

| | | | | |
|---|---|--|------------------------------|--------------------|
| SOLICITATION, OFFER, AND AWARD <i>(Construction, Alteration, or Repair)</i> | 1. SOLICITATION NUMBER DACA67-01-R-0213 | 2. TYPE OF SOLICITATION <input type="checkbox"/> SEALED BID (IFB) <input checked="" type="checkbox"/> NEGOTIATED (RFP) | 3. DATE ISSUED 27 June 01 | PAGE OF PAGES 1 |
| | IMPORTANT - The "offer" section on the reverse must be fully completed by the offeror. | | | |

| | | |
|-------------------------------------|--|-------------------|
| CONTRACT NUMBER DACA67-01-D-2006 | 5. REQUISITION/PURCHASE REQUEST NUMBER W68MD9-1064-0025 | 6. PROJECT NUMBER |
|-------------------------------------|--|-------------------|

| | | |
|--|----------------|---|
| 7. ISSUED BY Seattle District, Corps of Engineers ATTN: CENWS-CT-CB PO Box 3755 Seattle, WA 98124-3755 | CODE W68MD9 | 8. ADDRESS OFFER TO Seattle District, Corps of Engineers PO Box 3755 ATTN: CENWS-CT-CB-MU, Pat Holmes Seattle, WA 98124-3755 One Copy to: Small Business Administration 1200 6th Avenue, Suite 1700 Seattle, WA 98101-1128 |
|--|----------------|---|

| | | |
|-------------------------|--|---|
| 9. FOR INFORMATION CALL | A. NAME See Information Page inside Front Cover | B. TELEPHONE NUMBER (Include area code) (NO COLLECT CALLS) See Information Page inside Front Cover |
|-------------------------|--|---|

SOLICITATION

NOTE: In sealed bid solicitations "offer" and "offeror" mean "bid" and "bidder".

10. THE GOVERNMENT REQUIRES PERFORMANCE OF THE WORK DESCRIBED IN THESE DOCUMENTS (Title, identifying number, date):

Furnish all labor, materials and equipment and perform all work for Demolition of Wooden Buildings, Phase VI, Ft. Lewis WA and Subinstallations in accordance with the attached contract Clauses, Special Clauses and Technical Specifications.

- Solicitation No. DACA67-01-R-0213 dated 27 June 01 with 3 amendments thereto.
- Wage Determination WA010001 added as stated on alteration page.
- See page 2c for alteration(s) to the contract.

SBA#: 77 O-01-01227

NOTE: This contract is 100% small business set-aside.

11. The Contractor shall begin performance within 10 calendar days and complete it _____ calendar days after award, notice to proceed. This performance period is mandatory, negotiable. (See Paragraph SC-1, 00800.)

| | |
|---|--------------------------|
| 12A. THE CONTRACTOR MUST FURNISH ANY REQUIRED PERFORMANCE PAYMENT BONDS? <i>(If "YES," indicate within how many calendar days after award in Item 12B.)</i> <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO | 12B. CALENDAR DAYS 10 |
|---|--------------------------|

13. ADDITIONAL SOLICITATION REQUIREMENTS:

A. Sealed offers in original and 0 copies to perform the work required are due at the place specified in Item 8 2:00 p.m. (hour) local time 26 July 2001 (date). If this is a sealed bid solicitation, offers will be publicly opened at that time. Sealed containing offers shall be marked to show the offeror's name and address, the solicitation number, and the date and time offers are due.

B. An offer guarantee is, is not required.

C. All offers are subject to the (1) work requirements, and (2) other provisions and clauses incorporated in the solicitation in full text or by
Offers providing less than 120 calendar days for Government acceptance after the date offers are due will not be considered and be rejected.

OFFER (Must be fully completed by offeror)

14. NAME AND ADDRESS OF OFFEROR (Include ZIP Code)
 Garry Struthers Associates
 3150 Richards Road Suite 100
 Bellevue, WA 98005-4446
 Tax ID No: 91-1458064 DUNS No: 859061525
 eMail: garrys@gsassoc-inc.com

15. TELEPHONE NUMBER (Include area code) | FAX: (425) 519-0309
 (425) 519-0300
 16. REMITTANCE ADDRESS (Include only if different than Item 14)

CODE _____ FACILITY CODE _____

17. The offeror agrees to perform the work required at the prices specified below in strict accordance with the terms of this solicitation, if this accepted by the Government in writing within _____ calendar days after the date offers are due. (Insert any number equal or greater than minimum requirement stated in 13D. Failure to insert any number means the offeror accepts the minimum in Item 13D.)

AMOUNTS



See page 2b

18. The offeror agrees to furnish any required performance and payment bonds.

19. ACKNOWLEDGEMENT OF AMENDMENTS

(The offeror acknowledges receipt of amendments to the solicitation - give number and date of each)

| | | | | | | | | | |
|---------------|---------|---------|---------|--|--|--|--|--|--|
| AMENDMENT NO. | 0001 | 0002 | 0003 | | | | | | |
| DATE | 7/10/01 | 7/17/01 | 7/31/01 | | | | | | |

20A. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER (Type or print)
 Veronica Struthers, Vice President

20B. SIGNATURE

20C. OFFER DATE
 8/10/01

AWARD (To be completed by Government)

21. ITEMS ACCEPTED

22. AMOUNT
 NTE: \$2,000,000.00

23. ACCOUNTING AND APPROPRIATION DATA
 SEE ALTERATIONS TO THE CONTRACT (Page 2c)

24. SUBMIT INVOICES TO ADDRESS SHOWN IN (4 copies unless otherwise specified)

ITEM 26

25. OTHER THAN FULL AND OPEN COMPETITION PURSUANT TO
 10 U.S.C. 2304(c) () 41 U.S.C. 253(c) ()

26. ADMINISTERED BY CODE
 United States Army Corps of Engineers, Seattle District
 Northwest Area Office
 PO Box 92146
 Tillicum, WA 98492-0146

27. PAYMENT WILL BE MADE BY
 US Army Corps of Engineers Finance Center
 CEFC-AO-P
 5722 Integrity Drive
 Millington, TN 38054-5005

CONTRACTING OFFICER WILL COMPLETE ITEM 28 OR 29 AS APPLICABLE

28. NEGOTIATED AGREEMENT (Contractor is required to sign document and return _____ copies to the issuing office.) Contractor agrees to furnish and deliver all items or perform all work requirements identified on this form and any continuation sheets for the consideration stated in this contract. The rights and obligations of the parties to this contract shall be governed by (a) this contract award, (b) the solicitation, and (c) the clauses, representations, certifications, and specifications incorporated by reference in or attached to this

29. AWARD. (Contractor is not required to sign this document.) offer on this solicitation is hereby accepted as to the items listed. This award consummates the contract, which consists of (a) the Government solicitation and your offer, and (b) this contract award. No further contractual document is necessary.

30A. NAME AND TITLE OF CONTRACTOR OR PERSON AUTHORIZED TO SIGN (Type or print)

31A. NAME OF CONTRACTING OFFICER (Type or print)
 SUSAN K. SHERRELL

30B. SIGNATURE

30C. DATE

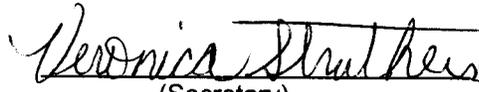
31B. UNITED STATES OF AMERICA
 BY

31C. AWARD DATE
 21 Sep 01

IF THE CONTRACTOR IS A CORPORATION OR PARTNERSHIP, THE APPLICABLE PORTION OF THE FORM LISTED BELOW MUST BE COMPLETED. IN THE ALTERNATIVE, OTHER EVIDENCE MUST BE SUBMITTED TO SUBSTANTIATE THE AUTHORITY OF THE PERSON SIGNING THE CONTRACT. IF A CORPORATION, **THE SAME OFFICER SHALL NOT EXECUTE BOTH THE CONTRACT AND THE CERTIFICATE.**

CORPORATE CERTIFICATE

I, Veronica Struthers, certify that I am the Garry Struthers Associates Secretary of the Corporation named as Contractor herein; that Veronica Struthers who signed this contract on behalf of the Contractor was then Vice President of said corporation; that said contract was duly signed for and on behalf of said corporation by authority of its governing body and is within the scope of its corporate powers.


(Secretary) **CORPORATE SEAL**



AUTHORITY TO BIND PARTNERSHIP

This is to certify that the names, signatures and Social Security Numbers of all partners are listed below and that the person signing the contract has authority actually to bind the partnership pursuant to its partnership agreements. Each of the partners individually has full authority to enter into and execute contractual instruments on behalf of said partnership with the United States of America, except as follows: (state "none" or describe limitations, if any)

This authority shall remain in full force and effect until such time as the revocation of authority by any cause whatsoever has been furnished in writing to, and acknowledged by, the Contracting Officer.

(Names, Signatures and Social Security Numbers of all Partners)

| NAME | SIGNATURE | SOCIAL SECURITY NO. |
|-------|-----------|---------------------|
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

This page intentionally blank

SCHEDULE – FOR MATOC BASIC CONTRACT

In the space below, provide the coefficient to be utilized **ONLY** for awarding Task Orders **on a sole source basis**:

| | |
|--|-------------|
| (this block must be completed by the offeror) | |
| COEFFICIENT | <u>88</u> % |

This page intentionally blank

ALTERATIONS IN CONTRACT:
(FAR 52.252-4) (APR 1984)

The following are hereby added to and incorporated into this contract:

ACCOUNTING AND APPROPRIATIONS DATA:

2112050000 088082 3200FB6273700000000000 E316 35026 000000000000
\$20,000.00 Guaranteed Minimum

WAGE DETERMINATION:

WA010001 Modification Number 14 Publication Date 08/31/2001

This page intentionally blank

| AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT | | | 1. CONTRACT ID CODE | PAGE OF PAGES | |
|--|------------------|---|--|---|-------------------------------|
| 2. AMENDMENT/MODIFICATION NO. 0001 | | 3. EFFECTIVE DATE 10-Jul-2001 | 4. REQUISITION/PURCHASE REQ. NO. W68MD9-1064-0025 | | 5. PROJECT NO.(If applicable) |
| 6. ISSUED BY USA ENGINEER DISTRICT, SEATTLE ATTN: CENWS-CT P.O. BOX 3755 SEATTLE WA 98124-3755 | | CODE DACW67 | 7. ADMINISTERED BY (If other than item 6) | | CODE |
| | | | See Item 6 | | |
| 8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code) | | | <input checked="" type="checkbox"/> | 9A. AMENDMENT OF SOLICITATION NO. DACA67-01-R-0213 | |
| | | | <input checked="" type="checkbox"/> | 9B. DATED (SEE ITEM 11) 27-Jun-2001 | |
| | | | | 10A. MOD. OF CONTRACT/ORDER NO. | |
| | | | | 10B. DATED (SEE ITEM 13) | |
| CODE | FACILITY CODE | | | | |
| 11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS | | | | | |
| <input checked="" type="checkbox"/> The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer <input type="checkbox"/> is extended, <input checked="" type="checkbox"/> is not extended. | | | | | |
| Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified. | | | | | |
| 12. ACCOUNTING AND APPROPRIATION DATA (If required) | | | | | |
| 13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14. | | | | | |
| A.THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A. | | | | | |
| B.THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B). | | | | | |
| C.THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: | | | | | |
| D.OTHER (Specify type of modification and authority) | | | | | |
| E. IMPORTANT: Contractor <input type="checkbox"/> is not, <input type="checkbox"/> is required to sign this document and return _____ copies to the issuing office. | | | | | |
| 14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.) SOLICITATION NUMBER: DACA67-01-R-0213 ENTITLED: DEMOLITION OF WOODEN BUILDINGS, PHASE VI, FORT LEWIS AND SUBINSTALLATIONS, WA SEE CONTINUATION SHEET | | | | | |
| Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect. | | | | | |
| 15A. NAME AND TITLE OF SIGNER (Type or print) | | | 16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) | | |
| 15B. CONTRACTOR/OFFEROR _____ (Signature of person authorized to sign) | 15C. DATE SIGNED | 16B. UNITED STATES OF AMERICA BY _____ (Signature of Contracting Officer) | | 16C. DATE SIGNED 10-Jul-2001 | |

