facilities and assistance for the safety and convenience of the Government inspectors in the performance of their duties. If the Government inspection or test is made at a point other than the premises of the Contractor or subcontractor, it shall be at the expense of the Government. All inspections and tests by the Government shall be performed in such a manner as not unduly to delay the work. Final inspection and acceptance or rejection of the work shall be made as promptly as practicable after delivery except as otherwise provided in this Contract; but failure to inspect and accept or reject the work shall neither relieve the Contractor from responsibility for such of the work as is not in accordance with the Contract requirements nor impose liability on the Government therefor.

d. The inspection and test by the Government of any work shall not relieve the Contractor from any responsibility regarding defects or other failures to meet the Contract requirements which may be discovered prior to acceptance. Except as otherwise provided in this Contract, acceptance shall be conclusive except as regards latent defects, fraud, or such gross mistakes as amount to fraud.
e. The Contractor shall provide and maintain an inspection system acceptable to the Government covering the work hereunder. Records of all inspection work by the Contractor shall be kept complete and available to the Government during the performance of this Contract and for such longer period as may be specified elsewhere in this Contract.

4.2 STANDARDS OF WORK

The Contractor agrees that the performance of work and services pursuant to the requirements of this Contract shall conform to high professional standards.

4.3 REPORTS OF WORK

(Not applicable if the Contract elsewhere contains specific requirements for reports of work.)

a. The Contractor shall submit separate monthly progress reports of all work accomplished during each month of contract performance. Reports shall be in narrative form and brief and informal in content. Monthly reports shall include:

(1) A quantitative description of overall progress;

(2) An indication of any current problems which may impede performance, and proposed corrective action; and

(3) A discussion of the work to be performed during the next monthly reporting period.

Monthly reports shall be submitted in a reproducible copy plus the number of copies specified in the Schedule.

b. The Contractor shall submit separate quarterly reports on all work accomplished during each 3-month period of contract performance. In addition to factual data, these reports shall include a separate analysis section which interprets the results obtained, recommends further action, and relates occurrences to the ultimate objectives of the contract work. Sufficient diagrams, sketches, curves, photographs, and drawings shall be included to convey the intended meaning. Quarterly reports shall be submitted in a reproducible copy plus the number of copies specified in the Schedule.

c. The Contractor shall submit a final report which documents and summarizes the results of the entire contract work, including recommendations and conclusions based on the experience and results obtained. The final report shall include tables, graphs, diagrams, curves, sketches, photographs, and drawings.
in sufficient detail to comprehensively explain the results achieved under the Contract. The final report shall be submitted in a reproducible copy plus the number of copies specified in the Schedule.

4.4 KEY PERSONNEL

(Applicable only if the Contract designates "Key Personnel," whether in an attachment or in the Schedule.)

The personnel specified in an attachment to this Contract are considered to be essential to the work being performed hereunder. Prior to diverting any of the specified individuals to other programs, the Contractor shall notify the Contracting Officer reasonably in advance and shall submit justification (including proposed substitutions) in sufficient detail to permit evaluation of the impact on the program. No diversion shall be made by the Contractor without the written consent of the Contracting Officer. PROVIDED, that the Contracting Officer may ratify in writing such diversion and such ratification shall constitute the consent of the Contracting Officer required by this clause. The attachment to this Contract may be amended from time to time during the course of the Contract to either add or delete personnel, as appropriate.

4.5 SUBCONTRACTS

(The provisions of this clause do not apply to firm fixed-price and fixed-price with escalation (economic price adjustment) contracts. The clause does apply to new subcontracts or modifications of existing subcontracts which are necessitated because of unpriced contract changes pursuant to the "Changes" clause or other provisions of this Contract.)

a. As used in this clause, the term "subcontract" includes purchase orders.

b. The Contractor shall notify the Contracting Officer reasonably in advance of entering into any subcontract if the Contractor's procurement system has not been approved by the Contracting Officer and if the subcontract:
   
   (1) Is to be a cost-reimbursement, time and materials, or labor-hour contract which it is estimated will involve an amount in excess of ten thousand dollars ($10,000) including any fee;
   
   (2) Is proposed to exceed one hundred thousand dollars ($100,000); or
(3) Is one of a number of subcontracts, under this Contract, with a single subcontractor for the same or related supplies or services which, in the aggregate, are expected to exceed one hundred thousand dollars ($100,000).

c. The advance notification required by paragraph b. above shall include:

(1) A description of the supplies or services to be called for by the subcontract;

(2) Identification of the proposed subcontractor and an explanation of why and how the proposed subcontractor was selected, including the competition obtained;

(3) The proposed subcontract price, together with the Contractor's cost or price analysis thereof;

(4) The subcontractor's current, complete, and accurate cost or pricing data and Certificate of Current Cost or Pricing Data, when such data and certificates are required by other provisions of this Contract to be obtained from the subcontractor;

(5) Identification of the type of subcontract to be used and a copy of the proposed subcontract if it either exceeds $100,000 or is otherwise required by the Contracting Officer;

(6) A memorandum of negotiation which sets forth the principal elements of the subcontract price negotiations. A copy of this memorandum shall be retained in the Contractor's file for the use of Government reviewing authorities. The memorandum shall be in sufficient detail to reflect the most significant considerations controlling the establishment of initial or revised prices. The memorandum should include an explanation of why cost or pricing data was or was not required, and, if it was not required in the case of any price negotiation in excess of $100,000, a statement of the basis for determining that the price resulted from or was based on adequate price competition, established catalog or market prices of commercial items sold in substantial quantities to the general public, or prices set by law or regulation. If cost or pricing data was submitted and a certificate of cost or pricing data was required, the memorandum shall reflect the extent to which reliance was not placed upon the factual cost or pricing data submitted and the extent to which this data was not used by the Contractor in determining the total price objective and in negotiating the final price. The
memorandum shall also reflect the extent to which it was recognized in the negotiation that any cost or pricing data submitted by the subcontractor was not accurate, complete, or current; the action taken by the Contractor and the subcontractor as a result; and the effect, if any, of such defective data on the total price negotiated. Where the total price negotiated differs significantly from the Contractor's total price objective, the memorandum shall explain this difference;

(7) When incentives are used, the memorandum of negotiation shall contain an explanation of the incentive fee profit plan identifying each critical performance element, management decisions used to quantify each incentive element, reasons for incentives on particular performance characteristics, and a brief summary of trade-off possibilities considered as to cost, performance, and time; and

(8) The subcontractor's Disclosure Statement or Certificate relating to Cost Accounting Standards when such data are required by other provisions of this Contract to be obtained from the subcontractor.

d. The Contractor shall not enter into any subcontract for which advance notification to the Contracting Officer is required by this clause, without the prior written consent of the Contracting Officer; PROVIDED, that the Contracting Officer, in his discretion, may ratify in writing any subcontract. Such ratification shall constitute the consent of the Contracting Officer required by this paragraph.

e. Neither consent by the Contracting Officer to any subcontract or any provisions thereof nor approval of the Contractor's procurement system shall be construed to be a determination of the acceptability of any subcontract price or of any amount paid under any subcontract or to relieve the Contractor of any responsibility for performing this Contract, unless such approval or consent specifically provides otherwise.

f. The Contractor agrees that no subcontract placed under this Contract shall provide for payment on a cost-plus-a-percentage-of-cost basis.

4.6 COMPETITION IN SUBCONTRACTING

The Contractor shall select subcontractors (including suppliers) on a competitive basis to the maximum practicable extent consistent with the objectives and requirements of the Contract.
4.7 NOTICE TO THE GOVERNMENT OF LABOR DISPUTES

a. Whenever the Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay the timely performance of this Contract, the Contractor shall immediately give notice thereof, including all relevant information with respect thereto, to the Contracting Officer.

b. The Contractor agrees to insert the substance of this clause, including this paragraph b., in any subcontract hereunder as to which a labor dispute may delay the timely performance of this Contract; except that each such subcontract shall provide that in the event its timely performance is delayed or threatened by delay by any actual or potential labor dispute, the subcontractor shall immediately notify his next higher-tier subcontractor, or the Prime Contractor, as the case may be, of all relevant information with respect to such disputes.

4.8 PRINTING

Unless otherwise specified in this Contract, the Contractor shall not engage in, nor subcontract for, any printing (as that term is defined in Title I of the Government Printing and Binding Regulations in effect on the effective date of this Contract) in connection with the performance of work under this Contract. PROVIDED, HOWEVER, that performance of a requirement under this Contract involving the reproduction of less than 5,000 production units of any one page, or less than 25,000 production units in the aggregate of multiple pages, will not be deemed to be printing. A production unit is defined as one sheet, size 8 by 10 1/2 inches, one side only, one color.

4.9 GOVERNMENT PROPERTY

(Applicable when the Government is to furnish or the Contractor is to acquire Government property.)

a. The Government shall deliver to the Contractor, for use in connection with and under the terms of this Contract, the property described as Government-furnished property in the Schedule or specifications, together with such related data and information as the Contractor may request and as may reasonably be required for the intended use of such property (hereinafter referred to as "Government-furnished property"). The delivery or performance dates for the supplies or services to be furnished by the Contractor under this Contract are based upon the expectation that Government-furnished property suitable for use (except for such property furnished "as is") will be delivered to the Contractor at the times stated in the Schedule or, if not so stated, in sufficient time to enable
the Contractor to meet such delivery or performance dates. In the event that Government-furnished property is not delivered to the Contractor by such time or times, the Contracting Officer shall, upon timely written request made by the Contractor, make a determination of the delay, if any, occasioned the Contractor thereby, and shall equitably adjust the delivery or performance dates or the contract price, or both, and any other contractual provisions affected by any such delay, in accordance with the procedures provided for in the clause of this Contract entitled "Changes." Except for Government-furnished property furnished "as is," in the event Government-furnished property is received by the Contractor in a condition not suitable for the intended use, the Contractor shall, upon receipt thereof, notify the Contracting Officer of such fact and, as directed by the Contracting Officer, either (1) return such property at the Government's expense or otherwise dispose of the property, or (2) effect repair or modification, in accordance with the procedures provided for in the clause of this Contract entitled "Changes." The foregoing provisions for adjustment are exclusive and the Government shall not be liable to suit for breach of contract by reason of any delay in delivery of Government-furnished property or delivery of such property in a condition not suitable for its intended use.

b. (1) By notice in writing, the Contracting Officer may (i) decrease the property provided or to be provided by the Government under this Contract, or (ii) substitute other Government-owned property for property to be provided by the Government, or to be acquired by the Contractor for the Government, under this Contract. The Contractor shall promptly take such action as the Contracting Officer may direct with respect to the removal and shipping of property covered by such notice.

(2) In the event of any decrease in or substitution of property pursuant to paragraph (1) above, or any withdrawal of authority to use property provided under any other contract or lease, which property the Government had agreed in the Schedule to make available for the performance of this Contract, the Contracting Officer, upon the written request of the Contractor (or, if the substitution of property causes a decrease in the cost of performance, on his own initiative), shall equitably adjust such contractual provisions as may be affected by the decrease, substitution, or withdrawal, in accordance with the procedures provided for in the "Changes" clause of this Contract.

c. Title to all property furnished by the Government shall remain in the Government. In order to define the obligations of the
parties under this clause, title to each item of facilities, 
special test equipment, and special tooling (other than that sub-
ject to a "Special Tooling" clause) acquired by the Contractor for 
the Government pursuant to this Contract shall pass to and 
vest in the Government when its use in the performance of this 
Contract commences, or upon payment therefor by the Government, 
whichever is earlier, whether or not title previously vested. 
All Government-furnished property, together with all property 
acquired by the Contractor, title to which vests in the Govern-
ment under this paragraph, are subject to the provisions of 
this clause and are hereinafter collectively referred to as 
"Government property." Title to Government property shall not 
be affected by the incorporation or attachment thereof to any 
property not owned by the Government, nor shall such Government 
property, or any part thereof, be or become a fixture or lose 
its identity as personalty by reason of affixation to any 
realty.

d. The Contractor shall be responsible for and accountable for 
all Government property provided under this Contract. The 
Contractor shall establish and maintain a system to control, 
protect, preserve, and maintain all Government property. This 
system shall, upon request by the Contracting Officer, be 
submitted for review and, if satisfactory, approved in writing 
by the Contracting Officer. The Contractor shall maintain and 
make available such records as are required by the approved 
system and must account for all property until relieved of 
responsibility therefor in accordance with the written instruc-
tions of the Contracting Officer.

e. The Government property shall, unless otherwise provided 
herein or approved by the Contracting Officer, be used only 
for the performance of this Contract.

f. The Contractor shall maintain and administer, in accordance 
with sound industrial practice, a program for the utilization, 
maintenance, repair, protection, and preservation of Government 
property until disposed of by the Contractor in accordance 
with this clause. In the event that any damage occurs to 
Government property the risk of which has been assumed by the 
Government under this Contract, the Government shall replace 
such items or the Contractor shall make such repair of the 
property as the Government directs: PROVIDED, HOWEVER, that 
if the Contractor cannot effect such repair within the time 
required, the Contractor shall dispose of such property in the 
manner directed by the Contracting Officer. The contract 
price includes no compensation to the Contractor for the 
performance of any repair or replacement for which the Govern-
ment is responsible, and an equitable adjustment will be made 
in any contractual provisions affected by such repair or
replacement of Government property made at the direction of the Government, in accordance with the procedures provided for in the "Changes" clause of this Contract. Any repair or replacement for which the Contractor is responsible under the provisions of this Contract shall be accomplished by the Contractor at its own expense.

g. Unless otherwise provided in this Contract, the Contractor assumes the risk of, and shall be responsible for, any loss of or damage to Government property provided under this Contract upon its delivery to it or upon passage of title thereto to the Government as provided in paragraph c. hereof, except for reasonable wear and tear and except to the extent that such property is consumed in the performance of this Contract.

h. The Government, and any persons designated by it, shall at all reasonable times have access to the premises where any Government property is located, for the purpose of inspecting the Government property.

i. Upon the completion of this Contract, or at such earlier dates as may be fixed by the Contracting Officer, the Contractor shall submit, in a form acceptable to the Contracting Officer, inventory schedules covering all items of Government property not consumed in the performance of this Contract (including any resulting scrap) or not theretofore delivered to the Government, and shall prepare for shipment, delivery f.o.b. origin, or dispose of the Government property, as may be directed or authorized by the Contracting Officer. The net proceeds of any such disposal shall be credited to the contract price or shall be paid in such other manner as the Contracting Officer may direct.

j. Unless otherwise provided herein, the Government:

(1) May abandon any Government property in place, and thereupon all obligations of the Government regarding such abandoned property shall cease; and

(2) Has no obligation to the Contractor with regard to restoration or rehabilitation of the Contractor's premises, neither in case of abandonment (paragraph j. (1) above), disposition on completion of need or of the Contract (paragraph (1) above), nor otherwise, except for restoration or rehabilitation costs which are properly included in an equitable adjustment under paragraph b. above.

k. All communications issued pursuant to this clause shall be in writing.
4.10 DISPOSITION OF MATERIAL

Upon termination or completion of all work under this Contract, the Contractor shall prepare for shipment, deliver f.o.b. destination, or dispose of all materials received from the Government and all residual materials produced in connection with the performance of this Contract as may be directed by the Contracting Officer, or as specified in other provisions of this Contract. All materials produced or required to be delivered under this Contract become and remain the property of the Government.

4.11 PERMITS AND LICENSES

Except as otherwise directed by the Contracting Officer, 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.

5.0 TERMINATION

5.1 TERMINATION FOR CONVENIENCE OF THE GOVERNMENT

a. The performance of work under this Contract may be terminated by the Government in accordance with this clause in whole, or from time to time in part, whenever the Contracting Officer shall determine that such termination is in the best interest of the Government. Any such termination shall be effected by delivery to the Contractor of a Notice of Termination specifying the extent to which performance of work under the Contract is terminated, and the date upon which such termination becomes effective.

b. After receipt of a Notice of Termination and except as otherwise directed by the Contracting Officer, the Contractor shall:

(1) Stop work under the Contract on the date and to the extent specified in the Notice of Termination;

(2) Place no further orders or subcontracts for materials, services, or facilities, except as may be necessary for completion of such portion of the work under the Contract as is not terminated;

(3) Terminate all orders and subcontracts to the extent that they relate to the performance of work terminated by the Notice of Termination;

(4) Assign to the Government, in the manner, at the times, and to the extent directed by the Contracting Officer, all of
the right, title, and interest of the Contractor under the orders and subcontracts so terminated, in which case the Government shall have the right, in its discretion, to settle or pay any or all claims arising out of the termination of such orders and subcontracts;

(5) Settle all outstanding liabilities and all claims arising out of such termination of orders and subcontracts, with the approval or ratification of the Contracting Officer, to the extent he may require, which approval or ratification shall be final and conclusive for all purposes of this clause;

(6) Transfer title to the Government and deliver in the manner, at the times, and to the extent, if any, directed by the Contracting Officer, (1) the fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced as a part of, or acquired in connection with the performance of, the work terminated by the Notice of Termination; and (ii) the completed or partially completed plans, drawings, information, and other property which, if the Contract had been completed, would have been required to be furnished to the Government;

(7) Use its best efforts to sell, in the manner, at the times, to the extent, and at the price or prices directed or authorized by the Contracting Officer, any property of the types referred to in (6) above: PROVIDED, HOWEVER, that the Contractor (i) shall not be required to extend credit to any purchaser, and (ii) may acquire any such property under the conditions prescribed by and at a price or prices approved by the Contracting Officer; AND PROVIDED FURTHER, that the proceeds of any such transfer or disposition shall be applied in reduction of any payments to be made by the Government to the Contractor under this Contract or shall otherwise be credited to the price or cost of the work covered by this Contract or paid in such other manner as the Contracting Officer may direct;

(8) Complete performance of such part of the work as shall not have been terminated by the Notice of Termination; and

(9) Take such action as may be necessary, or as the Contracting Officer may direct, for the protection and preservation of the property related to this Contract which is in the possession of the Contractor and in which the Government has or may acquire an interest.
At any time after expiration of the plant clearance period, as defined in Subpart 1-8.1 of the Federal Procurement Regulations (41 CFR 1-8.1), as the definition may be amended from time to time, the Contractor may submit to the Contracting Officer a list, certified as to quantity and quality, of any or all items of termination inventory not previously disposed of, exclusive of items the disposition of which has been directed or authorized by the Contracting Officer, and may request the Government to remove such items or enter into a storage agreement covering them. Not later than fifteen (15) days thereafter, the Government will accept such items and remove them or enter into a storage agreement covering the same: PROVIDED, that the list submitted shall be subject to verification by the Contracting Officer upon removal of the items or, if the items are stored, within forty-five (45) days from the date of submission of the list, and any necessary adjustment to correct the list as submitted shall be made prior to final settlement.

c. After receipt of a Notice of Termination, the Contractor shall submit to the Contracting Officer its termination claim, in the form and with the certification prescribed by the Contracting Officer. Such claim shall be submitted promptly but in no event later than one year from the effective date of termination, unless one or more extensions in writing are granted by the Contracting Officer upon request of the Contractor made in writing within such one-year period or authorized extension thereof. However, if the Contracting Officer determines that the facts justify such action, he may receive and act upon any such termination claim at any time after such one-year period or any extension thereof. Upon failure of the Contractor to submit his termination claim within the time allowed, the Contracting Officer may, subject to any review required by the contracting agency's procedures in effect as of the date of execution of this Contract, determine, on the basis of information available to him, the amount, if any, due to the Contractor by reason of the termination and shall thereupon pay to the Contractor the amount so determined.

d. Subject to the provisions of paragraph c., and subject to any review required by the contracting agency's procedures in effect as of the date of execution of this Contract, the Contractor and the Contracting Officer may agree upon the whole or any part of the amount or amounts to be paid to the Contractor by reason of the total or partial termination of work pursuant to this clause, which amount or amounts may include a reasonable allowance for profit on work done: PROVIDED, that such agreed amount or amounts, exclusive of settlement costs, shall not exceed the total contract price as reduced by the amount of payments otherwise made and as further reduced by the contract price of work not terminated. The
Contract shall be amended accordingly, and the Contractor shall be paid the agreed amount. Nothing in paragraph e. of this clause, prescribing the amount to be paid to the Contractor in the event of failure of the Contractor and the Contracting Officer to agree upon the whole amount to be paid to the Contractor by reason of the termination of work pursuant to this clause, shall be deemed to limit, restrict, or otherwise determine or affect the amount or amounts which may be agreed upon to be paid to the Contractor pursuant to this paragraph d.

e. In the event of the failure of the Contractor and the Contracting Officer to agree as provided in paragraph d. upon the whole amount to be paid to the Contractor by reason of the termination of work pursuant to this clause, the Contracting Officer shall, subject to any review required by the contracting agency's procedures in effect as of the date of execution of this Contract, determine, on the basis of information available to him, the amount, if any, due to the Contractor by reason of the termination and shall pay to the Contractor the amount determined as follows:

(1) For completed supplies accepted by the Government (or sold or acquired as provided in paragraph b.(7) above) and not theretofore paid for, a sum equivalent to the aggregate price for such supplies computed in accordance with the price or prices specified in the Contract, appropriately adjusted for any saving of freight or other charges;

(2) The total of:

(a) The costs incurred in the performance of the work terminated, including initial costs and preparatory expense allocable thereto, but exclusive of any costs attributable to supplies paid or to be paid for under paragraph e.(1) hereof;

(b) The cost of settling and paying claims arising out of the termination of work under subcontracts or orders, as provided in paragraph b.(5) above, which are properly chargeable to the terminated portion of the Contract (exclusive of amounts paid or payable on account of supplies or materials delivered or services furnished by subcontractors or vendors prior to the effective date of the Notice of Termination, which amounts shall be included in the costs payable under (a) above); and

(c) A sum, as profit on (a) above, determined by the Contracting Officer pursuant to paragraph 1-8.303
of the Federal Procurement Regulations (41 CFR 1-8.303), in effect as of the date of execution of this Contract, to be fair and reasonable: PROVIDED, HOWEVER, that if it appears that the Contractor would have sustained a loss on the entire Contract had it been completed, no profit shall be included or allowed under this subdivision (c) and an appropriate adjustment shall be made reducing the amount of the settlement to reflect the indicated rate of loss; and

(3) The reasonable costs of settlement, including accounting, legal, clerical, and other expenses reasonably necessary for the preparation of settlement claims and supporting data with respect to the terminated portion of the Contract and for the termination and settlement of subcontracts thereunder, together with reasonable storage, transportation, and other costs incurred in connection with the protection or disposition of property allocable to this Contract.

The total sum to be paid to the Contractor under (1) and (2) of this paragraph e. shall not exceed the total contract price as reduced by the amount of payments otherwise made and as further reduced by the contract price of work not terminated. Except for normal spoilage, and except to the extent that the Government shall have otherwise expressly assumed the risk of loss, there shall be excluded from the amounts payable to the Contractor as provided in e.(1) and (2)(a) above, the fair value, as determined by the Contracting Officer, of property which is destroyed, lost, stolen, or damaged so as to become undeliverable to the Government, or to a buyer pursuant to paragraph b.(7).

f. Costs claimed, agreed to, or determined pursuant to paragraphs c., d., and e. of this clause shall be in accordance with the applicable contract cost principles and procedures in Part 1-15 of the Federal Procurement Regulations (41 CFR 1-15) as supplemented or modified by ERDA-PR Part 9-15 (41 CFR 9-15) in effect on the date of the Contract.

g. The Contractor shall have the right to appeal, under the clause of this Contract entitled "Disputes," from any determination made by the Contracting Officer under paragraph c. or e. above, except that, if the Contractor has failed to submit its claim within the time provided in paragraph c. above and has failed to request extension of such time, it shall have no such right of appeal. In any case where the Contracting Officer has made a determination of the amount due under paragraph c. or e. above, the Government shall pay to the
Contractor the following: (1) if there is no right of appeal hereunder or if no timely appeal has been taken, the amount so determined by the Contracting Officer, or (2) if an appeal has been taken, the amount finally determined on such appeal.

h. In arriving at the amount due the Contractor under this clause, there shall be deducted (1) all unliquidated advance or other payments on account theretofore made to the Contractor, applicable to the terminated portion of this Contract; (2) any claim which the Government may have against the Contractor in connection with this Contract; and (3) the agreed price for, or the proceeds of sale of, any materials, supplies, or other things acquired by the Contractor or sold, pursuant to the provisions of this clause, and not otherwise recovered by or credited to the Government.

i. If the termination hereunder be partial, prior to the settlement of the terminated portion of this Contract, the Contractor may file with the Contracting Officer a request in writing for an equitable adjustment of the price or prices specified in the Contract relating to the continued portion of the Contract (the portion not terminated by the Notice of Termination), and such equitable adjustment as may be agreed upon shall be made in such price or prices.

j. The Government may from time to time, under such terms and conditions as it may prescribe, make partial payments and payments on account against costs incurred by the Contractor in connection with the terminated portion of the Contract whenever in the opinion of the Contracting Officer the aggregate of such payments shall be within the amount to which the Contractor will be entitled hereunder. If the total of such payments is in excess of the amount finally agreed or determined to be due under this clause, such excess shall be payable by the Contractor to the Government upon demand, together with interest computed at the rate established by the Secretary of the Treasury pursuant to Public Law 92-41 (50 USC App. 1215(b)(2)) for the Renegotiation Board, for the period from the date such excess payment is received by the Contractor to the date on which such excess is repaid to the Government: PROVIDED, HOWEVER, that no interest shall be charged with respect to any such excess payment attributable to a reduction in the Contractor's claim by reason of retention or other disposition of termination inventory until ten days after the date of such retention or disposition, or such later date as determined by the Contracting Officer by reason of the circumstances.

k. Unless otherwise provided for in this Contract, or by applicable statute, the Contractor, from the effective date of termination and for a period of three years after final settlement under
this Contract, shall preserve and make available to the Government at all reasonable times at the office of the Contractor but without direct charge to the Government, all its books, records, documents, and other evidence bearing on the costs and expenses of the Contractor under this Contract and relating to the work terminated hereunder, or, to the extent approved by the Contracting Officer, photographs, microphotographs, or other authentic reproductions thereof.