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

1. This amendment one (R0001) provides for the following:
 - a. ADD: Section 02095-1, Lead Containing Materials and Hazards.
 - b. DELETE: Table of Contents INSERT: Revised Table of Contents
2. **THE PROPOSAL DUE DATE AND TIME REMAIN UNCHANGED AT JULY 26, 2001, 2:00 P.M. LOCAL TIME.**
3. **NOTICE TO BIDDERS:** Bidders must acknowledge receipt of this amendment by number and date on Standard Form 1442 BACK, in Block 19, or by telegram. Please mark the outside of the envelope in which the bid is enclosed to show the amendment received.

Enclosures:
Section 02095-1
Table of Contents

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

1. This Amendment Number Two (0002) dated 17 July 2001 is issued to incorporate the following information into the solicitation:
 - a. Preproposal Conference Minutes dated 11 July 2001
 - b. Written questions received during the preproposal conference and responses.
 - c. **Proposal due date and time shall be changed to August 03, 2001 at 2:00 P.M. (Pacific Time)**
2. **DELETE** Section 00100, Instructions to Offerors
INSERT Revised Section 00100, Instructions to Offerors
3. **DELETE** Statement of Work dated May 31, 2001
INSERT Revised Statement of Work dated 7/12/01
4. **DELETE** FAR Clause 52.219-16 Liquidated Damages-Subcontracting Plan
5. **INSERT** FAR Clause 52.219-18, Notification to Competition Limited to Eligible 8(a) Concerns

52.219-18 NOTIFICATION OF COMPETITION LIMITED TO ELIGIBLE 8(A) CONCERNS (NOV 1999)

(a) Offers are solicited only from small business concerns expressly certified by the Small Business Administration (SBA) for participation in the SBA's 8(a) Program and which meet the following criteria at the time of submission of offer--

- (1) The Offeror is in conformance with the 8(a) support limitation set forth in its approved business plan; and
- (2) The Offeror is in conformance with the Business Activity Targets set forth in its approved business plan or any remedial action directed by the SBA.

(b) By submission of its offer, the Offeror represents that it meets all of the criteria set forth in paragraph (a) of this clause.

(c) Any award resulting from this solicitation will be made to the Small Business Administration, which will subcontract performance to the successful 8(a) offeror selected through the evaluation criteria set forth in this solicitation.

(d)(1) Agreement. A small business concern submitting an offer in its own name agrees to furnish, in performing the contract, only end items manufactured or produced by small business concerns in the United States. The term "United States" includes its territories and possessions, the Commonwealth of Puerto Rico, the Trust Territory of the Pacific Islands, and the District of Columbia. If this procurement is processed under simplified acquisition procedures and the total amount of this contract does not exceed \$25,000, a small business concern may furnish the product of any domestic firm. This subparagraph does not apply in connection with construction or service contracts.

(2) The _____ [insert name of SBA's contractor] will notify the US

Army Corps of Engineers-Seattle District Contracting Officer in writing immediately upon entering an agreement (either oral or written) to transfer all or part of its stock or other ownership interest to any other party.

(End of clause)

6. Reference Contract Specification Section 01061(01355) Environmental Protection:

Pg.1- Change (throughout entire specification section): “Hazardous Waste Management Services (HWMS) ” to “Environmental Services (ES)”

Pg.3- 1.7(d) Add: “Location of recycling facility(ies) to be used.”

Pg.5- 3.2.1.2 Change: “Hazardous Waste Management Section” to “Environmental Services” and “(HWMS)” to (ES)”.

Pg.6- 3.2.1.5 At end of paragraph 1; Add: “And in accordance with 3.2.3.5 Transportation and Disposal.”

Pg.6- 3.2.1.6 Add: “a Hazardous Material Technician (HMT)... The ECO/HWT/HMT...”

Pg.6- 3.2.1.6(a) Add: “Hazardous Materials and/or Waste, storage... ECO’s /HWT’s /HMT’s...”

Pg.6- 3.2.1.6(a) Change to: “These courses are available weekly form Ft. Lewis ENRD, Environmental Services and shall be taken... The Contractor shall contact ES to schedule attendance.”

Pg.8- 3.2.3.2 Change to: “The Contractor shall contact ES, phone (253) 967-4786...”

Pg.10- 3.2.3.6 Change to: “coordination for turn in shall be made with ES, phone...(para.1)”

Pg.10- 3.2.3.6 Change: “Containers” to “Hazardous Waste” (para.2)

Pg.13- 3.8.1 Add: “All solid waste transported off the installation for disposal or recycling must be reported to the COR as to type, weight and receiving facility.”

7. Reference Contract Specification Section 02050(02220) Demolition:

Pg.3- 1.3 Demolition Waste Management Plan: MP, Change: “1. Landfill locations: The name of the landfill(s) where waste will be disposed of, the amount of solid waste disposed of,...”

Pg.3- 1.3 Demolition Waste Management Plan: MP, Add (to end of paragraph) “2. Alternatives to Landfilling: The name of the recycling facility(ies), the cost to turn in recyclables, the amount and type of commodities turned in for recycling.”

Pg.6- 3.4.1 Change: “Base Hazardous Waste Management Section” to “Environmental Services” and “(HWMS)” to (ES)”.

Pg.7- 3.4.1.1 Delete:“... and recycled or disposed of appropriately“.

Add:(at end of paragraph) “All Class I Ozone Depleting Substances (ODS) shall be turned in to Environmental Services (ES). Class I ODS must remain under government control; either for re-distribution on the installation, or for turn-in to the DoD Reserve.”

8. Reference Task Order 0001:

Section B: Supplies and Services and Prices/Cost:

Delete: Line items 0005 through 0008:

| | | | | |
|-------------|---|---|----|----------|
| 0005 | The contractor shall provide all labor, supplies, services, and equipment for complete demolition of Bldgs. 6204, 6205, 6206 and 6207, at Ft. Lewis, WA, in accordance with the attached Statement Of Work. | 1 | LS | \$ _____ |
| 0006 | The contractor shall provide all labor, supplies, services, and equipment for complete demolition of Bldgs. A0518 and A0519 at Ft. Lewis, WA, in accordance with the attached Statement Of Work. | 1 | LS | \$ _____ |
| 0007 | The contractor shall provide all labor, supplies, services, and equipment for complete demolition of Trailer next to Bldg. 8094, at Ft. Lewis, WA, in accordance with the attached Statement Of Work. | 1 | LS | \$ _____ |
| 0008 | The contractor shall provide all labor, supplies, services, and equipment for complete | 1 | LS | \$ _____ |

demolition of Bldgs. F0002 and F0004, at Ft. Lewis, WA, in accordance with the attached Statement Of Work.

Insert: Line items 0005-0007

0005 The contractor shall provide all labor, supplies, services, and equipment for complete demolition of Bldgs. A0518 and A0519, at Ft. Lewis, WA, in accordance with the attached Statement Of Work. 1 LS \$ _____

0006 The contractor shall provide all labor, supplies, services, and equipment for complete demolition of Bldgs. B0834, C0237, C0833 and C1303 at Ft. Lewis, WA, in accordance with the attached Statement Of Work. 1 LS \$ _____

0007 The contractor shall provide all labor, supplies, services, and equipment for complete demolition of Bldgs. F0002 and F0004, at Ft. Lewis, WA, in accordance with the attached Statement Of Work. 1 LS \$ _____

9. Reference Task Order 0001:

Section C: Paragraph 3. Project Scope:

Delete: Line Item 0007 Option - Demolition and site restoration of the following buildings:
Trailer next to 8094

Line Item 0008 Option - Demolition and site restoration of the following buildings:
F0002 and F0004

Insert: Line Item 0007 Option - Demolition and site restoration of the following buildings:
F0002 and F0004

10. Reference Task Order 0001:

Section: Attachments

Delete: Attachment 0007

Demolition of Trailer next to Bldg. 8094
Fort Lewis, WA

Attachment 0008

Demolition of Buildings F0002 and F0004
Fort Lewis, WA

Insert: Attachment 0007

Demolition of Buildings F0002 and F0004
Fort Lewis, WA

11. No further changes occur as a result of this amendment.

Enclosures:

1. Preproposal Conference Minutes
2. Questions and Responses
3. Revised Section 00100
4. Revised Statement of Work
5. Revised Bid Schedule Task Order 0001 and Attachments
6. Revised Section 01061 (01355)
7. Revised Section 02050 (02220)

SECTION 00700 Contract Clauses

CLAUSES INCORPORATED BY FULL TEXT

SECTION 00700 Contract Clauses

CLAUSES INCORPORATED BY REFERENCE:

| | | |
|-----------------|--|----------|
| 52.201-4001 | Successor Contracting Officers | DEC 1999 |
| 52.202-1 Alt I | Definitions (Oct 1995) --Alternate I | APR 1984 |
| 52.203-3 | Gratuities | APR 1984 |
| 52.203-5 | Covenant Against Contingent Fees | APR 1984 |
| 52.203-7 | Anti-Kickback Procedures | JUL 1995 |
| 52.203-8 | Cancellation, Rescission, and Recovery of Funds for Illegal or Improper Activity | JAN 1997 |
| 52.203-10 | Price Or Fee Adjustment For Illegal Or Improper Activity | JAN 1997 |
| 52.203-11 | Certification And Disclosure Regarding Payment To Influence Certain Federal Transactions | APR 1991 |
| 52.203-12 | Limitation On Payments To Influence Certain Federal Transactions | JUN 1997 |
| 52.204-4 | Printing or Copying Double-Sided on Recycled Paper | AUG 2000 |
| 52.209-6 | Protecting the Government's Interest When Subcontracting With Contractors Debarred, Suspended, or Proposed for Debarment | JUL 1995 |
| 52.212-4007 | Environmental Litigation | NOV 1999 |
| 52.215-2 | Audit and Records--Negotiation | JUN 1999 |
| 52.215-10 | Price Reduction for Defective Cost or Pricing Data | OCT 1997 |
| 52.215-11 | Price Reduction for Defective Cost or Pricing Data--Modifications | OCT 1997 |
| 52.215-12 | Subcontractor Cost or Pricing Data | OCT 1997 |
| 52.215-13 | Subcontractor Cost or Pricing Data--Modifications | OCT 1997 |
| 52.217-9 | Option To Extend The Term Of The Contract | MAR 2000 |
| 52.219-6 | Notice Of Total Small Business Set-Aside | JUL 1996 |
| 52.219-8 | Utilization of Small Business Concerns | OCT 2000 |
| 52.219-9 Alt II | Small Business Subcontracting Plan (Oct 2000) Alternate II | OCT 2000 |
| 52.219-14 | Limitations On Subcontracting | DEC 1996 |
| 52.219-16 | Liquidated Damages-Subcontracting Plan | JAN 1999 |
| 52.219-25 | Small Disadvantaged Business Participation Program--Disadvantaged Status and Reporting | OCT 1999 |
| 52.219-4003 | Special Contract Conditions, 8(a) Subcontractors | JAN 2000 |
| 52.222-1 | Notice To The Government Of Labor Disputes | FEB 1997 |
| 52.222-3 | Convict Labor | AUG 1996 |
| 52.222-4 | Contract Work Hours and Safety Standards Act - Overtime Compensation | SEP 2000 |
| 52.222-6 | Davis Bacon Act | FEB 1995 |
| 52.222-7 | Withholding of Funds | FEB 1988 |
| 52.222-8 | Payrolls and Basic Records | FEB 1988 |
| 52.222-9 | Apprentices and Trainees | FEB 1988 |
| 52.222-10 | Compliance with Copeland Act Requirements | FEB 1988 |
| 52.222-11 | Subcontracts (Labor Standards) | FEB 1988 |
| 52.222-12 | Contract Termination-Debarment | FEB 1988 |
| 52.222-13 | Compliance with Davis-Bacon and Related Act Regulations. | FEB 1988 |

| | | |
|----------------|--|----------|
| 52.222-14 | Disputes Concerning Labor Standards | FEB 1988 |
| 52.222-15 | Certification of Eligibility | FEB 1988 |
| 52.222-21 | Prohibition Of Segregated Facilities | FEB 1999 |
| 52.222-23 | Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity for Construction | FEB 1999 |
| 52.222-26 | Equal Opportunity | FEB 1999 |
| 52.222-27 | Affirmative Action Compliance Requirements for Construction | FEB 1999 |
| 52.222-35 | Affirmative Action For Disabled Veterans And Veterans of the Vietnam Era | APR 1998 |
| 52.222-36 | Affirmative Action For Workers With Disabilities | JUN 1998 |
| 52.222-37 | Employment Reports On Disabled Veterans And Veterans Of The Vietnam Era | JAN 1999 |
| 52.223-3 | Hazardous Material Identification And Material Safety Data | JAN 1997 |
| 52.223-5 | Pollution Prevention and Right-to-Know Information | APR 1998 |
| 52.223-6 | Drug Free Workplace | JAN 1997 |
| 52.223-14 | Toxic Chemical Release Reporting | OCT 2000 |
| 52.225-9 | Buy American Act--Balance of Payments Program--Construction Materials | FEB 2000 |
| 52.225-13 | Restrictions on Certain Foreign Purchases | JUL 2000 |
| 52.226-1 | Utilization Of Indian Organizations And Indian-Owned Economic Enterprises | JUN 2000 |
| 52.227-1 | Authorization and Consent | JUL 1995 |
| 52.227-2 | Notice And Assistance Regarding Patent And Copyright Infringement | AUG 1996 |
| 52.227-4 | Patent Indemnity-Construction Contracts | APR 1984 |
| 52.228-2 | Additional Bond Security | OCT 1997 |
| 52.228-5 | Insurance - Work On A Government Installation | JAN 1997 |
| 52.228-11 | Pledges Of Assets | FEB 1992 |
| 52.228-12 | Prospective Subcontractor Requests for Bonds | OCT 1995 |
| 52.228-14 | Irrevocable Letter of Credit | DEC 1999 |
| 52.228-15 | Performance and Payment Bonds--Construction | JUL 2000 |
| 52.229-3 | Federal, State And Local Taxes | JAN 1991 |
| 52.232-5 | Payments under Fixed-Price Construction Contracts | MAY 1997 |
| 52.232-23 | Assignment Of Claims | JAN 1986 |
| 52.232-27 | Prompt Payment for Construction Contracts | JUN 1997 |
| 52.232-33 | Payment by Electronic Funds Transfer--Central Contractor Registration | MAY 1999 |
| 52.233-1 Alt I | Disputes (Dec 1998) - Alternate I | DEC 1991 |
| 52.233-3 | Protest After Award | AUG 1996 |
| 52.236-2 | Differing Site Conditions | APR 1984 |
| 52.236-3 | Site Investigation and Conditions Affecting the Work | APR 1984 |
| 52.236-5 | Material and Workmanship | APR 1984 |
| 52.236-6 | Superintendence by the Contractor | APR 1984 |
| 52.236-7 | Permits and Responsibilities | NOV 1991 |
| 52.236-8 | Other Contracts | APR 1984 |
| 52.236-9 | Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements | APR 1984 |
| 52.236-10 | Operations and Storage Areas | APR 1984 |
| 52.236-11 | Use and Possession Prior to Completion | APR 1984 |
| 52.236-12 | Cleaning Up | APR 1984 |
| 52.236-13 | Accident Prevention | NOV 1991 |
| 52.236-15 | Schedules for Construction Contracts | APR 1984 |
| 52.236-17 | Layout of Work | APR 1984 |
| 52.236-26 | Preconstruction Conference | FEB 1995 |
| 52.242-13 | Bankruptcy | JUL 1995 |

| | | |
|----------------|---|----------|
| 52.242-14 | Suspension of Work | APR 1984 |
| 52.243-4 | Changes | AUG 1987 |
| 52.244-2 | Subcontracts | AUG 1998 |
| 52.246-12 | Inspection of Construction | AUG 1996 |
| 52.248-3 | Value Engineering-Construction | FEB 2000 |
| 52.249-2 Alt I | Termination for Convenience of the Government (Fixed-Price) (Sep 1996) - Alternate I | SEP 1996 |
| 52.249-10 | Default (Fixed-Price Construction) | APR 1984 |
| 52.252-1 | Solicitation Provisions Incorporated By Reference | FEB 1998 |
| 52.252-2 | Clauses Incorporated By Reference | FEB 1998 |
| 52.252-4 | Alterations in Contract | APR 1984 |
| 52.252-6 | Authorized Deviations In Clauses | APR 1984 |
| 52.253-1 | Computer Generated Forms | JAN 1991 |
| 252.201-7000 | Contracting Officer's Representative | DEC 1991 |
| 252.203-7001 | Prohibition On Persons Convicted of Fraud or Other Defense-Contract-Related Felonies | MAR 1999 |
| 252.204-7001 | Commercial And Government Entity (CAGE) Code Reporting | AUG 1999 |
| 252.204-7003 | Control Of Government Personnel Work Product | APR 1992 |
| 252.209-7004 | Subcontracting With Firms That Are Owned or Controlled By The Government of a Terrorist Country | MAR 1998 |
| 252.215-7000 | Pricing Adjustments | DEC 1991 |
| 252.215-7002 | Cost Estimating System Requirements | OCT 1998 |
| 252.219-7003 | Small, Small Disadvantaged and Women-Owned Small Business Subcontracting Plan (DOD Contracts) | APR 1996 |
| 252.219-7009 | Section 8(a) Direct Award | JUN 1998 |
| 252.223-7004 | Drug Free Work Force | SEP 1988 |
| 252.227-7022 | Government Rights (Unlimited) | MAR 1979 |
| 252.227-7023 | Drawings and Other Data to become Property of Government | MAR 1979 |
| 252.227-7033 | Rights in Shop Drawings | APR 1966 |
| 252.228-7004 | Bonds Or Other Security | DEC 1991 |
| 252.231-7000 | Supplemental Cost Principles | DEC 1991 |
| 252.236-7000 | Modification Proposals-Price Breakdown | DEC 1991 |
| 252.242-7000 | Postaward Conference | DEC 1991 |
| 252.243-7001 | Pricing Of Contract Modifications | DEC 1991 |
| 252.243-7002 | Requests for Equitable Adjustment | MAR 1998 |

Successor Contracting Officers (52.201-4001)

The Contracting Officer who signed this contract is the primary Contracting Officer for the contract. Nevertheless, any Contracting Officer assigned to the Seattle District and acting within his/her authority may take formal action on this contract when a contract action needs to be taken and the primary Contracting Officer is unavailable.

52.202-1 DEFINITIONS (MAY 2001) --ALTERNATE I (MAY 2001)

(a) Agency head or head of the agency means the Secretary (Attorney General, Administrator, Governor, Chairperson, or other chief official, as appropriate) of the agency, unless otherwise indicated, including any deputy or assistant chief official of the executive agency.

(b) "Commercial component" means any component that is a commercial item.

(c) Except as otherwise provided in this contract, the term "subcontracts" includes, but is not limited to, purchase orders and changes and modifications to purchase orders under this contract.

(d) Component means any item supplied to the Government as part of an end item or of another component, except that for use in 52.225-9, and 52.225-11 see the definitions in 52.225-9(a) and 52.225-11(a).

(e) Contracting Officer means a person with the authority to enter into, administer, and/or terminate contracts and make related determinations and findings. The term includes certain authorized representatives of the Contracting Officer acting within the limits of their authority as delegated by the Contracting Officer.

(f) Nondevelopmental item means--

(1) Any previously developed item of supply used exclusively for governmental purposes by a Federal agency, a State or local government, or a foreign government with which the United States has a mutual defense cooperation agreement;

(2) Any item described in paragraph (f)(1) of this definition that requires only minor modification or modifications of a type customarily available in the commercial marketplace in order to meet the requirements of the procuring department or agency; or

(3) Any item of supply being produced that does not meet the requirements of paragraph (f)(1) or (f)(2) solely because the item is not yet in use.

(End of clause)

52.203-3 GRATUITIES (APR 1984)

(a) The right of the Contractor to proceed may be terminated by written notice if, after notice and hearing, the agency head or a designee determines that the Contractor, its agent, or another representative--

(1) Offered or gave a gratuity (e.g., an entertainment or gift) to an officer, official, or employee of the Government; and

(2) Intended, by the gratuity, to obtain a contract or favorable treatment under a contract.

(b) The facts supporting this determination may be reviewed by any court having lawful jurisdiction.