5.2 DEFAULT

a. The Government may, subject to the provisions of paragraph c. of this clause, by written notice of default to the Contractor, terminate the whole or any part of this Contract in any one of the following circumstances:

(1) If the Contractor fails to perform the work called for by this Contract within the time(s) specified herein or any extension thereof; or

(2) If the Contractor fails to perform any of the other provisions of this Contract, or so fails to prosecute the work as to endanger performance of this Contract in accordance with its terms, and in either of these two circumstances does not cure such failure within a period of 10 days (or such longer period as the Contracting Officer may authorize in writing) after receipt of notice from the Contracting Officer specifying such failure.

b. In the event the Government terminates this Contract in whole or in part as provided in paragraph a. of this clause, the Government may procure, upon such terms and in such manner as the Contracting Officer may deem appropriate, work similar to the work so terminated and the Contractor shall be liable to the Government for any excess costs for such similar work: PROVIDED, that the Contractor shall continue the performance of this Contract to the extent not terminated under the provisions of this clause.

c. Except with respect to defaults of subcontractors, the Contractor shall not be liable for any excess costs if the failure to perform the Contract arises out of causes beyond the control and without the fault or negligence of the Contractor. Such causes may include, but are not restricted to, acts of God or of the public enemy, acts of the Government in either its sovereign or contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather; but in every case the failure to perform must be beyond the control and without the fault or negligence of the Contractor. If the failure to perform is caused by the default of a subcontractor, and if such default
arises out of causes beyond the control of both the Contractor and subcontractor, and without the fault or negligence of either of them, the Contractor shall not be liable for any excess costs for failure to perform unless the supplies or services to be furnished by the subcontractor were obtainable from other sources in sufficient time to permit the Contractor to meet the required delivery schedule or other performance requirements.

d. If this Contract is terminated as provided in paragraph a. of this clause, the Government, in addition to any other rights provided in this clause, may require the Contractor to transfer title and deliver to the Government, in the manner and to the extent directed by the Contracting Officer, any of the completed or partially completed work not theretofore delivered to, and accepted by, the Government and any other property, including contract rights, specifically produced or specifically acquired for the performance of such part of this Contract as has been terminated; and the Contractor shall, upon the direction of the Contracting Officer, protect and preserve property in the possession of the Contractor in which the Government has an interest. The Government shall pay to the Contractor the contract price, if separately stated, for completed work accepted by the Government and the amount agreed upon by the Contractor and the Contracting Officer for (1) completed work for which no separate price is stated, (2) partially completed work, (3) other property described above which is accepted by the Government, and (4) the protection and preservation of property. Failure to agree shall be a dispute concerning a question of fact within the meaning of the clause of this Contract entitled "Disputes." The Government may withhold from amounts otherwise due the Contractor for such completed supplies or manufacturing materials such sum as the Contracting Officer determines to be necessary to protect the Government against loss because of outstanding liens or claims of former lienholders.

e. If, after notice of termination of this Contract under the provisions of this clause, it is determined for any reason that the Contractor was not in default under the provisions of this clause, or that the default was excusable under the provisions of this clause, the rights and obligations of the parties shall, if the Contract contains a clause providing for termination for convenience of the Government, be the same as if the notice of termination had been issued pursuant to such clause. If, after notice of termination of this Contract under the provisions of this clause, it is determined for any reason that the Contractor was not in default under the provisions of this clause, and if this Contract does not contain a clause providing for termination for convenience of the Government, the Contract shall be equitably adjusted to compensate for such termination and the Contract modified accordingly; failure to agree to any such adjustment shall be a dispute.
concerning a question of fact within the meaning of the clause of this Contract entitled "Disputes."

f. The right and remedies of the Government provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Contract.

g. As used in paragraph c. of this clause, the terms "subcontractor" and "subcontractors" mean subcontractor(s) at any tier.

6.0 PATENTS—TECHNICAL DATA—COPYRIGHTS

6.1 SUBCONTRACTIONS, PURCHASE ORDERS, AND PROCUREMENT
The Contractor shall utilize in its policies and procedures relating to subcontracts, purchase orders, and procurement hereunder, such additional DOE procurement policies in the Patents and Data area as set forth in 41 CFR, Part 9-9, or such other policies and procedures as may be specifically directed in writing by the Contracting Officer or Patent Counsel.

6.2 AUTHORIZATION AND CONSENT
The Government hereby gives its authorization and consent (without prejudice to any rights of indemnification) for all use and manufacture, in the performance of this Contract or any part hereof or any amendment hereeto or any subcontract hereunder (including any lower-tier subcontract), of any invention described in and covered by a patent of the United States. The entire liability to the Government for infringement of a patent of the United States shall be determined solely by the provisions of the indemnity clauses, if any, included in this Contract or any subcontract hereunder (including any lower-tier subcontract), and the Government assumes liability for all other infringement to the extent of the authorization and consent hereinabove granted.

6.3 NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT
The provisions of this clause shall be applicable only if the amount of this Contract exceeds $10,000.

a. The Contractor shall report to the Contracting Officer, promptly and in reasonable written detail, each notice or claim of patent or copyright infringement based on the performance of this Contract of which the Contractor has knowledge.

b. In the event of any claim or suit against the Government on account of any alleged patent or copyright infringement arising out of the performance of this Contract or out of the use of any supplies furnished or work or services performed hereunder,
the Contractor shall furnish to the Government, when requested by the Contracting Officer, all evidence and information in possession of the Contractor pertaining to such suit or claim. Such evidence and information shall be furnished at the expense of the Government except where the Contractor has agreed to indemnify the Government.

c. This clause shall be included in all subcontracts.

6.4 REPORTING OF ROYALTIES

If this Contract is in the amount which exceeds $10,000 and if any royalty payments are directly involved in this Contract or are reflected in the contract price to the Government, the Contractor agrees to report in writing to the Patent Counsel (with notification by Patent Counsel to the Contracting Officer) during the performance of this Contract and prior to its completion or final settlement the amount of any royalties or other payments paid or to be paid by it directly to others in connection with the performance of this Contract, together with the names and addresses of licensors to whom such payments are made and either the patent numbers involved or such other information as will permit identification of the patents or other basis on which the royalties are to be paid. The approval of the DQE of any individual payments or royalties shall not stop the Government at any time from contesting the enforceability, validity, or scope of, or title to, any patent under which a royalty or payments are made.

6.5 PATENT INDEMNITY

The Contractor shall indemnify the Government and its officers, agents, and employees against liability, including costs, for infringement of U.S. Letters Patent (except U.S. Letters Patent issued upon an application which is now or may hereafter be kept secret or otherwise withheld from issue by order of the Government) resulting from the Contractor's: (1) furnishing or supplying standard parts or components which have been sold or offered for sale to the public on the commercial open market; or (2) utilizing its normal practices or methods which normally are or have been used in providing goods and services on the commercial open market, in the performance of the Contract; or (3) utilizing any parts, components, practices, or methods to the extent to which the Contractor has secured indemnification from liability. The foregoing indemnity shall not apply unless the Contractor shall have been informed as soon as practicable by the Government of the suit or action alleging such infringement, and shall have been given such opportunity as is afforded by applicable laws, rules, or regulations to participate in the defense thereof; and further, such indemnity shall not apply to a claimed infringement which is settled without the consent of the Contractor, unless required by final decree of a court of competent jurisdiction or to an infringement resulting
from addition to or change in such supplies or components furnished or construction work performed which addition or change was made subsequent to delivery or performance by the Contractor.

6.6 PATENT RIGHTS

a. Definitions

(1) "Subject Invention" means any invention or discovery of the Contractor conceived or first actually reduced to practice in the course of or under this Contract, and includes any art, method, process, machine, manufacture, design, or composition of matter, or any new and useful improvement thereof, or any variety of plants, whether patented or unpatented under the Patent Laws of the United States of America or any foreign country.

(2) "Contract" means any contract, grant, agreement, understanding, or other arrangement, which includes research, development, or demonstration work, and includes any assignment or substitution of parties.

(3) "States and domestic municipal governments" means the States of the United States, the District of Columbia, Puerto Rico, the Virgin Islands, American Samoa, Guam, the Trust Territory of the Pacific Islands, and any political subdivision and agencies thereof.

(4) "Government agency" includes an executive department, independent commission, board, office, agency, administration, authority, Government corporation, or other Government establishment of the Executive Branch of the Government of the United States of America.

(5) "To the point of practical application" means to manufacture in the case of a composition or product, to practice in the case of a process, or to operate in the case of a machine and under such conditions as to establish that the invention is being worked and that its benefits are reasonably accessible to the public.

(6) "Patent Counsel" means the DOE Patent Counsel assisting the procuring activity.

(7) "Secretary" means the Secretary of DOE.

b. Allocation of Principal Rights

(1) Assignment to the Government. The Contractor agrees to assign to the Government the entire right, title, and interest throughout the world in and to each Subject
Invention, except to the extent that rights are retained by the Contractor under paragraphs b.(2) and c. of this clause.

(2) Greater Rights Determinations. The Contractor or the employee-inventor with authorization of the Contractor may request greater rights than the nonexclusive license and the foreign patent rights provided in paragraph c. of this clause on identified inventions in accordance with 41 CFR 9-9.109-6. Such requests must be submitted to the Patent Counsel (with notification by Patent Counsel to the Contracting Officer) at the time of the first disclosure pursuant to paragraph e.(2) of this clause, or not later than 9 months after conception or first actual reduction to practice, whichever occurs first, or such longer period as may be authorized by the Contracting Officer or Patent Counsel for good cause shown in writing by the Contractor.

c. Minimum Rights to the Contractor

(1) Contractor License. The Contractor reserves a revocable, nonexclusive, paid-up license in each patent application filed in any country on a Subject Invention and any resulting patent in which the Government acquires title. The license shall extend to the Contractor's domestic subsidiaries and affiliates, if any, within the corporate structure of which the Contractor is a part and shall include the right to grant sublicenses of the same scope to the extent the Contractor was legally obligated to do so at the time the Contract was awarded. The license shall be transferable only with approval of DOE except to the successor of that part of the Contractor's business to which the invention pertains.

(2) Revocation Limitations. The Contractor's nonexclusive license retained pursuant to paragraph c.(1) of this clause and sublicenses granted thereunder may be revoked or modified by DOE, either in whole or in part, only to the extent necessary to achieve expeditious practical application of the Subject Invention under DOE's published licensing regulations (10 CFR 781), and only to the extent an exclusive license is actually granted. This license shall not be revoked in that field of use and/or the geographical areas in which the Contractor, or its sublicensee, has brought the invention to the point of practical application and continues to make the benefits of the invention reasonably accessible to the public, or is expected to do so within a reasonable time.
(3) **Revocation Procedures.** Before modification or revocation of the license or sublicense, pursuant to paragraph c.(2) of this clause, DOE shall furnish the Contractor a written notice of its intention to modify or revoke the license and any sublicense thereunder, and the Contractor shall be allowed 30 days, or such longer period as may be authorized by the Patent Counsel (with notification by Patent Counsel to the Contracting Officer) for good cause shown in writing by the Contractor, after such notice to show cause why the license or any sublicense should not be modified or revoked. The Contractor shall have the right to appeal, in accordance with 10 CFR 781, any decision concerning the modification or revocation of its license or any sublicense.

(4) **Foreign Patent Rights.** Upon written request to the Patent Counsel (with notification by Patent Counsel to the Contracting Officer), in accordance with paragraph e.(2)(a) of this clause, and subject to DOE security regulations and requirements, there shall be reserved to the Contractor, or the employee-inventor with authorization of the Contractor, the patent rights to a Subject Invention in any foreign country where the Government has elected not to secure such rights provided:

(a) The recipient of such rights, when specifically requested by DOE and three years after issuance of a foreign patent disclosing said Subject Invention, shall furnish DOE a report setting forth:

1) The commercial use that is being made, or is intended to be made, of said invention, and

2) The steps taken to bring the invention to the point of practical application or to make the invention available for licensing.