(c) If this contract is terminated under paragraph (a) of this clause, the Government is entitled--

(1) To pursue the same remedies as in a breach of the contract; and

(2) In addition to any other damages provided by law, to exemplary damages of not less than 3 nor more than 10 times the cost incurred by the Contractor in giving gratuities to the person concerned, as determined by the agency head or a designee. (This subparagraph (c)(2) is applicable only if this contract uses money appropriated to the Department of Defense.)

(d) The rights 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.

(End of clause)

52.203-5 COVENANT AGAINST CONTINGENT FEES (APR 1984)

(a) The Contractor warrants that no person or agency has been employed or retained to solicit or obtain this contract upon an agreement or understanding for a contingent fee, except a bona fide employee or agency. 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 the contingent fee.

(b) "Bona fide agency," as used in this clause, means an established commercial or selling agency, maintained by a

contractor for the purpose of securing business, that neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds itself out as being able to obtain any Government contract or contracts through improper influence.

"Bona fide employee," as used in this clause, means a person, employed by a contractor and subject to the contractor's supervision and control as to time, place, and manner of performance, who neither exerts nor proposes to exert improper influence to solicit or obtain Government contracts nor holds out as being able to obtain any Government contract or contracts through improper influence.

"Contingent fee," as used in this clause, means any commission, percentage, brokerage, or other fee that is contingent upon the success that a person or concern has in securing a Government contract.

"Improper influence," as used in this clause, means any influence that induces or tends to induce a Government employee or officer to give consideration or to act regarding a Government contract on any basis other than the merits of the matter.

(End of clause)

52.203-7 ANTI-KICKBACK PROCEDURES. (JUL 1995)

(a) Definitions.

"Kickback," as used in this clause, means any money, fee, commission, credit, gift, gratuity, thing of value, or compensation of any kind which is provided, directly or indirectly, to any prime Contractor, prime Contractor employee, subcontractor, or subcontractor employee for the purpose of improperly obtaining or rewarding favorable treatment in connection with a prime contract or in connection with a subcontract relating to a prime contract.

"Person," as used in this clause, means a corporation, partnership, business association of any kind, trust, joint-stock company, or individual.

"Prime contract," as used in this clause, means a contract or contractual action entered into by the United States for the purpose of obtaining supplies, materials, equipment, or services of any kind.

"Prime Contractor," as used in this clause, means a person who has entered into a prime contract with the United States.

"Prime Contractor employee," as used in this clause, means any officer, partner, employee, or agent of a prime Contractor.

"Subcontract," as used in this clause, means a contract or contractual action entered into by a prime Contractor or subcontractor for the purpose of obtaining supplies, materials, equipment, or services of any kind under a prime contract.

"Subcontractor," as used in this clause, (1) means any person, other than the prime Contractor, who offers to furnish or furnishes any supplies, materials, equipment, or services of any kind under a prime contract or a subcontract entered into in connection with such prime contract, and (2) includes any person who offers to furnish or furnishes general supplies to the prime Contractor or a higher tier subcontractor.

"Subcontractor employee," as used in this clause, means any officer, partner, employee, or agent of a subcontractor.

(b) The Anti-Kickback Act of 1986 (41 U.S.C. 51-58) (the Act), prohibits any person from -

(1) Providing or attempting to provide or offering to provide any kickback;

(2) Soliciting, accepting, or attempting to accept any kickback; or

(3) Including, directly or indirectly, the amount of any kickback in the contract price charged by a prime Contractor to the United States or in the contract price charged by a subcontractor to a prime Contractor or higher tier subcontractor.

(c)(1) The Contractor shall have in place and follow reasonable procedures designed to prevent and detect possible violations described in paragraph (b) of this clause in its own operations and direct business relationships.

(2) When the Contractor has reasonable grounds to believe that a violation described in paragraph (b) of this clause may have occurred, the Contractor shall promptly report in writing the possible violation. Such reports shall be made to the inspector general of the contracting agency, the head of the contracting agency if the agency does not have an inspector general, or the Department of Justice.

(3) The Contractor shall cooperate fully with any Federal agency investigating a possible violation described in paragraph (b) of this clause.

(4) The Contracting Officer may (i) offset the amount of the kickback against any monies owed by the United States under the prime contract and/or (ii) direct that the Prime Contractor withhold, from sums owed a subcontractor under the prime contract, the amount of any kickback. The Contracting Officer may order the monies withheld under subdivision (c)(4)(ii) of this clause be paid over to the Government unless the Government has already offset those monies under subdivision (c)(4)(i) of this clause. In either case, the Prime Contractor shall notify the Contracting Officer when the monies are withheld.

(5) The Contractor agrees to incorporate the substance of this clause, including this subparagraph (c)(5) but excepting subparagraph (c)(1), in all subcontracts under this contract which exceed \$100,000.

52.203-8 CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997)

(a) If the Government receives information that a contractor or a person has engaged in conduct constituting a violation of subsection (a), (b), (c), or (d) of Section 27 of the Office of Federal Procurement Policy Act (41 U.S.C. 423) (the Act), as amended by section 4304 of the 1996 National Defense Authorization Act for Fiscal Year 1996 (Pub. L. 104-106), the Government may--

(1) Cancel the solicitation, if the contract has not yet been awarded or issued; or

(2) Rescind the contract with respect to which--

(i) The Contractor or someone acting for the Contractor has been convicted for an offense where the conduct constitutes a violation of subsection 27 (a) or (b) of the Act for the purpose of either--

(A) Exchanging the information covered by such subsections for anything of value; or

(B) Obtaining or giving anyone a competitive advantage in the award of a Federal agency procurement contract; or

(ii) The head of the contracting activity has determined, based upon a preponderance of the evidence, that the Contractor or someone acting for the Contractor has engaged in conduct constituting an offense punishable under subsections 27(e)(1) of the Act.

(b) If the Government rescinds the contract under paragraph (a) of this clause, the Government is entitled to recover, in addition to any penalty prescribed by law, the amount expended under the contract.

(c) The rights and remedies of the Government specified herein are not exclusive, and are in addition to any other rights and remedies provided by law, regulation, or under this contract.

52.203-10 PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY (JAN 1997)

(a) The Government, at its election, may reduce the price of a fixed-price type contract and the total cost and fee under a cost-type contract by the amount of profit or fee determined as set forth in paragraph (b) of this clause if the head of the contracting activity or designee determines that there was a violation of subsection 27 (a), (b), or (c) of the Office of Federal Procurement Policy Act, as amended (41 U.S.C. 423), as implemented in section 3.104 of the Federal Acquisition Regulation.

(b) The price or fee reduction referred to in paragraph (a) of this clause shall be--

(1) For cost-plus-fixed-fee contracts, the amount of the fee specified in the contract at the time of award;

(2) For cost-plus-incentive-fee contracts, the target fee specified in the contract at the time of award, notwithstanding any minimum fee or "fee floor" specified in the contract;

(3) For cost-plus-award-fee contracts--

(i) The base fee established in the contract at the time of contract award;

(ii) If no base fee is specified in the contract, 30 percent of the amount of each award fee otherwise payable to the Contractor for each award fee evaluation period or at each award fee determination point.

(4) For fixed-price-incentive contracts, the Government may--

(i) Reduce the contract target price and contract target profit both by an amount equal to the initial target profit specified in the contract at the time of contract award; or

(ii) If an immediate adjustment to the contract target price and contract target profit would have a significant adverse impact on the incentive price revision relationship under the contract, or adversely affect the contract financing provisions, the Contracting Officer may defer such adjustment until establishment of the total final price of the contract. The total final price established in accordance with the incentive price revision provisions of the contract shall be reduced by an amount equal to the initial target profit specified in the contract at the time of contract award and such reduced price shall be the total final contract price.

(5) For firm-fixed-price contracts, by 10 percent of the initial contract price or a profit amount determined by the Contracting Officer from records or documents in existence prior to the date of the contract award.

(c) The Government may, at its election, reduce a prime contractor's price or fee in accordance with the procedures of paragraph (b) of this clause for violations of the Act by its subcontractors by an amount not to exceed the amount of profit or fee reflected in the subcontract at the time the subcontract was first definitively priced.

(d) In addition to the remedies in paragraphs (a) and (c) of this clause, the Government may terminate this contract for default. The rights and remedies of the Government specified herein are not exclusive, and are in addition to any other rights and remedies provided by law or under this contract.

(End of clause)

52.203-11 CERTIFICATION AND DISCLOSURE REGARDING PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (APR 1991)

(a) The definitions and prohibitions contained in the clause, at FAR 52.203-12, Limitation on Payments to Influence Certain Federal Transactions, included in this solicitation, are hereby incorporated by reference in paragraph (b) of this Certification.

(b) The offeror, by signing its offer, hereby certifies to the best of his or her knowledge and belief that on or after December 23, 1989,--

(1) No Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a member of Congress on his or her behalf in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan, or cooperative agreement;

(2) If any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress or an employee of a Member of Congress on his or her behalf in connection with this solicitation, the offeror shall complete and submit, with its offer, OMB standard form LLL, Disclosure of Lobbying Activities, to the Contracting Officer; and

(3) He or she will include the language of this certification in all subcontract awards at any tier and require that all recipients of subcontract awards in excess of \$100,000 shall certify and disclose accordingly.

(c) Submission of this certification and disclosure is a prerequisite for making or entering into this contract imposed by section 1352, title 31, United States Code. Any person who makes an expenditure prohibited under this provision, shall be subject to a civil penalty of not less than \$10,000, and not more than \$100,000, for each such failure.

(End of provision)

52.203-12 LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (JUN 1997)

(a) Definitions.

"Agency," as used in this clause, means executive agency as defined in 2.101.

"Covered Federal action," as used in this clause, means any of the following Federal actions:

(1) The awarding of any Federal contract.

(2) The making of any Federal grant.

(3) The making of any Federal loan.

(4) The entering into of any cooperative agreement.

(5) The extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

"Indian tribe" and "tribal organization," as used in this clause, have the meaning provided in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450B) and include Alaskan Natives.

"Influencing or attempting to influence," as used in this clause, means making, with the intent to influence, any communication to or appearance before an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with any covered Federal action.

"Local government," as used in this clause, means a unit of government in a State and, if chartered, established, or otherwise recognized by a State for the performance of a governmental duty, including a local public authority, a special district, an intrastate district, a council of governments, a sponsor group representative organization, and any other instrumentality of a local government.

"Officer or employee of an agency," as used in this clause, includes the following individuals who are employed by an agency:

- (1) An individual who is appointed to a position in the Government under title 5, United States Code, including a position under a temporary appointment.
- (2) A member of the uniformed services, as defined in subsection 101(3), title 37, United States Code.
- (3) A special Government employee, as defined in section 202, title 18, United States Code.
- (4) An individual who is a member of a Federal advisory committee, as defined by the Federal Advisory Committee Act, title 5, United States Code, appendix 2.

"Person," as used in this clause, means an individual, corporation, company, association, authority, firm, partnership, society, State, and local government, regardless of whether such entity is operated for profit, or not for profit. This term excludes an Indian tribe, tribal organization, or any other Indian organization with respect to expenditures specifically permitted by other Federal law.