(b) The Government shall retain at least an irrevocable, nonexclusive, paid-up license to make, use, and sell the invention throughout the world by or on behalf of the Government (including any Government agency) and States and domestic municipal governments, unless the Secretary or his designee determines that it would not be in the public interest to acquire the license for the States and domestic municipal governments.

(c) Subject to the rights granted in c.(1), (2), and (3) of this clause, the Secretary or his designee shall have the right to terminate the foreign patent.
rights granted in this paragraph c.(4) in whole or in part unless the recipient of such rights demonstrates to the satisfaction of the Secretary or his designee that effective steps necessary to accomplish substantial utilization of the invention have been taken or within a reasonable time will be taken.

(d) Subject to the rights granted in c.(1), (2), and (3) of this clause, the Secretary or his designee shall have the right, commencing four years after foreign patent rights are accorded under this paragraph c.(4), to require the granting of a nonexclusive or partially exclusive license to a responsible applicant or applicants, upon terms reasonable under the circumstances and in appropriate circumstances to terminate said foreign patent rights in whole or in part, following a hearing upon notice thereof to the public, upon a petition by an interested person justifying such hearing:

1) If the Secretary or his designee determines, upon review of such material as he deems relevant, and after the recipient of such rights, or other interested person, has had the opportunity to provide such relevant and material information as the Secretary or his designee may require, that such foreign patent rights have tended substantially to lessen competition or to result in undue market concentration in any section of the United States in any line of commerce to which the technology relates; or

2) Unless the recipient of such rights demonstrates to the satisfaction of the Secretary or his designee at such hearing that the recipient has taken effective steps, or within a reasonable time thereafter is expected to take such steps, necessary to accomplish substantial utilization of the invention.

d. Filing of Patent Applications

(1) With respect to each Subject Invention in which the Contractor or the inventor requests foreign patent rights in accordance with paragraph c.(4) of this clause, a request may also be made for the right to file and prosecute the U.S. application on behalf of the U.S. Government. If such request is granted, the Contractor or inventor shall file a domestic patent application on the invention within six months after the request for foreign patent
rights is granted, or such longer period of time as may be approved by the Patent Counsel for good cause shown in writing by the requester. With respect to the invention, the requester shall promptly notify the Patent Counsel (with notification by Patent Counsel to the Contracting Officer) of any decision not to file an application.

(2) For each Subject Invention on which a domestic patent application is filed by the Contractor or inventor, the Contractor or inventor shall:

(a) Within two months after the filing or within two months after submission of the invention disclosure if the patent application previously has been filed, deliver to the Patent Counsel a copy of the application as filed including the filing date and serial number;

(b) Within six months after filing the application or within six months after submission of the invention disclosure if the application has been filed previously, deliver to the Patent Counsel a duly executed and approved Assignment to the Government, on a form specified by the Government;

(c) Provide the Patent Counsel with the original patent grant promptly after a patent is issued on the application; and

(d) Not less than 30 days before the expiration of the response period for any action required by the Patent and Trademark Office, notify the Patent Counsel of any decision not to continue prosecution of the application.

(3) With respect to each Subject Invention in which the Contractor or inventor has requested foreign patent rights, the Contractor or inventor shall file a patent application on the invention in each foreign country in which such request is granted in accordance with applicable statutes and regulations and within one of the following periods:

(a) Eight months from the date of filing a corresponding United States application, or if such an application is not filed, six months from the date the request was granted;

(b) Six months from the date a license is granted by the Commissioner of Patents and Trademarks to file the
foreign patent application where such filing has been prohibited by security reasons; or.

(c) Such longer periods as may be approved by the Patent Counsel for good cause shown in writing by the Contractor or inventor.

(4) Subject to the license specified in paragraphs c. (1), (2), and (3) of this clause, the Contractor or inventor agrees to convey to the Government, upon request, the entire right, title, and interest in any foreign country in which the Contractor or inventor fails to have a patent application filed in accordance with paragraph d. (3) of this clause, or decides not to continue prosecution or to pay any maintenance fees covering the invention. To avoid forfeiture of the patent application or patent, the Contractor or inventor shall, not less than 60 days before the expiration period for any action required by any Patent Office, notify the Patent Counsel of such failure or decision, and deliver to the Patent Counsel the executed instruments necessary for the conveyance specified in this paragraph.

e. Invention Identification, Disclosures, and Reports

(1) The Contractor shall establish and maintain active and effective procedures to ensure that Subject Inventions are promptly identified and timely disclosed. These procedures shall include the maintenance of laboratory notebooks or equivalent records and any other records that are reasonably necessary to document the conception and/or the first actual reduction to practice of Subject Inventions, and records which show that the procedures for identifying and disclosing the inventions are followed. Upon request, the Contractor shall furnish the Contracting Officer a description of these procedures so that he may evaluate and determine their effectiveness.

(2) The Contractor shall furnish the Patent Counsel (with notification by Patent Counsel to the Contracting Officer) on a DOE-approved form:

(a) A written report containing full and complete technical information concerning each Subject Invention within six months after conception or first actual reduction to practice, whichever occurs first in the course of or under this Contract, but in any event prior to any on sale, public use or public disclosure of such invention known to the Contractor. The report shall identify the Contract and inventor and shall be
sufficiently complete in technical detail and appropriately illustrated by sketch or diagram to convey to one skilled in the art to which the invention pertains a clear understanding of the nature, purpose, operation, and, to the extent known, the physical, chemical, biological, or electrical characteristics of the invention. The report should also include any request for foreign patent rights under paragraph c.(4) of this clause and any request to file a domestic patent application under d.(1) of this clause. However, such requests shall be made within the period set forth in paragraph b.(2) of this clause. When an invention is reported under this paragraph e.(2)(a), it shall be presumed to have been made in the manner specified in Section (a)(1) and (2) of 42 USC 5908 unless the Contractor contends it was not so made in accordance with paragraph g.(2)(b) of this clause.

(b) Upon request, but not more than annually, interim reports on a DOE-approved form listing Subject Inventions and subcontracts awarded containing a "Patent Rights" clause for that period and certifying that:

1) The Contractor's procedures for identifying and disclosing Subject Inventions as required by this paragraph e. have been followed throughout the reporting period;

2) All Subject Inventions have been disclosed or that there are no such inventions;

3) All subcontracts containing a "Patent Rights" clause have been reported or that no such subcontracts have been awarded; and

(c) A final report on a DOE-approved form within three months after completion of the contract work listing all Subject Inventions and all subcontracts containing a "Patent Rights" clause and certifying that:

1) All Subject Inventions have been disclosed or that there were no such inventions; and

2) All subcontracts containing a "Patent Rights" clause have been reported or that no such subcontracts have been awarded.
(3) The Contractor shall obtain patent agreements to effectuate the provisions of this clause from all persons in its employ who perform any part of the work under this Contract except nontechnical personnel, such as clerical employees and manual laborers.

(4) The Contractor agrees that the Government may duplicate and disclose Subject Invention disclosures and all other reports and papers furnished or required to be furnished pursuant to this clause. If the Contractor is to file a foreign patent application on a Subject Invention, the Government agrees, upon written request, to use its best efforts to withhold publication of such invention disclosures until the expiration of the time period specified in paragraph d.(1) of this clause, but in no event shall the Government or its employees be liable for any publication thereof.

f. Publication

It is recognized that during the course of the work under this Contract, the Contractor or its employees may from time to time desire to release or publish information regarding scientific or technical developments conceived or first actually reduced to practice in the course of or under this Contract. In order that public disclosure of such information will not adversely affect the patent interests of DOE or the Contractor, patent approval for release or publication shall be secured from Patent Counsel prior to any such release or publication.

g. Forfeiture of Rights in Unreported Subject Inventions

(1) The Contractor shall forfeit to the Government, at the request of the Secretary or his designee, all rights in any Subject Invention which the Contractor fails to report to the Patent Counsel (with notification by Patent Counsel to the Contracting Officer) within six months after the time the Contractor:

(a) Files or causes to be filed a United States or foreign patent application thereon; or

(b) Submits the final report required by paragraph e.(2)(c) of this clause, whichever is later.

(2) However, the Contractor shall not forfeit rights in a Subject Invention if, within the time specified in (1)(a) or (1)(b) of this paragraph g., the Contractor:
(a) Prepared a written decision based upon a review of the record that the invention was neither conceived nor first actually reduced to practice in the course of or under the Contract and delivers the same to Patent Counsel (with notification by Patent Counsel to the Contracting Officer); or

(b) Contending that the invention is not a Subject Invention, the Contractor nevertheless discloses the invention and all facts pertinent to this contention to the Patent Counsel (with notification by Patent Counsel to the Contracting Officer); or

(c) Establishes that the failure to disclose did not result from the Contractor's fault or negligence.

(3) Pending written assignment of the patent applications and patents on a Subject Invention determined by the Secretary or his designee to be forfeited (such determination to be a final decision under the "Disputes" clause of this Contract), the Contractor shall be deemed to hold the invention and the patent applications and patents pertaining thereto in trust for the Government. The forfeiture provision of this paragraph g. shall be in addition to and shall not supersede other rights and remedies which the Government may have with respect to Subject Inventions.

h. Examination of Records Relating to Inventions

(1) The Contracting Officer or his authorized representative, until the expiration of three years after final payment under this Contract, shall have the right to examine any books (including laboratory notebooks), records, documents, and other supporting data of the Contractor which the Contracting Officer or his authorized representative reasonably deem pertinent to the discovery or identification of Subject Inventions or to determine compliance with the requirements of this clause.

(2) The Contracting Officer or his authorized representative shall have the right to review all books (including laboratory notebooks), records, and documents of the Contractor relating to the conception or first actual reduction to practice of inventions in the same field of technology as the work under this Contract to determine whether any such inventions are Subject Inventions, if the Contractor refuses or fails to:

(a) Establish the procedures of paragraph e.(1) of this clause; or
(b) Maintain and follow such procedures; or

(c) Correct or eliminate any material deficiency in the procedures within thirty (30) days after the Contracting Officer notifies the Contractor of such a deficiency.

i. Withholding of Payment (Not applicable to subcontracts)

(1) Any time before final payment of the amount of this Contract, the Contracting Officer may, if he deems such action warranted, withhold payment until a reserve not exceeding $50,000 or 5 percent of the amount of this Contract, whichever is less, shall have been set aside if in his opinion the Contractor fails to:

(a) Establish, maintain, and follow effective procedures for identifying and disclosing Subject Inventions pursuant to paragraph e.(1) of this clause, or

(b) Disclose any Subject Invention pursuant to paragraph e.(2)(a) of this clause; or

(c) Deliver the interim reports pursuant to paragraph e.(2)(b) of this clause; or

(d) Provide the information regarding subcontracts pursuant to paragraph j.(5) of this clause; or

(e) Convey to the Government in a DOE-approved form the title and/or rights of the Government in each Subject Invention as required by this clause.

(2) The reserve or balance shall be withheld until the Contracting Officer has determined that the Contractor has rectified whatever deficiencies exist and has delivered all reports, disclosures, and other information required by this clause.

(3) Final payment under this Contract shall not be made by the Contracting Officer before the Contractor delivers to the Patent Counsel all disclosures of Subject Inventions and other information required by e.(2)(a) of this clause, the final report required by e.(2)(c) of this clause, and the Patent Counsel has issued a patent clearance certification to the Contracting Officer.

(4) The Contracting Officer may, in his discretion, decrease or increase the sums withheld up to the maximum authorized above. If the Contractor is a nonprofit organization,
the maximum amount that may be withheld under this para-
graph shall not exceed $50,000 or 1 percent of the amount
of this Contract, whichever is less. No amount shall be
withheld under this paragraph while the amount specified
by this paragraph is being withheld under other provisions
of the Contract. The withholding of any amount or subse-
quently payment thereof shall not be construed as a waiver
of any rights accruing to the Government under this
Contract.

j. Subcontracts

(1) For the purpose of this paragraph, the term "Contractor"
means the party awarding a subcontract and the term
"Subcontractor" means the party being awarded a subcontract,
regardless of tier.

(2) Unless otherwise authorized or directed by the Contract-
ing Officer, the Contractor shall include the "Patent
Rights" clause of 41 CFR 9-9.107-5(a) or 41 CFR 9-9.107-
6 as appropriate, modified to identify the parties in any
subcontract hereunder having as a purpose the conduct of
research, development, or demonstration work. In the
event of refusal by a subcontractor to accept this clause,
or if in the opinion of the Contractor this clause is
inconsistent with DOE's patent policies, the Contractor:

(a) Shall promptly submit written notice to the Contract-
ing Officer setting forth reasons for the subcontrac-
tor's refusal and other pertinent information which
may expedite disposition of the matter; and

(b) Shall not proceed with the subcontract without the
written authorization of the Contracting Officer.

(3) Except as may be otherwise provided in this clause, the
Contractor shall not, in any subcontract or by using a
subcontract as consideration therefor, acquire any rights
in its subcontractor's Subject Invention for the Contrac-
tor's own use (as distinguished from such rights as may
be required solely to fulfill the Contractor's contract
obligations to the Government in the performance of this
Contract).

(4) All invention disclosures, reports, instruments, and
other information required to be furnished by the subcon-
tractor to DOE, under the provisions of a "Patent Rights"
clause in any subcontract hereunder, may, in the discretion
of the Contracting Officer, be furnished to the Contractor
for transmission to DOE.
(5) The Contractor shall promptly notify the Contracting Officer in writing upon the award of any subcontract containing a "Patent Rights" clause by identifying the subcontractor, the work to be performed under the subcontract, and the dates of award, and estimated completion. Upon the request of the Contracting Officer, the Contractor shall furnish a copy of the subcontract to the Contracting Officer.

(6) The Contractor shall identify all Subject Inventions of the subcontractor of which it acquires knowledge in the performance of this Contract and shall notify the Patent Counsel (with notification by Patent Counsel to the Contracting Officer) promptly upon the identification of the inventions.

(7) It is understood that the Government is a third party beneficiary of any subcontract clause granting rights to the Government in Subject Inventions, and the Contractor hereby assigns to the Government all rights that the Contractor would have to enforce the subcontractor's obligations for the benefit of the Government with respect to Subject Inventions. The Contractor shall not be obligated to enforce the agreements of any subcontractor hereunder relating to the obligations of the subcontractor to the Government in regard to Subject Inventions.

k. Background Patents

(1) "Background Patent" means a domestic patent covering an invention or discovery which is not a Subject Invention and which is owned or controlled by the Contractor at any time through the completion of this Contract:

(a) Which the Contractor, but not the Government, has the right to license to others without obligation to pay royalties thereon, and

(b) Infringement of which cannot reasonably be avoided upon the practice of any specific process, method, machine, manufacture, or composition of matter (including relatively minor modifications thereof) which is a subject of the research, development, or demonstration work performed under this Contract.

(2) The Contractor agrees to and does hereby grant to the Government a royalty-free, nonexclusive license under any Background Patent for purposes of practicing a subject of this Contract by or for the Government in research, development, and demonstration work only.
(3) The Contractor also agrees that upon written application by the DOE, it will grant to responsible parties for purposes of practicing a subject of this Contract, nonexclusive licenses under any Background Patent on terms that are reasonable under the circumstances. If, however, the Contractor believes that exclusive or partially exclusive rights are necessary to achieve expeditious commercial development or utilization, then a request may be made to DOE for DOE approval of such licensing by the Contractor.

(4) Notwithstanding the foregoing paragraph k.(3), the Contractor shall not be obligated to license any Background Patent if the Contractor demonstrates to the satisfaction of the Secretary or his designee that:

(a) A competitive alternative to the subject matter covered by said Background Patent is commercially available or readily introduceable from one or more other sources; or

(b) The Contractor or its licensees are supplying the subject matter covered by said Background Patent in sufficient quantity and at reasonable prices to satisfy market needs, or to have taken effective steps or within a reasonable time are expected to take effective steps to so supply the subject matter.

1. Atomic Energy

(1) No claim for pecuniary award or compensation under the provisions of the Atomic Energy Act of 1954, as amended, shall be asserted by the Contractor or its employees with respect to any invention or discovery made or conceived in the course of or under this Contract.

(2) Except as otherwise authorized in writing by the Contracting Officer, the Contractor will obtain patent agreements to effectuate the provisions of paragraph 1.(1) of this clause from all persons who perform any part of the work under this Contract, except nontechnical personnel, such as clerical employees and manual laborers.

m. Limitation of Rights

Nothing contained in this "Patent Rights" clause shall be deemed to give the Government any rights with respect to any invention other than a Subject Invention except as set forth in the "Patent Rights" clause of this Contract with respect to Background Patents.
6.7 RIGHTS IN TECHNICAL DATA

a. Definitions

(1) "Technical Data" means recorded information, regardless of form or characteristic, of a scientific or technical nature. It may, for example, document research, experimental, developmental, or demonstration, or engineering work, or be usable or used to define a design or process, or to procure, produce, support, maintain, or operate materiel. The data may be graphic or pictorial delineations in media such as drawings or photographs, text in specifications or related performance or design type documents, or computer software (including computer programs, computer software data bases, and computer software documentation). Examples of technical data include research and engineering data, engineering drawings and associated lists, specifications, standards, process sheets, manuals, technical reports, catalog item identification, and related information. Technical data as used herein does not include financial reports, cost analyses, and other information incidental to contract administration.

(2) "Proprietary Data" means technical data which embody trade secrets developed at private expense, such as design procedures or techniques, chemical composition of materials, or manufacturing methods, processes, or treatments, including minor modifications thereof, provided that such data:

(a) Are not generally known or available from other sources without obligation concerning their confidentiality,

(b) Have not been made available by the owner to others without obligation concerning its confidentiality,

(c) Are not already in the possession of another without obligation concerning its confidentiality.

(3) "Contract Data" means technical data first produced in the course of or under the Contract, technical data which are specified to be delivered in the Contract, technical data that may be called for under the "Additional Technical Data Requirements" clause of the Contract, if any, or technical data actually delivered in connection with the Contract.
(4) "Unlimited Rights" means rights to use, duplicate, or disclose technical data, in whole or in part, in any manner and for any purpose whatsoever, and to permit others to do so.

b. Allocation of Rights

(1) Government Rights. The Government shall have:

(a) Unlimited rights in contract data except as otherwise provided below with respect to proprietary data.

(b) The right to remove, cancel, correct, or ignore any marking not authorized by the terms of this Contract on any technical data furnished hereunder, if in response to a written inquiry by DOE concerning the propriety of the markings, the Contractor fails to respond thereto within 60 days or fails to substantiate the propriety of the markings. In either case, DOE will notify the Contractor of the action taken.

(c) No rights under this Contract in any technical data which is not contract data.

(2) Contractor Rights. The Contractor shall have:

(a) The right to withhold proprietary data in accordance with the provisions of this clause.

(b) The right to use for its private purposes, subject to patent, security, or other provisions of this Contract, contract data it first produces in the course of or under this Contract provided the data requirements of this Contract have been met as of the date of the private use of such data. The Contractor agrees that to the extent it receives or is given access to proprietary data or other technical, business, or financial data in the form of recorded information from DOE or a DOE contractor or subcontractor, the Contractor shall treat such data in accordance with any restrictive legend contained thereon, unless use is specifically authorized by prior written approval of the Contracting Officer.

(3) Nothing contained in the "Rights in Technical Data" clause shall imply a license to the Government under any patent or be construed as affecting the scope of any licenses or other rights otherwise granted to the Government under any patent.
c. **Copyrighted Material**

(1) The Contractor shall not, without prior written authorization of the Contracting Officer, establish a claim to statutory copyright in any contract data first produced in the course of or under the Contract. To the extent such authorization is granted, the Government reserves for itself and others acting on its behalf a royalty-free, nonexclusive, irrevocable, worldwide license for governmental purposes to publish, distribute, translate, duplicate, exhibit, and perform any such data copyrighted by the Contractor.

(2) The Contractor agrees not to include in the technical data delivered under the Contract any material copyrighted by the Contractor and not to knowingly include any material copyrighted by others without first obtaining at no cost a license therein for the benefit of the Government of the same scope as set forth in paragraph c.(1) above. If such royalty-free license is unavailable and the Contractor nevertheless determines that such copyrighted material must be included in the technical data to be delivered, rather than merely incorporated therein by reference, the Contractor shall request the written authorization of the Contracting Officer to include such copyrighted material in the technical data without a license.

d. **Subcontracting**

It is the responsibility of the Contractor to obtain from its subcontractors technical data and rights therein, on behalf of the Government, necessary to fulfill the Contractor's obligations to the Government with respect to such data. In the event of refusal by a subcontractor to accept a clause affording the Government such rights, the Contractor shall:

(1) Promptly submit written notice to the Contracting Officer setting forth reasons for the subcontractor refusal and other pertinent information which may expedite disposition of the matter; and

(2) Not proceed with the subcontract without the written authorization of the Contracting Officer.

e. **Withholding of Proprietary Data**

Notwithstanding the inclusion of the "Additional Technical Data Requirements" clause in this Contract or any provision of this Contract specifying the delivery of technical data, the Contractor may withhold proprietary data from delivery, provided
that the Contractor furnishes in lieu of any such proprietary data so withheld technical data disclosing the source, size, configuration, mating and attachment characteristics, functional characteristics and performance requirements ("Form, Fit, and Function" data, e.g., specification control drawings, catalog sheets, envelope drawings, etc.) or a general description of such proprietary data where "Form, Fit, and Function" data are not applicable. The Government will acquire no rights to any proprietary data so withheld except that such data shall be subject to the "inspection rights" provisions of paragraph f., and, if included, the "limited rights in proprietary data" provisions of paragraph g. and the licensing provisions of paragraph h.

f. Inspection Rights

Except as may be otherwise specified in this Contract for specific items of proprietary data which are not subject to this paragraph, the Contracting Officer's representatives, at all reasonable times up to three (3) years after final payment under this Contract, may inspect at the Contractor's facility any proprietary data withheld under paragraph e. and not furnished under paragraph g. for the purposes of verifying that such data properly fell within the withholding provision of paragraph e., or for evaluating work performance.

g. Limited Rights in Proprietary Data

Except as may be otherwise specified in this Contract as technical data which are not subject to this paragraph, the Contractor shall, upon written request from the Contracting Officer at any time prior to three (3) years after final payment under this Contract, promptly deliver to the Government any "proprietary data" withheld pursuant to paragraph e. of the "Rights in Technical Data" clause of this Contract. The following legend and no other is authorized to be affixed on any "proprietary data" delivered pursuant to this provision, provided the "proprietary data" meets the conditions for initial withholding under paragraph e. of the "Rights in Technical Data" clause. The Government will thereafter treat the "proprietary data" in accordance with such legend.

LIMITED RIGHTS LEGEND

This "proprietary data," furnished under Contract No. ______ with the United States Department of Energy (and purchase order No. ______ if applicable), may be duplicated and used by the Government with the express limitations that the "proprietary data" may not be disclosed outside the Government or be used for purposes of manufacture without prior permission of the Contractor subject to the following provisions:
(1) This "proprietary data" may be disclosed for evaluation purposes under the restriction that the proprietary data be retained in confidence and not be further disclosed;

(2) This "proprietary data" may be disclosed to other Contractors participating in the Government's program of which this Contract is a part for information or use in connection with the work performed under their contracts and under the restriction that the "proprietary data" be retained in confidence and not be further disclosed; or

(3) This "proprietary data" may be used by the Government or others on its behalf for emergency repair or overhaul work under the restriction that the "proprietary data" be retained in confidence and not be further disclosed.

This legend shall be marked on any reproduction of this data in whole or in part.

h. **Contractor Licensing**

Except as may be otherwise specified in this Contract as technical data not subject to this paragraph, the Contractor agrees that upon written application by DOE, it will grant to the Government and responsible third parties, for purposes of practicing a subject of this Contract, nonexclusive licenses under any contract data which are proprietary data on terms and conditions reasonable under the circumstances including appropriate provisions for confidentiality; provided, however, the Contractor shall not be obligated to license any proprietary contract data if the Contractor demonstrates to the satisfaction of the Secretary or his designee that:

(1) Such data are not essential to the manufacture or practice of hardware designed or fabricated, or processes developed, under this Contract;

(2) Such data, in the form of results obtained by their use, have a commercially competitive alternative available or readily introduceable from one or more other sources;

(3) Such data, in the form of results obtained by their use, are being supplied by the Contractor or its licensees in sufficient quantity and at reasonable prices to satisfy market needs, or the Contractor or its licensees have taken effective steps or within a reasonable time are expected to take effective steps to so supply such data in the form of results obtained by its use; or
(4) Such data, in the form of results obtained by their use, can be furnished by another firm skilled in the art of manufacturing items or performing processes of the same general type and character necessary to achieve the contract results.