"Reasonable compensation," as used in this clause, means, with respect to a regularly employed officer or employee of any person, compensation that is consistent with the normal compensation for such officer or employee for work that is not furnished to, not funded by, or not furnished in cooperation with the Federal Government.

"Reasonable payment," as used in this clause, means, with respect to professional and other technical services, a payment in an amount that is consistent with the amount normally paid for such services in the private sector.

"Recipient," as used in this clause, includes the Contractor and all subcontractors. This term excludes an Indian tribe, tribal organization, or any other Indian organization with respect to expenditures specifically permitted by other Federal law.

"Regularly employed," as used in this clause, means, with respect to an officer or employee of a person requesting or receiving a Federal contract, an officer or employee who is employed by such person for at least 130 working days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person for receipt of such contract. An officer or employee who is employed by such person for less than 130 working days within 1 year immediately preceding the date of the submission that initiates agency consideration of such person shall be considered to be regularly employed as soon as he or she is employed by such person for 130 working days.

"State," as used in this clause, means a State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, a territory or possession of the United States, an agency or instrumentality of a State, and multi-State, regional, or interstate entity having governmental duties and powers.

(b) Prohibitions.

- (1) Section 1352 of title 31, United States Code, among other things, prohibits a recipient of a Federal contract, grant, loan, or cooperative agreement from using appropriated funds to pay any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an

employee of a Member of Congress in connection with any of the following covered Federal actions: the awarding of any Federal contract; the making of any Federal grant; the making of any Federal loan; the entering into of any cooperative agreement; or the modification of any Federal contract, grant, loan, or cooperative agreement.

(2) The Act also requires Contractors to furnish a disclosure if any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a Federal contract, grant, loan, or cooperative agreement.

(3) The prohibitions of the Act do not apply under the following conditions:

(i) Agency and legislative liaison by own employees.

(A) The prohibition on the use of appropriated funds, in subparagraph (b)(1) of this clause, does not apply in the case of a payment of reasonable compensation made to an officer or employee of a person requesting or receiving a covered Federal action if the payment is for agency and legislative liaison activities not directly related to a covered Federal action.

(B) For purposes of subdivision (b)(3)(i)(A) of this clause, providing any information specifically requested by an agency or Congress is permitted at any time.

(C) The following agency and legislative liaison activities are permitted at any time where they are not related to a specific solicitation for any covered Federal action:

(1) Discussing with an agency the qualities and characteristics (including individual demonstrations) of the person's products or services, conditions or terms of sale, and service capabilities.

(2) Technical discussions and other activities regarding the application or adaptation of the person's products or services for an agency's use.

(D) The following agency and legislative liaison activities are permitted where they are prior to formal solicitation of any covered Federal action--

(1) Providing any information not specifically requested but necessary for an agency to make an informed decision about initiation of a covered Federal action;

(2) Technical discussions regarding the preparation of an unsolicited proposal prior to its official submission; and

(3) Capability presentations by persons seeking awards from an agency pursuant to the provisions of the Small Business Act, as amended by Pub. L. 95-507, and subsequent amendments.

(E) Only those services expressly authorized by subdivision (b)(3)(i)(A) of this clause are permitted under this clause.

(ii) Professional and technical services.

(A) The prohibition on the use of appropriated funds, in subparagraph (b)(1) of this clause, does not apply in the case of--

(1) A payment of reasonable compensation made to an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action, if payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action.

(2) Any reasonable payment to a person, other than an officer or employee of a person requesting or receiving a covered Federal action or an extension, continuation, renewal, amendment, or modification of a covered Federal action if the payment is for professional or technical services rendered directly in the preparation, submission, or negotiation of any bid, proposal, or application for that Federal action or for meeting requirements imposed by or pursuant to law as a condition for receiving that Federal action. Persons other than officers or employees of a person requesting or receiving a covered Federal action include consultants and trade associations.

(B) For purposes of subdivision (b)(3)(ii)(A) of this clause, "professional and technical services" shall be limited to advice and analysis directly applying any professional or technical discipline. For example, drafting of a legal document accompanying a bid or proposal by a lawyer is allowable. Similarly, technical advice provided by an engineer on the performance or operational capability of a piece of equipment rendered directly in the negotiation of a contract is allowable. However, communications with the intent to influence made by a professional (such as a licensed lawyer) or a technical person (such as a licensed accountant) are not allowable under this section unless they provide advice and analysis directly applying their professional or technical expertise and unless the advice or analysis is rendered directly and solely in the preparation, submission or negotiation of a covered Federal action. Thus, for example, communications with the intent to influence made by a lawyer that do not provide legal advice or analysis directly and solely related to the legal aspects of his or her client's proposal, but generally advocate one proposal over another are not allowable under this section because the lawyer is not providing professional legal services. Similarly, communications with the intent to influence made by an engineer providing an engineering analysis prior to the preparation or submission of a bid or proposal are not allowable under this section since the engineer is providing technical services but not directly in the preparation, submission or negotiation of a covered Federal action.

(C) Requirements imposed by or pursuant to law as a condition for receiving a covered Federal award include those required by law or regulation and any other requirements in the actual award documents.

(D) Only those services expressly authorized by subdivisions (b)(3)(ii)(A)(1) and (2) of this clause are permitted under this clause.

(E) The reporting requirements of FAR 3.803(a) shall not apply with respect to payments of reasonable compensation made to regularly employed officers or employees of a person.

(c) Disclosure.

(1) The Contractor who requests or receives from an agency a Federal contract shall file with that agency a disclosure form, OMB standard form LLL, Disclosure of Lobbying Activities, if such person has made or has agreed to make any payment using nonappropriated funds (to include profits from any covered Federal action), which would be prohibited under subparagraph (b)(1) of this clause, if paid for with appropriated funds.

(2) The Contractor shall file a disclosure form at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the information contained in any disclosure form previously filed by such person under subparagraph (c)(1) of this clause. An event that materially affects the accuracy of the information reported includes--

(i) A cumulative increase of \$25,000 or more in the amount paid or expected to be paid for influencing or attempting to influence a covered Federal action; or

(ii) A change in the person(s) or individual(s) influencing or attempting to influence a covered Federal action; or

(iii) A change in the officer(s), employee(s), or Member(s) contacted to influence or attempt to influence a covered Federal action.

(3) The Contractor shall require the submittal of a certification, and if required, a disclosure form by any person who requests or receives any subcontract exceeding \$100,000 under the Federal contract.

(4) All subcontractor disclosure forms (but not certifications) shall be forwarded from tier to tier until received by the prime Contractor. The prime Contractor shall submit all disclosures to the Contracting Officer at the end of the calendar quarter in which the disclosure form is submitted by the subcontractor. Each subcontractor certification shall be retained in the subcontract file of the awarding Contractor.

(d) Agreement. The Contractor agrees not to make any payment prohibited by this clause.

(e) Penalties.

(1) Any person who makes an expenditure prohibited under paragraph (a) of this clause or who fails to file or amend the disclosure form to be filed or amended by paragraph (b) of this clause shall be subject to civil penalties as provided for by 31 U.S.C. 1352. An imposition of a civil penalty does not prevent the Government from seeking any other remedy that may be applicable.

(2) Contractors may rely without liability on the representation made by their subcontractors in the certification and disclosure form.

(f) Cost allowability. Nothing in this clause makes allowable or reasonable any costs which would otherwise be unallowable or unreasonable. Conversely, costs made specifically unallowable by the requirements in this clause will not be made allowable under any other provision.

(End of clause)

52.204-4 PRINTING OR COPYING DOUBLE-SIDED ON RECYCLED PAPER (AUG 2000)

(a) Definitions. As used in this clause--

Postconsumer material means a material or finished product that has served its intended use and has been discarded for disposal or recovery, having completed its life as a consumer item. Postconsumer material is a part of the broader category of "recovered material." For paper and paper products, postconsumer material means "postconsumer fiber" defined by the U.S. Environmental Protection Agency (EPA) as--

(1) Paper, paperboard, and fibrous materials from retail stores, office buildings, homes, and so forth, after they have passed through their end-usage as a consumer item, including: used corrugated boxes; old newspapers; old magazines; mixed waste paper; tabulating cards; and used cordage; or

(2) All paper, paperboard, and fibrous materials that enter and are collected from municipal solid waste; but not

(3) Fiber derived from printers' over-runs, converters' scrap, and over-issue publications.

Printed or copied double-sided means printing or reproducing a document so that information is on both sides of a sheet of paper.

Recovered material, for paper and paper products, is defined by EPA in its Comprehensive Procurement Guideline as "recovered fiber" and means the following materials:

(1) Postconsumer fiber; and

(2) Manufacturing wastes such as--

(i) Dry paper and paperboard waste generated after completion of the papermaking process (that is, those manufacturing operations up to and including the cutting and trimming of the paper machine reel into smaller rolls or rough sheets) including: envelope cuttings, bindery trimmings, and other paper and paperboard waste resulting

from printing, cutting, forming, and other converting operations; bag, box, and carton manufacturing wastes; and butt rolls, mill wrappers, and rejected unused stock; and

(ii) Repulped finished paper and paperboard from obsolete inventories of paper and paperboard manufacturers, merchants, wholesalers, dealers, printers, converters, or others.

(b) In accordance with Section 101 of Executive Order 13101 of September 14, 1998, Greening the Government through Waste Prevention, Recycling, and Federal Acquisition, the Contractor is encouraged to submit paper documents, such as offers, letters, or reports, that are printed or copied double-sided on recycled paper that meet minimum content standards specified in Section 505 of Executive Order 13101, when not using electronic commerce methods to submit information or data to the Government.

(c) If the Contractor cannot purchase high-speed copier paper, offset paper, forms bond, computer printout paper, carbonless paper, file folders, white wove envelopes, writing and office paper, book paper, cotton fiber paper, and cover stock meeting the 30 percent postconsumer material standard for use in submitting paper documents to the Government, it should use paper containing no less than 20 percent postconsumer material. This lesser standard should be used only when paper meeting the 30 percent postconsumer material standard is not obtainable at a reasonable price or does not meet reasonable performance standards.

(End of clause)

52.209-6 PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT (JUL 1995)

(a) The Government suspends or debar Contractors to protect the Government's interests. The Contractor shall not enter into any subcontract in excess of the \$25,000 with a Contractor that is debarred, suspended, or proposed for debarment unless there is a compelling reason to do so.

(b) The Contractor shall require each proposed first-tier subcontractor, whose subcontract will exceed \$25,000, to disclose to the Contractor, in writing, whether as of the time of award of the subcontract, the subcontractor, or its principles, is or is not debarred, suspended, or proposed for debarment by the Federal Government.

(c) A corporate officer or a designee of the Contractor shall notify the Contracting Officer, in writing, before entering into a subcontract with a party that is debarred, suspended, or proposed for debarment (see FAR 9.404 for information on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs). The notice must include the following:

(1) The name of the subcontractor.

(2) The Contractor's knowledge of the reasons for the subcontractor being on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs.

(3) The compelling reason(s) for doing business with the subcontractor notwithstanding its inclusion on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs.

(4) The systems and procedures the Contractor has established to ensure that it is fully protecting the Government's interests when dealing with such subcontractor in view of the specific basis for the party's debarment, suspension, or proposed debarment.

(End of clause)

52.212-4007 ENVIRONMENTAL LITIGATION

(a) If the performance of all or any part of the work is suspended, delayed, or interrupted due to an order of a court of competent jurisdiction as a result of environmental litigation, as defined below, the Contracting Officer, at the request of the Contractor, shall determine whether the order is due in any part to the acts or omissions of the Contractor or a Subcontractor at any tier not required by the terms of this contract. If it is determined that the order is not due in any part to acts or omissions of the Contractor or a Subcontractor at any tier other than as required by the terms of this contract, such suspension, delay, or interruption shall be considered as if ordered by the Contracting Officer in the administration of this contract under the terms of the "Suspension of Work" clause of this contract. The period of such suspension, delay or interruption shall be considered unreasonable, and an adjustment shall be made for any increase in the cost of performance of this contract (excluding profit) as provided in that clause, subject to all the provisions thereof.

(b) The term "environmental litigation", as used herein, means a lawsuit alleging that the work will have an adverse effect on the environment or that the Government has not duly considered, either substantially or procedurally, the effect of the work on the environment.

52.215-2 AUDIT AND RECORDS--NEGOTIATION (JUN 1999)

(a) As used in this clause, "records" includes books, documents, accounting procedures and practices, and other data, regardless of type and regardless of whether such items are in written form, in the form of computer data, or in any other form.

(b) Examination of costs. If this is a cost-reimbursement, incentive, time-and-materials, labor-hour, or price redeterminable contract, or any combination of these, the Contractor shall maintain and the Contracting Officer, or an authorized representative of the Contracting Officer, shall have the right to examine and audit all records and other evidence sufficient to reflect properly all costs claimed to have been incurred or anticipated to be incurred directly or indirectly in performance of this contract. This right of examination shall include inspection at all reasonable times of the Contractor's plants, or parts of them, engaged in performing the contract.

(c) Cost or pricing data. If the Contractor has been required to submit cost or pricing data in connection with any pricing action relating to this contract, the Contracting Officer, or an authorized representative of the Contracting Officer, in order to evaluate the accuracy, completeness, and currency of the cost or pricing data, shall have the right to examine and audit all of the Contractor's records, including computations and projections, related to--

- (1) The proposal for the contract, subcontract, or modification;
- (2) The discussions conducted on the proposal(s), including those related to negotiating;
- (3) Pricing of the contract, subcontract, or modification; or
- (4) Performance of the contract, subcontract or modification.

(d) Comptroller General--(1) The Comptroller General of the United States, or an authorized representative, shall have access to and the right to examine any of the Contractor's directly pertinent records involving transactions related to this contract or a subcontract hereunder.

(2) This paragraph may not be construed to require the Contractor or subcontractor to create or maintain any record that the Contractor or subcontractor does not maintain in the ordinary course of business or pursuant to a provision of law.

(e) Reports. If the Contractor is required to furnish cost, funding, or performance reports, the Contracting Officer or an authorized representative of the Contracting Officer shall have the right to examine and audit the supporting records and materials, for the purpose of evaluating (1) the effectiveness of the Contractor's policies and procedures to produce data compatible with the objectives of these reports and (2) the data reported.

(f) Availability. The Contractor shall make available at its office at all reasonable times the records, materials, and other evidence described in paragraphs (a), (b), (c), (d), and (e) of this clause, for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in Subpart 4.7, Contractor Records Retention, of the Federal Acquisition Regulation (FAR), or for any longer period required by statute or by other clauses of this contract. In addition--

(1) If this contract is completely or partially terminated, the Contractor shall make available the records relating to the work terminated until 3 years after any resulting final termination settlement; and

(2) The Contractor shall make available records relating to appeals under the Disputes clause or to litigation or the settlement of claims arising under or relating to this contract until such appeals, litigation, or claims are finally resolved.

(g) The Contractor shall insert a clause containing all the terms of this clause, including this paragraph (g), in all subcontracts under this contract that exceed the simplified acquisition threshold, and--

(1) That are cost-reimbursement, incentive, time-and-materials, labor-hour, or price-redeterminable type or any combination of these;

(2) For which cost or pricing data are required; or

(3) That require the subcontractor to furnish reports as discussed in paragraph (e) of this clause.

The clause may be altered only as necessary to identify properly the contracting parties and the Contracting Officer under the Government prime contract.

(End of clause)

52.215-10 PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA (OCT 1997)

(a) 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 amount because--

(1) The Contractor or a subcontractor furnished cost or pricing data that were not complete, accurate, and current as certified in its Certificate of Current Cost or Pricing Data;

(2) A subcontractor or prospective subcontractor furnished the Contractor cost or pricing data that were not complete, accurate, and current as certified in the Contractor's Certificate of Current Cost or Pricing Data; or

(3) Any of these parties furnished data of any description that were not accurate, the price or cost shall be reduced accordingly and the contract shall be modified to reflect the reduction.

(b) Any reduction in the contract price under paragraph (a) of this clause due to defective data from a prospective subcontractor that was not subsequently awarded the subcontract shall be limited to the amount, plus applicable overhead and profit markup, by which--

(1) The actual subcontract; or

(2) The actual cost to the Contractor, if there was no subcontract, was less than the prospective subcontract cost estimate submitted by the Contractor; provided, that the actual subcontract price was not itself affected by defective cost or pricing data.

(c)(1) If the Contracting Officer determines under paragraph (a) of this clause that a price or cost reduction should be made, the Contractor agrees not to raise the following matters as a defense:

(i) The Contractor or subcontractor was a sole source supplier or otherwise was in a superior bargaining position and thus the price of the contract would not have been modified even if accurate, complete, and current cost or pricing data had been submitted.

(ii) The Contracting Officer should have known that the cost or pricing data in issue were defective even though the Contractor or subcontractor took no affirmative action to bring the character of the data to the attention of the Contracting Officer.

(iii) The contract was based on an agreement about the total cost of the contract and there was no agreement about the cost of each item procured under the contract.

(iv) The Contractor or subcontractor did not submit a Certificate of Current Cost or Pricing Data.

(2)(i) Except as prohibited by subdivision (c)(2)(ii) of this clause, an offset in an amount determined appropriate by the Contracting Officer based upon the facts shall be allowed against the amount of a contract price reduction if--

(A) The Contractor certifies to the Contracting Officer that, to the best of the Contractor's knowledge and belief, the Contractor is entitled to the offset in the amount requested; and

(B) The Contractor proves that the cost or pricing data were available before the "as of" date specified on its Certificate of Current Cost or Pricing Data, and that the data were not submitted before such date.

(ii) An offset shall not be allowed if--

(A) The understated data were known by the Contractor to be understated before the "as of" date specified on its Certificate of Current Cost or Pricing Data; or

(B) The Government proves that the facts demonstrate that the contract price would not have increased in the amount to be offset even if the available data had been submitted before the "as of" date specified on its Certificate of Current Cost or Pricing Data.

(d) If any reduction in the contract price under this clause reduces the price of items for which payment was made prior to the date of the modification reflecting the price reduction, the Contractor shall be liable to and shall pay the United States at the time such overpayment is repaid--

(1) Simple interest on the amount of such overpayment to be computed from the date(s) of overpayment to the Contractor to the date the Government is repaid by the Contractor at the applicable underpayment rate effective for each quarter prescribed by the Secretary of the Treasury under 26 U.S.C. 6621(a)(2); and

A penalty equal to the amount of the overpayment, if the Contractor or subcontractor knowingly submitted cost or pricing data that were incomplete, inaccurate, or noncurrent.

52.215-11 PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA--MODIFICATIONS (OCT 1997)

(a) This clause shall become operative only for any modification to this contract involving a pricing adjustment expected to exceed the threshold for submission of cost or pricing data at FAR 15.403-4, except that this clause does not apply to any modification if an exception under FAR 15.403-1 applies.

(b) If any price, including profit or fee, negotiated in connection with any modification under this clause, or any cost reimbursable under this contract, was increased by any significant amount because (1) the Contractor or a

subcontractor furnished cost or pricing data that were not complete, accurate, and current as certified in its Certificate of Current Cost or Pricing Data, (2) a subcontractor or prospective subcontractor furnished the Contractor cost or pricing data that were not complete, accurate, and current as certified in the Contractor's Certificate of Current Cost or Pricing Data, or (3) any of these parties furnished data of any description that were not accurate, the price or cost shall be reduced accordingly and the contract shall be modified to reflect the reduction. This right to a price reduction is limited to that resulting from defects in data relating to modifications for which this clause becomes operative under paragraph (a) of this clause.

(c) Any reduction in the contract price under paragraph (b) of this clause due to defective data from a prospective subcontractor that was not subsequently awarded the subcontract shall be limited to the amount, plus applicable overhead and profit markup, by which--

(1) The actual subcontract; or

(2) The actual cost to the Contractor, if there was no subcontract, was less than the prospective subcontract cost estimate submitted by the Contractor; provided, that the actual subcontract price was not itself affected by defective cost or pricing data.

(d)(1) If the Contracting Officer determines under paragraph (b) of this clause that a price or cost reduction should be made, the Contractor agrees not to raise the following matters as a defense:

(i) The Contractor or subcontractor was a sole source supplier or otherwise was in a superior bargaining position and thus the price of the contract would not have been modified even if accurate, complete, and current cost or pricing data had been submitted.

(ii) The Contracting Officer should have known that the cost or pricing data in issue were defective even though the Contractor or subcontractor took no affirmative action to bring the character of the data to the attention of the Contracting Officer.

(iii) The contract was based on an agreement about the total cost of the contract and there was no agreement about the cost of each item procured under the contract.

(iv) The Contractor or subcontractor did not submit a Certificate of Current Cost or Pricing Data.

(2)(i) Except as prohibited by subdivision (d)(2)(ii) of this clause, an offset in an amount determined appropriate by the Contracting Officer based upon the facts shall be allowed against the amount of a contract price reduction if--

(A) The Contractor certifies to the Contracting Officer that, to the best of the Contractor's knowledge and belief, the Contractor is entitled to the offset in the amount requested; and

(B) The Contractor proves that the cost or pricing data were available before the "as of" date specified on its Certificate of Current Cost or Pricing Data, and that the data were not submitted before such date.

(ii) An offset shall not be allowed if--

(A) The understated data were known by the Contractor to be understated before the "as of" date specified on its Certificate of Current Cost or Pricing Data; or

(B) The Government proves that the facts demonstrate that the contract price would not have increased in the amount to be offset even if the available data had been submitted before the "as of" date specified on its Certificate of Current Cost or Pricing Data.