6.8 ADDITIONAL TECHNICAL DATA REQUIREMENTS

a. In addition to the technical data specified elsewhere in this Contract to be delivered, the Contracting Officer may at any time during the contract performance or within one year after final payment call for the Contractor to deliver any technical data first produced or specifically used in the course of or under this Contract except technical data pertaining to items of standard commercial design.

b. The provisions of the "Rights in Technical Data" clause included in this Contract are applicable to all technical data called for under this "Additional Technical Data Requirements" clause. Accordingly, nothing contained in this clause shall require the Contractor to actually deliver any technical data, the delivery of which is excused by paragraph e. of the "Rights in Technical Data" clause.

c. When technical data are to be delivered under this clause, the Contractor will be compensated for appropriate costs for converting such data into the prescribed form, for reproduction, and for delivery.

6.9 RIGHTS TO PROPOSAL DATA

Except as may be otherwise specifically provided in this Contract, it is agreed that as a condition of the award of this Contract, and notwithstanding the provisions of any notice appearing on the proposal, the Government shall have the right to use, duplicate, and disclose, and have others do so for any purpose whatsoever, the technical data contained in the proposal upon which this Contract is based.

7.0 SOCIOECONOMIC

7.1 BUY AMERICAN ACT SUPPLY AND SERVICE CONTRACTS

a. In acquiring end products, the Buy American Act (41 USC 10a-d) provides that the Government give preference to domestic source end products. For the purpose of this clause:

(1) "Components" means those articles, materials, and supplies which are directly incorporated in the end products;
(2) "End products" means those articles, materials, and supplies which are to be acquired under this Contract for public use; and

(3) A "domestic source end product" means (1) an unmanufactured end product which has been mined or produced in the United States and (ii) an end product manufactured in the United States if the cost of the components thereof which are mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. For the purpose of this a.(3)(ii), components of foreign origin of the same type or kind as products referred to in b.(2) or (3) of this clause shall be treated as components mined, produced, or manufactured in the United States.

b. The Contractor agrees that there will be delivered under this Contract only domestic source end products, except end products:

(1) Which are for use outside the United States;

(2) Which the Government determines are not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities and of a satisfactory quality;

(3) As to which the Secretary or his designee determines the domestic preference to be inconsistent with the public interest; or

(4) As to which the Secretary or his designee determines the cost to the Government to be unreasonable.

(The foregoing requirements are administered in accordance with Executive Order 10582, dated December 17, 1954.)

7.2 CLEAN AIR AND WATER

(Applicable only if the Contract exceeds $100,000, or the Contracting Officer has determined that the orders under an indefinite quantity contract in any one year will exceed $100,000, or a facility to be used has been the subject of a conviction under the Clean Air Act (42 USC 1857c-8(c)(1)) or the Federal Water Pollution Control Act (33 USC 1319(c)) and is listed by EPA, or the Contract is not otherwise exempt.)

a. The Contractor agrees as follows:

(1) To comply with all the requirements of Section 114 of the Clean Air Act, as amended (42 USC 1857, et seq., as
amended by Public Law 91-604), and Section 308 of the Federal Water Pollution Control Act (33 USC 1251, as amended by Public Law 92-500), respectively, relating to inspection, monitoring, entry, reports, and information, as well as other requirements specified in Section 114 and Section 308 of the Air Act and the Water Act, respectively, and all regulations and guidelines issued there-under before the award of this Contract.

(2) That no portion of the work required by this prime contract will be performed in a facility listed on the Environmental Protection Agency list of violating facilities on the date when this Contract was awarded unless and until the EPA eliminates the name of such facility or facilities from such listing.

(3) To use its best efforts to comply with clean air standards and clean water standards at the facilities in which the Contract is being performed.

(4) To insert the substance of the provisions of this clause in any nonexempt subcontract, including this paragraph (4).

b. The terms used in this clause have the following meanings:

(1) The term "Air Act" means the Clean Air Act, as amended (42 USC 1857 et seq., as amended by Public Law 91-604).

(2) The term "Water Act" means Federal Water Pollution Control Act, as amended (33 USC 1251 et seq., as amended by Public Law 92-500).

(3) The term "clean air standards" means any enforceable rules, regulations, guidelines, standards, limitations, orders, controls, prohibitions, or other requirements which are contained in, issued under, or otherwise adopted pursuant to the Air Act or Executive Order 11738, an applicable implementation plan as described in Section 110(d) of the Clean Air Act (42 USC 1857c-5(d)), an approved implementation procedure or plan under Section 111(c) or Section 111(d), respectively, of the Air Act (42 USC 1857c-6(c) or (d)), or an approved implementation procedure under Section 112(d) of the Air Act (42 USC 1857c-7(d)).

(4) The term "clean water standards" means any enforceable limitation, control, condition, prohibition, standard, or other requirement which is promulgated pursuant to the Water Act or contained in a permit issued to a discharger
by the Environmental Protection Agency or by a state under an approved program, as authorized by Section 402 of the Water Act (33 USC 1342), or by a local government to ensure compliance with pretreatment regulations as required by Section 307 of the Water Act (33 USC 1317).

(5) The term "compliance" means compliance with clean air or water standards. Compliance shall also mean compliance with a schedule or plan ordered or approved by a court of competent jurisdiction, the Environmental Protection Agency, or an air or water pollution control agency in accordance with the requirement of the Air Act or Water Act and regulations issued pursuant thereto.

(6) The term "facility" means any building, plant, installation, structure, mine, vessel, or other floating craft, location, or site of operations, owned, leased, or supervised by a contractor, subcontractor, to be utilized in the performance of a contract or subcontract. Where a location or site of operations contains or includes more than one building, plant, installation, or structure, the entire location shall be deemed to be a facility except where the Director, Office of Federal Activities, Environmental Protection Agency, determines that independent facilities are colocated in one geographical area.

7.3 REQUIRED SOURCE FOR JEWEL BEARING

a. For the purpose of this clause:

(1) "Jewel bearing" means a piece of synthetic sapphire or ruby of any shape, except a phonograph needle, which has one or more polished surfaces and which is suitable for use in an instrument, mechanism, subassembly, or part without any additional processing. A jewel bearing may be either unmounted or mounted into a ring or bushing. Examples of jewel bearings are: watch holes—olive, watch holes—straight, pallet stones, roller jewels (jewel pins), end stones (caps), vee (cone) jewels, instrument rings, cups, double cups, and orifice jewels. As used herein, the term "jewel bearings" includes "related items."

(2) "Related items" means other synthetic sapphire or ruby components. Examples of related items are pivots, knife edges, insulators, spacers, windows, and striking surfaces other than pallet stones.

(3) "Price list" means the official U.S. Government Jewel Bearing Price List for jewel bearings produced by the
William Langer Jewel Bearing Plant. This list is issued periodically by the General Services Administration.

(4) "Plant" means the Government-owned William Langer Jewel Bearing Plant, Rolla, North Dakota.

(5) "Military Standard Jewel Bearing" means a jewel bearing conforming to Military Specification No. MIL-B-27497 (latest revision) entitled "Bearings, Jewel, Sapphire or Ruby, Synthetic."

b. Jewel bearings required in the performance of this Contract shall be procured from the Plant at prices established in the price list dated (date to be filled in by Contracting Officer). Each purchase order issued to the Plant under this Contract shall include the prime contract number and date of the price list cited above. The Contractor agrees that the quantities, types, and sizes (including tolerances) of jewel bearings so ordered will be those required for the performance of this Contract. Within 90 calendar days after the effective date of this Contract, the Contractor shall furnish to the Contracting Officer a certification that the required jewel bearings were ordered pursuant to this clause. The Contractor agrees to notify the Contracting Officer promptly of the rejection of its (or any subcontractor's) purchase order in whole or in part by the Plant. The requirement for purchase and use of jewel bearings from the Plant will be waived to the extent of orders rejected because of the Plant's inability to deliver. If such a waiver is granted, an equitable adjustment shall be made in the contract price or delivery schedule, or both, in accordance with the "Changes" clause of this Contract. Further, the requirement for use (but not the requirement for purchase from the Plant) of jewel bearings may be waived by the Contracting Officer when such waiver is determined by him to be consistent with established policy.

c. The Contractor agrees to use the Langer-made jewel bearings in the production of subassemblies or end items either under this Contract or in its commercial production.

d. Whenever it is necessary for the Contractor or any subcontractor to redesign or reengineer jeweled items in order to satisfy specific performance requirements, the Contractor or subcontractor shall provide in such redesign for the use of military standard jewel bearings. This requirement does not apply when the dimensional tolerances or configurations of military standard jewel bearings are such that their use in the product would prevent attainment of the required level of performance specified for the item. However, when one or more nonstandard bearings must be used to satisfy performance requirements of
the jeweled item but military standard jewel bearings will function satisfactorily for other applications within the same item, the item will be required to be redesigned to provide for the use of military standard jewel bearings in such "other" applications. The Contractor or subcontractor is not required to redesign a jeweled item solely for the purpose of converting from the use of nonstandard to military standard jewel bearings. Nothing in this Contract shall prevent any Contractor or subcontractor from voluntarily redesigning a jeweled item solely to accommodate the use of military standard jewel bearings.

e. If at the end of the contract period, the total quantity of end items actually ordered under this Contract is less than the total estimated quantity, and the Contractor, pursuant to paragraph b. of this clause, has purchased a larger quantity of Langer-made jewel bearings than used in deliveries made under this Contract, an equitable adjustment shall be made (if requested by the Contractor within 90 days after the end of the contract period) to reimburse the Contractor for any additional costs resulting from such excess purchase but in no event shall such additional costs cover more jewel bearings than necessary to deliver the total estimated quantity of end items. Such excess jewel bearings shall be disposed of as directed by the Contracting Officer. However, such excess jewel bearings may be used in partial satisfaction of the requirements to purchase Langer-made jewel bearings pursuant to paragraph b. of this clause where a subsequent contract to furnish similar end items to the Government is entered into with the same Contractor. In this situation, the requirement to purchase and use jewel bearings from the Plant will be waived up to the amount of such excess jewel bearings in Contractor's possession upon submission of a written request by the Contractor. Such request shall contain documented evidence in support of the waiver of purchase and nonuse of such excess jewel bearings. If such waiver is granted, an equitable adjustment to the extent of differences in price lists shall be made in the contract price in accordance with the "Changes" clause of this Contract.

f. The Contractor agrees to retain for 3 years from the date of final payment under this Contract and upon request of the Contracting Officer to make available during that period records showing compliance with this clause.

g. The Contractor agrees to insert this clause, including this paragraph g., in every subcontract and purchase order issued in performance of this Contract unless it knows that the subassembly, component, or part being purchased does not contain jewel bearings.
7.4 COVENANT AGAINST CONTINGENT FEES

The Contractor warrants that no person or selling agency has been employed or retained to solicit or secure this Contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the Contractor for the purpose of securing business. For breach or violation of this warranty, the Government shall have the right to annul this Contract without liability or in its discretion to deduct from the contract price or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

7.5 OFFICIALS NOT TO BENEFIT

No member of or delegate to Congress, or resident commissioner, shall be admitted to any share or part of this Contract, or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this Contract if made with a corporation for its general benefit.

7.6 UTILIZATION OF MINORITY BUSINESS ENTERPRISES

(Applicable only if the Contract exceeds $10,000.)

a. It is the policy of the Government that minority business enterprises shall have the maximum practicable opportunity to participate in the performance of Government contracts.

b. The Contractor agrees to use its best efforts to carry out this policy in the award of its subcontracts to the fullest extent consistent with the efficient performance of this Contract. As used in this Contract, the term "minority business enterprise" means a business, at least 50 percent of which is owned by minority group members or, in case of publicly owned businesses, at least 51 percent of the stock of which is owned by minority group members. For the purposes of this definition, minority group members are Negroes, Spanish-speaking American persons, American-Orientals, American-Indians, American-Eskimos, and American-Aleuts. Contractors may rely on written representations by subcontractors regarding their status as minority business enterprises in lieu of an independent investigation.

7.7 UTILIZATION OF SMALL BUSINESS CONCERNS

(Applicable only if the Contract exceeds $10,000.)
a. It is the policy of the Government as declared by the Congress that a fair proportion of the purchases and contracts for supplies and services for the Government be placed with small business concerns.

b. The Contractor agrees to accomplish the maximum amount of subcontracting to small business concerns that the Contractor finds to be consistent with the efficient performance of this Contract.

7:8 UTILIZATION OF LABOR SURPLUS AREA CONCERNS

(Applicable only if the Contract exceeds $10,000.)

a. It is the policy of the Government to award contracts to labor surplus area concerns that (1) have been certified by the Secretary of Labor (hereafter referred to as certified-eligible concerns with first or second preferences) regarding the employment of a proportionate number of disadvantaged individuals and have agreed to perform substantially (i) in or near sections of concentrated unemployment or underemployment or in persistent or substantial labor surplus areas, or (ii) in other areas of the United States, respectively, or (2) are noncertified concerns which have agreed to perform substantially in persistent or substantial labor surplus areas, where this can be done consistent with the efficient performance of the Contract and at prices no higher than are obtainable elsewhere. The Contractor agrees to use its best efforts to place its subcontracts in accordance with this policy.

b. In complying with paragraph a. of this clause and with paragraph b. of the clause of this Contract entitled "Utilization of Small Business Concerns," the Contractor, in placing its subcontracts, shall observe the following order of preference: (1) certified-eligible concerns with a first preference which are also small business concerns; (2) other certified-eligible concerns with a first preference; (3) certified-eligible concerns with a second preference which are also small business concerns; (4) other certified-eligible concerns with a second preference; (5) persistent or substantial labor surplus area concerns which are also small business concerns; (6) other persistent or substantial labor surplus area concerns; and (7) small business concerns which are not labor surplus area concerns.

7.9 MINORITY BUSINESS ENTERPRISES SUBCONTRACTING PROGRAM

(Unless otherwise specified in the Schedule, the following clause is applicable if the Contract exceeds $500,000.)
a. The Contractor agrees to establish and conduct a program which will enable minority business enterprises (as defined in the clause entitled "Utilization of Minority Business Enterprises") to be considered fairly as subcontractors and suppliers under this Contract. In this connection, the Contractor shall:

(1) Designate a liaison officer who will administer the Contractor's minority business enterprises program.

(2) Provide adequate and timely consideration of the potentialities of known minority business enterprises in all "make-or-buy" decisions.

(3) Assure that known minority business enterprises will have an equitable opportunity to compete for subcontracts, particularly by arranging solicitations, time for the preparation of bids, quantities, specifications, and delivery schedules so as to facilitate the participation of minority business enterprises.

(4) Maintain records showing (i) procedures which have been adopted to comply with the policies set forth in this clause, including the establishment of a source list of minority business enterprises, (ii) awards to minority business enterprises on the source list, and (iii) specific efforts to identify and award contracts to minority business enterprises.

(5) Include the "Utilization of Minority Business Enterprises" clause in subcontracts which offer substantial minority business enterprises subcontracting opportunities.

(6) Cooperate with the Contracting Officer in any studies and surveys of the Contractor's minority business enterprises procedures and practices that the Contracting Officer may from time to time conduct.

(7) Submit periodic reports of subcontracting to known minority business enterprises with respect to the records referred to in subparagraph (4), above, in such form and manner and at such time (not more often than quarterly) as the Contracting Officer may prescribe.

b. The Contractor further agrees to insert, in any subcontract hereunder which may exceed $500,000, provisions which shall conform substantially to the language of this clause, including this paragraph b., and to notify the Contracting Officer of the names of such subcontractors.
7.10 SMALL BUSINESS SUBCONTRACTING PROGRAM

(Unless otherwise specified in the Schedule, the following clause is applicable if the Contract exceeds $500,000.)

a. The Contractor agrees to establish and conduct a small business subcontracting program which will enable small business concerns to be considered fairly as subcontractors and suppliers under this Contract. In this connection, the Contractor shall:

(1) Designate a liaison officer who will (i) maintain liaison with the Government on small business matters, (ii) supervise compliance with the "Utilization of Small Business Concerns" clause, and (iii) administer the Contractor's "Small Business Subcontracting Program."

(2) Provide adequate and timely consideration of the potentialities of small business concerns in all "make-or-buy" decisions.

(3) Assure that small business concerns will have an equitable opportunity to compete for subcontracts, particularly by arranging solicitations, time for the preparation of bids, quantities, specifications, and delivery schedules so as to facilitate the participation of small business concerns. Where the Contractor's lists of potential small business subcontractors are excessively long, reasonable effort shall be made to give all such small business concerns an opportunity to compete over a period of time.

(4) Maintain records showing (i) whether each prospective subcontractor is a small business concern, (ii) procedures which have been adopted to comply with the policies set forth in this clause, and (iii) with respect to the letting of any subcontract (including purchase orders) exceeding $10,000, information substantially as follows:

(a) Whether the award went to large or small business.

(b) Whether less than three or more than two small business firms were solicited.

(c) The reason for nonsolicitation of small business if such was the case.

(d) The reason for small business failure to receive the award if such was the case when small business was solicited.
The records maintained in accordance with (iii) above may be in such form as the Contractor may determine, and the information shall be summarized quarterly and submitted by the purchasing department of each individual plant or division to the Contractor's cognizant small business liaison officer. Such quarterly summaries will be considered to be management records only and need not be submitted routinely to the Government; however, records maintained pursuant to this clause will be kept available for review by the Government until the expiration of one year after the award of this Contract, or for such longer period as may be required by any other clause of this Contract or by applicable law or regulation.

(5) Notify the Contracting Officer before soliciting bids or quotations on any subcontract (including purchase orders) in excess of $10,000 if (i) no small business concern is to be solicited, and (ii) the Contracting Officer's consent to the subcontract (or ratification) is required by a "Subcontracts" clause in this Contract. Such notice will state the Contractor's reasons for nonsolicitation of small business concerns, and will be given as early in the procurement cycle as possible so that the Contracting Officer may give SBA timely notice to permit SBA a reasonable period to suggest potentially qualified small business concerns through the Contracting Officer. In no case will the procurement action be held up when to do so would, in the Contractor's judgment, delay performance under the Contract.

(6) Include the "Utilization of Small Business Concerns" clause in subcontracts which offer substantial small business subcontracting opportunities.

(7) Cooperate with the Contracting Officer in any studies and surveys of the Contractor's subcontracting procedures and practices that the Contracting Officer may from time to time conduct.

(8) Submit quarterly reports of subcontracting to small business concerns on either Optional Form 61, Small Business Subcontracting Program Quarterly Report of Participating Large Company on Subcontract Commitments to Small Business Concerns, or such other form as may be specified in the Contract. Except as otherwise provided in this Contract, the reporting requirements of this subparagraph (8) do not apply to small business contractors, small business subcontractors, educational and nonprofit institutions, and contractors or subcontractors for standard commercial items.
b. A "small business concern" is a concern that meets the pertinent criteria established by the Small Business Administration and set forth in paragraph 1-1.701 of the Federal Procurement Regulations.

c. The Contractor agrees that, in the event it fails to comply with its contractual obligations concerning the small business subcontracting program, this Contract may be terminated, in whole or in part, for default.

d. The Contractor further agrees to insert, in any subcontract hereunder which may exceed $500,000 and which contains the "Utilization of Small Business Concerns" clause, provisions which shall conform substantially to the language of this clause, including this paragraph d., and to notify the Contracting Officer of the names of such subcontractors.

7.11 LABOR SURPLUS AREA SUBCONTRACTING PROGRAM

(Unless otherwise specified in the Schedule, the following clause is applicable if the Contract exceeds $500,000.)

a. The Contractor agrees to establish and conduct a program which will encourage labor surplus area concerns to compete for subcontracts within their capabilities. In this connection, the Contractor shall:

(1) Designate a liaison officer who will (i) maintain liaison with duly authorized representatives of the Government on labor surplus area matters, (ii) supervise compliance with the "Utilization of Concerns in Labor Surplus Areas" clause, and (iii) administer the Contractor's "Labor Surplus Area Subcontracting Program";

(2) Provide adequate and timely consideration of the potentialities of labor surplus area concerns in all "make-or-buy" decisions;

(3) Assure that labor surplus area concerns will have an equitable opportunity to compete for subcontracts, particularly by arranging solicitations, time for the preparation of bids, quantities, specifications, and delivery schedules so as to facilitate the participation of labor surplus area concerns;

(4) Maintain records showing procedures which have been adopted to comply with the policies set forth in this clause. Records maintained pursuant to this clause will be kept available for review by the Government until the expiration of one year after the award of this Contract,
or for such longer period as may be required by any other clause of this Contract or by applicable law or regulations; and

(5) Include the "Utilization of Concerns in Labor Surplus Areas" clause in subcontracts which offer substantial labor surplus area subcontracting opportunities.

b. A "labor surplus area concern" is a concern that (1) has been certified by the Secretary of Labor (hereafter referred to as a certified-eligible concern) regarding the employment of a proportionate number of disadvantaged individuals and has agreed to perform substantially in or near sections of concentrated unemployment or underemployment, in persistent or substantial labor surplus areas, or in other areas of the United States, or (2) is a noncertified concern which has agreed to perform a substantial proportion of a contract in persistent or substantial labor surplus areas. A certified-eligible concern shall be deemed to have performed a substantial proportion of a contract in or near sections of concentrated unemployment or underemployment, in persistent or substantial labor surplus areas, or in other areas if the costs that the concern will incur on account of manufacturing or production in or near such sections or in such areas (by itself, if a certified concern, or by certified concerns acting as first-tier subcontractors) amount to more than 25 percent of the contract price. A concern shall be deemed to have performed a substantial proportion of a contract in persistent or substantial labor surplus areas (by itself or its first-tier subcontractors) if the costs that the concern will incur on account of production or manufacturing in such areas amount of more than 50 percent of the contract price.

c. The Contractor further agrees to insert, in any subcontract hereunder which may exceed $500,000 and which contains the "Utilization of Concerns in Labor Surplus Areas" clause, provisions which shall conform substantially to the language of this clause, including this paragraph c., and to notify the Contracting Officer of the names of such subcontractors.

7.12 CONVICT LABOR

In connection with the performance of work under this Contract, the Contractor agrees not to employ any person undergoing sentence of imprisonment except as provided by Public Law 89-176, September 10, 1965 (18 USC 4082(c)(2)) and Executive Order 11755, December 29, 1973.

7.13 DISABLED VETERANS AND VETERANS OF THE VIETNAM ERA

(Applicable only to nonexempt contracts of $10,000 or more.)
a. The Contractor will not discriminate against any employee or applicant for employment because he or she is a disabled veteran or veteran of the Vietnam era in regard to any position for which the employee or applicant for employment is qualified. The Contractor agrees to take affirmative action to employ, advance in employment, and otherwise treat qualified disabled veterans and veterans of the Vietnam era without discrimination based upon their disability or veterans status in all employment practices such as the following: employment, upgrading, demotion or transfer, recruitment, advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship.

b. The Contractor agrees that all suitable employment openings of the Contractor which exist at the time of the execution of this Contract and those which occur during the performance of this Contract, including those not generated by this Contract and including those occurring at an establishment of the Contractor other than the one wherein the Contract is being performed but excluding those of independently operated corporate affiliates, shall be listed at an appropriate local office of the State employment service system wherein the opening occurs. The Contractor further agrees to provide such reports to such local office regarding employment openings and hires as may be required.

State and local government agencies holding Federal contracts of $10,000 or more shall also list all their suitable openings with the appropriate office of the State employment service, but are not required to provide those reports set forth in paragraphs d. and e.

c. Listing of employment openings with the employment service system pursuant to this clause shall be made at least concurrently with the use of any other recruitment source or effort and shall involve the normal obligations which attach to the placing of a bona fide job order, including the acceptance of referrals of veterans and nonveterans. The listing of employment openings does not require the hiring of any particular job applicant or from any particular group of job applicants, and nothing herein is intended to relieve the Contractor from any requirements in executive orders or regulations regarding nondiscrimination in employment.

d. The reports required by paragraph b. of this clause shall include, but not be limited to, periodic reports which shall be filed at least quarterly with the appropriate local office or, where the Contractor has more than one hiring location in a State, with the central office of that State employment service. Such reports shall indicate for each hiring location
(i) the number of individuals who were hired during the reporting period, (ii) the number of nondisabled veterans of the Vietnam era hired, (iii) the number of disabled veterans of the Vietnam era hired, and (iv) the total number of disabled veterans hired. The reports should include covered veterans hired for on-the-job training under 38 USC 1787. The Contractor shall submit a report within 30 days after the end of each reporting period wherein any performance is made on this Contract identifying data for each hiring location. The Contractor shall maintain at each hiring location copies of the reports submitted until the expiration of one year after final payment under the Contract, during which time these reports and related documentation shall be made available, upon request, for examination by any authorized representatives of the Contracting Officer or of the Secretary of Labor. Documentation would include personnel records respecting job openings, recruitment, and placement.

e. Whenever the Contractor becomes contractually bound by the listing provisions of this clause, it shall advise the employment service system in each State where it has establishments of the name and location of each hiring location in the State. As long as the Contractor is contractually bound to these provisions and has so advised the State system, there is no need to advise the State system of subsequent contracts. The Contractor may advise the State system when it is no longer bound by this Contract clause.

f. This clause does not apply to the listing of employment openings which occur and are filled outside of the 50 States, the District of Columbia, Puerto Rico, Guam, and the Virgin Islands.

g. The provisions of paragraphs b., c., d., and e. of this clause do not apply to openings which the Contractor proposes to fill from within its own organization or to fill pursuant to a customary and traditional employer-union hiring arrangement. This exclusion does not apply to a particular opening once an employer decides to consider applicants outside of its own organization or employer-union arrangement for that opening.

h. As used in this clause:

(1) "All suitable employment openings" includes, but is not limited to, openings which occur in the following job categories: production and nonproduction; plant and office; laborers and mechanics; supervisory and nonsupervisory; technical; and executive, administrative, and professional openings which are compensated on a salary basis of less than $25,000 per year. The term includes
full-time employment, temporary employment of more than three days' duration, and part-time employment. It does not include openings which the Contractor proposes to fill from within its own organization or to fill pursuant to a customary and traditional employer-union hiring arrangement nor openings in an educational institution which are restricted to students of that institution. Under the most compelling circumstances, an employment opening may not be suitable for listing, including such situations where the needs of the Government cannot reasonably be otherwise supplied, where listing would be contrary to national security, or where the requirement of listing would otherwise not be for the best interest of the Government.