(e) If any reduction in the contract price under this clause reduces the price of items for which payment was made prior to the date of the modification reflecting the price reduction, the Contractor shall be liable to and shall pay the United States at the time such overpayment is repaid--

(1) Simple interest on the amount of such overpayment to be computed from the date(s) of overpayment to the Contractor to the date the Government is repaid by the Contractor at the applicable underpayment rate effective for each quarter prescribed by the Secretary of the Treasury under 26 U.S.C. 6621(a)(2); and

A penalty equal to the amount of the overpayment, if the Contractor or subcontractor knowingly submitted cost or pricing data that were incomplete, inaccurate, or noncurrent.

52.215-12 SUBCONTRACTOR COST OR PRICING DATA (OCT 1997)

(a) Before awarding any subcontract expected to exceed the threshold for submission of cost or pricing data at FAR 15.403-4, on the date of agreement on price or the date of award, whichever is later; or before pricing any subcontract modification involving a pricing adjustment expected to exceed the threshold for submission of cost or pricing data at FAR 15.403-4, the Contractor shall require the subcontractor to submit cost or pricing data (actually or by specific identification in writing), unless an exception under FAR 15.403-1 applies.

(b) The Contractor shall require the subcontractor to certify in substantially the form prescribed in FAR 15.406-2 that, to the best of its knowledge and belief, the data submitted under paragraph (a) of this clause were accurate, complete, and current as of the date of agreement on the negotiated price of the subcontract or subcontract modification.

(c) In each subcontract that exceeds the threshold for submission of cost or pricing data at FAR 15.403-4, when entered into, the Contractor shall insert either--

(1) The substance of this clause, including this paragraph (c), if paragraph (a) of this clause requires submission of cost or pricing data for the subcontract; or

(2) The substance of the clause at FAR 52.215-13, Subcontractor Cost or Pricing Data--Modifications.

52.215-13 SUBCONTRACTOR COST OR PRICING DATA--MODIFICATIONS (OCT 1997)

(a) The requirements of paragraphs (b) and (c) of this clause shall--

(1) Become operative only for any modification to this contract involving a pricing adjustment expected to exceed the threshold for submission of cost or pricing data at FAR 15.403-4; and

(2) Be limited to such modifications.

(b) Before awarding any subcontract expected to exceed the threshold for submission of cost or pricing data at FAR 15.403-4, on the date of agreement on price or the date of award, whichever is later; or before pricing any subcontract modification involving a pricing adjustment expected to exceed the threshold for submission of cost or pricing data at FAR 15.403-4, the Contractor shall require the subcontractor to submit cost or pricing data (actually or by specific identification in writing), unless an exception under FAR 15.403-1 applies.

(c) The Contractor shall require the subcontractor to certify in substantially the form prescribed in FAR 15.406-2 that, to the best of its knowledge and belief, the data submitted under paragraph (b) of this clause were accurate, complete, and current as of the date of agreement on the negotiated price of the subcontract or subcontract modification.

The Contractor shall insert the substance of this clause, including this paragraph (d), in each subcontract that exceeds the threshold for submission of cost or pricing data at FAR 15.403-4 on the date of agreement on price or the date of award, whichever is later.

52.217-9 OPTION TO EXTEND THE TERM OF THE CONTRACT (MAR 2000)

(a) The Government may extend the term of this contract by written notice to the Contractor within 60 days provided that the Government gives the Contractor a preliminary written notice of its intent to extend at least 60 days before the contract expires. The preliminary notice does not commit the Government to an extension.

(b) If the Government exercises this option, the extended contract shall be considered to include this option clause.

(c) The total duration of this contract, including the exercise of any options under this clause, shall not exceed three (3) years.

(End of clause)

52.219-6 NOTICE OF TOTAL SMALL BUSINESS SET-ASIDE (JUL 1996)

(a) Definition.

"Small business concern," as used in this clause, means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the size standards in this solicitation.

(b) General. (1) Offers are solicited only from small business concerns. Offers received from concerns that are not small business concerns shall be considered nonresponsive and will be rejected.

(2) Any award resulting from this solicitation will be made to a small business concern.

(c) Agreement. A small business concern submitting an offer in its own name agrees to furnish, in performing the contract, only end items manufactured or produced by small business concerns in the United States. The term "United States" includes its territories and possessions, the Commonwealth of Puerto Rico, the Trust Territory of the Pacific Islands, and the District of Columbia. If this procurement is processed under simplified acquisition procedures and the total amount of this contract does not exceed \$25,000, a small business concern may furnish the product of any domestic firm. This paragraph does not apply in connection with construction or service contracts.

(End of clause)

52.219-8 UTILIZATION OF SMALL BUSINESS CONCERNS (OCT 2000)

(a) It is the policy of the United States that small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, and women-owned small business concerns shall have the maximum practicable opportunity to participate in performing contracts let by any Federal agency, including contracts and subcontracts for subsystems, assemblies, components, and related services for major systems. It is further the policy of the United States that its prime contractors establish procedures to ensure the timely payment of amounts due pursuant to the terms of their subcontracts with small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns, and women-owned small business concerns.

(b) The Contractor hereby agrees to carry out this policy in the awarding of subcontracts to the fullest extent consistent with efficient contract performance. The Contractor further agrees to cooperate in any studies or surveys

as may be conducted by the United States Small Business Administration or the awarding agency of the United States as may be necessary to determine the extent of the Contractor's compliance with this clause.

Definitions. As used in this contract--

HUBZone small business concern means a small business concern that appears on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration.

Service-disabled veteran-owned small business concern--

(1) Means a small business concern--

(i) Not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and

(ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a veteran with permanent and severe disability, the spouse or permanent caregiver of such veteran.

(2) Service-disabled veteran means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16).

Small business concern means a small business as defined pursuant to Section 3 of the Small Business Act and relevant regulations promulgated pursuant thereto.

Small disadvantaged business concern means a small business concern that represents, as part of its offer that--

(1) It has received certification as a small disadvantaged business concern consistent with 13 CFR part 124, subpart B;

(2) No material change in disadvantaged ownership and control has occurred since its certification;

(3) Where the concern is owned by one or more individuals, the net worth of each individual upon whom the certification is based does not exceed \$750,000 after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); and

(4) It is identified, on the date of its representation, as a certified small disadvantaged business in the database maintained by the Small Business Administration (PRO-Net).

Veteran-owned small business concern means a small business concern--

(1) Not less than 51 percent of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and

(2) The management and daily business operations of which are controlled by one or more veterans.

Women-owned small business concern means a small business concern--

(1) That is at least 51 percent owned by one or more women, or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and

(2) Whose management and daily business operations are controlled by one or more women.

(d) Contractors acting in good faith may rely on written representations by their subcontractors regarding their status as a small business concern, a veteran-owned small business concern, a service-disabled veteran-owned small business concern, a HUBZone small business concern, a small disadvantaged business concern, or a women-owned small business concern.

(End of clause)

52.219-9 SMALL BUSINESS SUBCONTRACTING PLAN (OCT 2000) ALTERNATE II (OCT 2000)

(a) This clause does not apply to small business concerns.

(b) Definitions. As used in this clause--

Commercial item means a product or service that satisfies the definition of commercial item in section 2.101 of the Federal Acquisition Regulation.

Commercial plan means a subcontracting plan (including goals) that covers the offeror's fiscal year and that applies to the entire production of commercial items sold by either the entire company or a portion thereof (e.g., division, plant, or product line).

Individual contract plan means a subcontracting plan that covers the entire contract period (including option periods), applies to a specific contract, and has goals that are based on the offeror's planned subcontracting in support of the specific contract, except that indirect costs incurred for common or joint purposes may be allocated on a prorated basis to the contract.

Master plan means a subcontracting plan that contains all the required elements of an individual contract plan, except goals, and may be incorporated into individual contract plans, provided the master plan has been approved.

Subcontract means any agreement (other than one involving an employer-employee relationship) entered into by a Federal Government prime Contractor or subcontractor calling for supplies or services required for performance of the contract or subcontract.

(c) Proposals submitted in response to this solicitation shall include a subcontracting plan that separately addresses subcontracting with small business, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns. If the offeror is submitting an individual contract plan, the plan must separately address subcontracting with small business, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns, with a separate part for the basic contract and separate parts for each option (if any). The plan shall be included in and made a part of the resultant contract. The subcontracting plan shall be negotiated within the time specified by the Contracting Officer. Failure to submit and negotiate a subcontracting plan shall make the offeror ineligible for award of a contract.

(d) The offeror's subcontracting plan shall include the following:

(1) Goals, expressed in terms of percentages of total planned subcontracting dollars, for the use of small business, veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns as subcontractors. Service-disabled veteran-owned small business concerns meet the definition of veteran-owned small business concerns, and offerors may include them within the subcontracting plan goal for veteran-owned small business concerns. A separate goal for service-disabled veteran-owned small business concerns is not required. The offeror shall include all subcontracts that contribute to contract performance, and may include a proportionate share of products and services that are normally allocated as indirect costs.

(2) A statement of--

(i) Total dollars planned to be subcontracted for an individual contract plan; or the offeror's total projected sales, expressed in dollars, and the total value of projected subcontracts to support the sales for a commercial plan;

- (ii) Total dollars planned to be subcontracted to small business concerns;
 - (iii) Total dollars planned to be subcontracted to veteran-owned small business concerns;
 - (iv) Total dollars planned to be subcontracted to HUBZone small business concerns;
 - (v) Total dollars planned to be subcontracted to small disadvantaged business concerns; and
 - (vi) Total dollars planned to be subcontracted to women-owned small business concerns.
- (3) A description of the principal types of supplies and services to be subcontracted, and an identification of the types planned for subcontracting to--
- (i) Small business concerns;
 - (ii) Veteran-owned small business concerns;
 - (iii) HUBZone small business concerns;
 - (iv) Small disadvantaged business concerns; and
 - (v) Women-owned small business concerns.
- (4) A description of the method used to develop the subcontracting goals in paragraph (d)(1) of this clause.
- (5) A description of the method used to identify potential sources for solicitation purposes (e.g., existing company source lists, the Procurement Marketing and Access Network (PRO-Net) of the Small Business Administration (SBA), veterans service organizations, the National Minority Purchasing Council Vendor Information Service, the Research and Information Division of the Minority Business Development Agency in the Department of Commerce, or small, HUBZone, small disadvantaged, and women-owned small business trade associations). A firm may rely on the information contained in PRO-Net as an accurate representation of a concern's size and ownership characteristics for the purposes of maintaining a small, veteran-owned small, HUBZone small, small disadvantaged, and women-owned small business source list. Use of PRO-Net as its source list does not relieve a firm of its responsibilities (e.g., outreach, assistance, counseling, or publicizing subcontracting opportunities) in this clause.
- (6) A statement as to whether or not the offeror included indirect costs in establishing subcontracting goals, and a description of the method used to determine the proportionate share of indirect costs to be incurred with—
- (i) Small business concerns;
 - (ii) Veteran-owned small business concerns;
 - (iii) HUBZone small business concerns;
 - (iv) Small disadvantaged business concerns; and
 - (v) Women-owned small business concerns.
- (7) The name of the individual employed by the offeror who will administer the offeror's subcontracting program, and a description of the duties of the individual.
- (8) A description of the efforts the offeror will make to assure that small business, veteran-owned small business, HUBZone small business, small disadvantaged business and women-owned small business concerns have an equitable opportunity to compete for subcontracts.