(2) "Appropriate office of the State employment service system" means the local office of the Federal-State national system of public employment offices with assigned responsibility for serving the area where the employment opening is to be filled, including the District of Columbia, Guam, Puerto Rico, and the Virgin Islands.

(3) "Openings which the Contractor proposes to fill from within its own organization" means employment openings for which no consideration will be given to persons outside the Contractor's own organization (including any affiliates, subsidiaries, and parent companies) and includes any openings which the Contractor proposes to fill from regularly established "recall" lists.

(4) "Openings which the Contractor proposes to fill pursuant to a customary and traditional employer-union hiring arrangement" means employment openings which the Contractor proposes to fill from union halls, which is part of the customary and traditional hiring relationship which exists between the Contractor and representatives of its employees.

i. The Contractor agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor issued pursuant to the Act.

j. In the event of the Contractor's noncompliance with the requirements of this clause, actions for noncompliance may be taken in accordance with the rules, regulations, and relevant orders of the Secretary of Labor issued pursuant to the Act.

k. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices in a form to be prescribed by the Director, provided by or through the
Contracting Officer. Such notice shall state the Contractor's obligation under the law to take affirmative action to employ and advance in employment qualified disabled veterans and veterans of the Vietnam era for employment, and the rights of applicants and employees.

1. The Contractor will notify each labor union or representative of workers with which it has a collective bargaining agreement or other contract understanding that the Contractor is bound by terms of the Vietnam Era Veteran's Readjustment Assistance Act and is committed to take affirmative action to employ and advance in employment qualified disabled veterans and veterans of the Vietnam era.

m. The Contractor will include the provisions of this clause in every subcontract or purchase order of $10,000 or more unless exempted by rules, regulations, or orders of the Secretary issued pursuant to the Act, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the Director of the Office of Federal Contract Compliance Programs may direct to enforce such provisions, including action for noncompliance.

7.14 EMPLOYMENT OF THE HANDICAPPED

(Applicable only to nonexempt contracts of $2,500 or more.)

a. The Contractor will not discriminate against any employee or applicant for employment because of physical or mental handicap in regard to any position for which the employee or applicant for employment is qualified. The Contractor agrees to take affirmative action to employ, advance in employment, and otherwise treat qualified handicapped individuals without discrimination based upon their physical or mental handicap in all employment practices such as the following: employment, upgrading, demotion or transfer, recruitment, advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship.

b. The Contractor agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor issued pursuant to the Rehabilitation Act of 1973, as amended.

c. In the event of the Contractor's noncompliance with the requirements of this clause, actions for noncompliance may be taken in accordance with the rules, regulations, and relevant orders of the Secretary of Labor issued pursuant to the Act.
d. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices in a form to be prescribed by the Director, Office of Federal Contract Compliance Programs, Department of Labor, provided by or through the Contracting Officer. Such notices shall state the Contractor's obligation under the law to take affirmative action to employ and advance in employment qualified handicapped employees and applicants for employment, and the rights of applicants and employees.

e. The Contractor will notify each labor union or representative of workers with which it has a collective bargaining agreement or other contract understanding, that the Contractor is bound by the terms of Section 503 of the Act and is committed to take affirmative action to employ and advance in employment physically and mentally handicapped individuals.

f. The Contractor will include the provisions of this clause in every subcontract or purchase order of $2,500 or more unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 503 of the Act, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the Director, Office of Federal Contract Compliance Programs, may direct to enforce such provisions, including action for noncompliance.

7.15 EQUAL OPPORTUNITY

(The following clause is applicable unless this Contract is exempt under the rules, regulations, and relevant orders of the Secretary of Labor (41 CFR Ch 60).)

During the performance of this Contract, the Contractor agrees as follows:

a. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Contracting Officer setting forth the provisions of this "Equal Opportunity" clause.
b. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

c. The Contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency Contracting Officer, advising the labor union or workers' representative of the Contractor's commitments under this "Equal Opportunity" clause, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

d. The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, as amended by Executive Order 11375 of October 13, 1967, and of the rules, regulations, and relevant orders of the Secretary of Labor.

e. The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, as amended by Executive Order 11375 of October 13, 1967, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to its books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

f. In the event of the Contractor's noncompliance with the "Equal Opportunity" clause of this Contract or with any of the said rules, regulations, or orders, this Contract may be canceled, terminated, or suspended, in whole or in part, and the Contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, as amended by Executive Order 11375 of October 13, 1967, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, as amended by Executive Order 11375 of October 13, 1967, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

g. The Contractor will include the provisions of paragraphs a. through g. in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, as amended by Executive Order 11375 of October 13, 1967, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as
the contracting agency may direct as a means of enforcing such provisions, including sanctions for noncompliance; PROVIDED, HOWEVER, that in the event the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

7.16 WALSH-HEALEY PUBLIC CONTRACTS ACT

If this Contract is for the manufacture or furnishing of materials, supplies, articles, or equipment in an amount which exceeds or may exceed $10,000 and is otherwise subject to the Walsh-Healey Public Contracts Act, as amended (41 USC 35-45), there are hereby incorporated by reference all representations and stipulations required by said Act and regulations issued thereunder by the Secretary of Labor, such representations and stipulations being subject to all applicable rulings and interpretations of the Secretary of Labor which are now or may hereafter be in effect.

7.17 CONTRACT WORK HOURS AND SAFETY STANDARDS ACT—OVERTIME COMPENSATION

This Contract, to the extent that it is of a character specified in the Contract Work Hours and Safety Standards Act (40 USC 327-333), is subject to the following provisions and to all other applicable provisions and exceptions of such Act and the regulations of the Secretary of Labor thereunder.

a. Overtime Requirements. No Contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers, mechanics, apprentices, trainees, watchmen, and guards shall require or permit any laborer, mechanic, apprentice, trainee, watchman, or guard in any workweek in which he is employed on such work to work in excess of 8 hours in any calendar day or in excess of 40 hours in such workweek on work subject to the provisions of the Contract Work Hours and Safety Standards Act unless such laborer, mechanic, apprentice, trainee, watchman, or guard receives a compensation at a rate not less than one and one-half times his basic rate of pay for all such hours worked in excess of 8 hours in any calendar day or in excess of 40 hours in such workweek, whichever is the greater number of overtime hours.

b. Violation; Liability for Unpaid Wages; Liquidated Damages. In the event of any violation of the provisions of paragraph a., the Contractor and any subcontractor responsible therefor shall be liable to any affected employee for his unpaid wages. In addition, such Contractor and subcontractor shall be liable
to the United States for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer, mechanic, apprentice, trainee, watchman, or guard employed in violation of the provisions of paragraph a. in the sum of $10 for each calendar day on which such employee was required or permitted to be employed on such work in excess of 8 hours or in excess of the standard workweek of 40 hours without payment of the overtime wages required by paragraph a.

c. Withholding for Unpaid Wages and Liquidated Damages. The Contracting Officer may withhold from the Government Prime Contractor, from any moneys payable on account of work performed by the Contractor or subcontractor, such sums as may administratively be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for unpaid wages and liquidated damages as provided in the provisions of paragraph b.

d. Subcontracts. The Contractor shall insert paragraphs a. through d. of this clause in all subcontracts, and shall require their inclusion in all subcontracts of any tier.

e. Records. The Contractor shall maintain payroll records containing the information specified in 29 CFR 516.2(a). Such records shall be preserved for three (3) years from the completion of the Contract.

7.18 PREFERENCE FOR U.S. FLAG AIR CARRIERS

a. Public Law 93-623 requires that all Federal agencies and Government contractors and subcontractors will use U.S. flag air carriers for international air transportation of personnel (and their personal effects) or property to the extent service by such carriers is available. It further provides that the Comptroller General of the United States shall disallow any expenditure from appropriated funds for international air transportation on other than a U.S. flag air carrier in the absence of satisfactory proof of the necessity therefor.

b. The Contractor agrees to utilize U.S. flag air carriers for international air transportation of personnel (and their personal effects) or property to the extent service by such carriers is available.

c. In the event that the Contractor selects a carrier other than a U.S. flag air carrier for international air transportation, it will include a certification on vouchers involving such transportation which is essentially as follows:
CERTIFICATION OF UNAVAILABILITY OF
U.S. FLAG AIR CARRIERS

I hereby certify that transportation service for personnel (and their personal effects) or property by certificated air carrier was unavailable for the following reasons: (state reasons).

d. The terms used in this clause have the following meanings:

(1) "International air transportation" means transportation of persons (and their personal effects) or property by air between a place in the United States and a place outside thereof or between two places both of which are outside the United States.

(2) "U.S. flag air carrier" means one of a class of air carriers holding a certificate of public convenience and necessity issued by the Civil Aeronautics Board, approved by the President, authorizing operations between the United States and/or its territories and one or more foreign countries.

(3) The term "United States" includes the 50 states, Commonwealth of Puerto Rico, possessions of the United States, and the District of Columbia.

e. The Contractor shall include the substance of this clause, including this paragraph e., in each subcontract or purchase hereunder which may involve international air transportation.

7.19 USE OF U.S. FLAG COMMERCIAL VESSELS

(Applicable only if the Contract involves the transportation of property by ocean vessel.)

a. The Cargo Preference Act of 1954 (Public Law 664, August 26, 1954, 68 Stat. 832, 46 USC 1241(b)) requires that Federal departments or agencies shall transport at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) of equipment, materials, or commodities which may be transported on ocean vessels on privately owned United States flag commercial vessels. Such transportation shall be accomplished whenever:

(1) Any equipment, materials, or commodities, within or outside the United States, which may be transported by ocean vessel are:
(a) Procured, contracted for, or otherwise obtained for the agency's account; or

(b) Furnished to or for the account of any foreign nation without provision for reimbursement.

(2) Funds or credits are advanced or the convertibility of foreign currencies is guaranteed in connection with furnishing such equipment, materials, or commodities which may be transported by ocean vessel.

NOTE: This requirement does not apply to small purchases as defined in 41 CFR 1-3.6 or to cargoes carried in the vessels of the Panama Canal Company.

b. The Contractor agrees as follows:

(1) To utilize privately owned United States flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved whenever shipping any equipment, material, or commodities under the conditions set forth in a. above pursuant to this Contract to the extent such vessels are available at fair and reasonable rates for United States flag commercial vessels.

NOTE: Guidance regarding fair and reasonable rates for United States flag vessels may be obtained from the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, D.C. 20230: Area Code 202, phone 377-3449.

(2) To furnish, within 15 working days following the date of loading for shipments originating within the United States or within 25 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated "on-board" commercial ocean bill of lading in English for each shipment of cargo covered by the provisions in a. above to both the Contracting Officer (through the prime contractor in the case of subcontractor bills of lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, D.C. 20230.

(3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this Contract except for small purchases as defined in 41 CFR 1-3.6.
7.20 FEDERAL REPORTS ACT

a. In the event that it subsequently becomes a contractual require-
ment to collect or record information calling either for
answers to identical questions from 10 or more persons other
than Federal employees, or information from Federal employees
which is to be used for statistical compilations of general
public interest, the Federal Reports Act shall apply to this
Contract. No plan, questionnaire, interview guide, or other
similar device for collecting information (whether repetitive
or single-time) may be used without first obtaining clearance
from the Office of Management and Budget (OMB).

b. The Contractor shall request the required OMB clearance from
the Contracting Officer before expending any funds or making
public contracts for the collection of data. The authority to
expend funds and to proceed with the collection of data shall
be in writing by the Contracting Officer. The Contractor must
plan at least 90 days for OMB clearance. Excessive delay
caused by the Government which arises out of causes beyond the
control and without the fault or negligence of the Contractor
will be considered in accordance with the clause entitled
"Excusable Delays," if such clause is applicable. If not,
the period of performance may be extended pursuant to this
clause if approved by the Contracting Officer.