(9) Assurances that the offeror will include the clause of this contract entitled "Utilization of Small Business Concerns" in all subcontracts that offer further subcontracting opportunities, and that the offeror will require all subcontractors (except small business concerns) that receive subcontracts in excess of \$500,000 (\$1,000,000 for construction of any public facility) to adopt a subcontracting plan that complies with the requirements of this clause.

(10) Assurances that the offeror will--

(i) Cooperate in any studies or surveys as may be required;

(ii) Submit periodic reports so that the Government can determine the extent of compliance by the offeror with the subcontracting plan;

(iii) Submit Standard Form (SF) 294, Subcontracting Report for Individual Contracts, and/or SF 295, Summary Subcontract Report, in accordance with paragraph (j) of this clause. The reports shall provide information on subcontract awards to small business concerns, veteran-owned small business concerns, service-disabled veteran-owned small business concerns, small disadvantaged business concerns, women-owned small business concerns, and Historically Black Colleges and Universities and Minority Institutions. Reporting shall be in accordance with the instructions on the forms or as provided in agency regulations.

(iv) Ensure that its subcontractors agree to submit SF 294 and SF 295.

(11) A description of the types of records that will be maintained concerning procedures that have been adopted to comply with the requirements and goals in the plan, including establishing source lists; and a description of the offeror's efforts to locate small business, veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns and award subcontracts to them. The records shall include at least the following (on a plant-wide or company-wide basis, unless otherwise indicated)

(i) Source lists (e.g., PRO-Net), guides, and other data that identify small business, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns.

(ii) Organizations contacted in an attempt to locate sources that are small business, veteran-owned small business, HUBZone small business, small disadvantaged business, or women-owned small business concerns.

(iii) Records on each subcontract solicitation resulting in an award of more than \$100,000, indicating--

(A) Whether small business concerns were solicited and, if not, why not;

(B) Whether veteran-owned small business concerns were solicited and, if not, why not;

(C) Whether HUBZone small business concerns were solicited and, if not, why not;

(D) Whether small disadvantaged business concerns were solicited and, if not, why not;

(E) Whether women-owned small business concerns were solicited and, if not, why not; and

(F) If applicable, the reason award was not made to a small business concern.

(iv) Records of any outreach efforts to contact--

(A) Trade associations;

(B) Business development organizations;

(C) Conferences and trade fairs to locate small, HUBZone small, small disadvantaged, and women-owned small business sources; and

(D) Veterans service organizations.

(v) Records of internal guidance and encouragement provided to buyers through--

(A) Workshops, seminars, training, etc.; and

(B) Monitoring performance to evaluate compliance with the program's requirements.

(vi) On a contract-by-contract basis, records to support award data submitted by the offeror to the Government, including the name, address, and business size of each subcontractor. Contractors having commercial plans need not comply with this requirement.

(e) In order to effectively implement this plan to the extent consistent with efficient contract performance, the Contractor shall perform the following functions:

(1) Assist small business, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns by arranging solicitations, time for the preparation of bids, quantities, specifications, and delivery schedules so as to facilitate the participation by such concerns. Where the Contractor's lists of potential small business, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned 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.

(2) Provide adequate and timely consideration of the potentialities of small business, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns in all "make-or-buy" decisions.

(3) Counsel and discuss subcontracting opportunities with representatives of small business, veteran-owner small business, HUBZone small business, small disadvantaged business, and women-owned small business firms.

(4) Provide notice to subcontractors concerning penalties and remedies for misrepresentations of business status as small, veteran-owner small business, HUBZone small, small disadvantaged, or women-owned small business for the purpose of obtaining a subcontract that is to be included as part or all of a goal contained in the Contractor's subcontracting plan.

(f) A master plan on a plant or division-wide basis that contains all the elements required by paragraph (d) of this clause, except goals, may be incorporated by reference as a part of the subcontracting plan required of the offeror by this clause; provided--

(1) the master plan has been approved, (2) the offeror ensures that the master plan is updated as necessary and provides copies of the approved master plan, including evidence of its approval, to the Contracting Officer, and (3) goals and any deviations from the master plan deemed necessary by the Contracting Officer to satisfy the requirements of this contract are set forth in the individual subcontracting plan.

(g) A commercial plan is the preferred type of subcontracting plan for contractors furnishing commercial items. The commercial plan shall relate to the offeror's planned subcontracting generally, for both commercial and Government business, rather than solely to the Government contract. Commercial plans are also preferred for subcontractors that provide commercial items under a prime contract, whether or not the prime contractor is supplying a commercial item.

(h) Prior compliance of the offeror with other such subcontracting plans under previous contracts will be considered by the Contracting Officer in determining the responsibility of the offeror for award of the contract.

(i) The failure of the Contractor or subcontractor to comply in good faith with (1) the clause of this contract entitled "Utilization Of Small Business Concerns," or (2) an approved plan required by this clause, shall be a material breach of the contract.

(j) The Contractor shall submit the following reports:

(1) Standard Form 294, Subcontracting Report for Individual Contracts. This report shall be submitted to the Contracting Officer semiannually and at contract completion. The report covers subcontract award data related to this contract. This report is not required for commercial plans.

(2) Standard Form 295, Summary Subcontract Report. This report encompasses all of the contracts with the awarding agency. It must be submitted semi-annually for contracts with the Department of Defense and annually for contracts with civilian agencies. If the reporting activity is covered by a commercial plan, the reporting activity must report annually all subcontract awards under that plan. All reports submitted at the close of each fiscal year (both individual and commercial plans) shall include a breakout, in the Contractor's format, of subcontract awards, in whole dollars, to small disadvantaged business concerns by North American Industry Classification System (NAICS) Industry Subsector. For a commercial plan, the Contractor may obtain from each of its subcontractors a predominant NAICS Industry Subsector and report all awards to that subcontractor under its predominant NAICS Industry Subsector.

(End of clause)

52.219-14 LIMITATIONS ON SUBCONTRACTING (DEC 1996)

(a) This clause does not apply to the unrestricted portion of a partial set-aside.

(b) By submission of an offer and execution of a contract, the Offeror/Contractor agrees that in performance of the contract in the case of a contract for--

(1) Services (except construction). At least 50 percent of the cost of contract performance incurred for personnel shall be expended for employees of the concern.

(2) Supplies (other than procurement from a nonmanufacturer of such supplies). The concern shall perform work for at least 50 percent of the cost of manufacturing the supplies, not including the cost of materials.

(3) General construction. The concern will perform at least 15 percent of the cost of the contract, not including the cost of materials, with its own employees.

(4) Construction by special trade contractors. The concern will perform at least 25 percent of the cost of the contract, not including the cost of materials, with its own employees.

52.219-16 LIQUIDATED DAMAGES-SUBCONTRACTING PLAN (JAN 1999)

(a) Failure to make a good faith effort to comply with the subcontracting plan, as used in this clause, means a willful or intentional failure to perform in accordance with the requirements of the subcontracting plan approved under the clause in this contract entitled "Small Business Subcontracting Plan," or willful or intentional action to frustrate the plan.

(b) Performance shall be measured by applying the percentage goals to the total actual subcontracting dollars or, if a commercial plan is involved, to the pro rata share of actual subcontracting dollars attributable to Government contracts covered by the commercial plan. If, at contract completion or, in the case of a commercial plan, at the close of the fiscal year for which the plan is applicable, the Contractor has failed to meet its subcontracting goals and the Contracting Officer decides in accordance with paragraph (c) of this clause that the Contractor failed to make a

good faith effort to comply with its subcontracting plan, established in accordance with the clause in this contract entitled "Small Business Subcontracting Plan," the Contractor shall pay the Government liquidated damages in an amount stated. The amount of probable damages attributable to the Contractor's failure to comply shall be an amount equal to the actual dollar amount by which the Contractor failed to achieve each subcontract goal.

(c) Before the Contracting Officer makes a final decision that the Contractor has failed to make such good faith effort, the Contracting Officer shall give the Contractor written notice specifying the failure and permitting the Contractor to demonstrate what good faith efforts have been made and to discuss the matter. Failure to respond to the notice may be taken as an admission that no valid explanation exists. If, after consideration of all the pertinent data, the Contracting Officer finds that the Contractor failed to make a good faith effort to comply with the subcontracting plan, the Contracting Officer shall issue a final decision to that effect and require that the Contractor pay the Government liquidated damages as provided in paragraph (b) of this clause.

(d) With respect to commercial plans, the Contracting Officer who approved the plan will perform the functions of the Contracting Officer under this clause on behalf of all agencies with contracts covered by the commercial plan.

(e) The Contractor shall have the right of appeal, under the clause in this contract entitled Disputes, from any final decision of the Contracting Officer.

(f) Liquidated damages shall be in addition to any other remedies that the Government may have.

(End of clause)

52.219-25 SMALL DISADVANTAGED BUSINESS PARTICIPATION PROGRAM—DISADVANTAGED STATUS AND REPORTING (OCT 1999)

(a) Disadvantaged status for joint venture partners, team members, and subcontractors. This clause addresses disadvantaged status for joint venture partners, teaming arrangement members, and subcontractors and is applicable if this contract contains small disadvantaged business (SDB) participation targets. The Contractor shall obtain representations of small disadvantaged status from joint venture partners, teaming arrangement members, and subcontractors through use of a provision substantially the same as paragraph (b)(1)(i) of the provision at FAR 52.219-22, Small Disadvantaged Business Status. The Contractor shall confirm that a joint venture partner, team member, or subcontractor representing itself as a small disadvantaged business concern, is identified as a certified small disadvantaged business in the database maintained by the Small Business Administration (PRO-Net) or by contacting the SBA's Office of Small Disadvantaged Business Certification and Eligibility.

(b) Reporting requirement. If this contract contains SDB participation targets, the Contractor shall report on the participation of SDB concerns at contract completion, or as otherwise provided in this contract. Reporting may be on Optional Form 312, Small Disadvantaged Business Participation Report, or in the Contractor's own format providing the same information. This report is required for each contract containing SDB participation targets. If this contract contains an individual Small, Small Disadvantaged and Women-Owned Small Business Subcontracting Plan, reports may be submitted with the final Subcontracting Report for Individual Contracts (Standard Form 294) at the completion of the contract.

(End of clause)

Special Contract Conditions, 8(a) Subcontractors

**** (subcontractor name) **** shall not subcontract the performance of any of the requirements of this contract to any lower tier subcontractor without the prior written approval of the SBA and the designated Contracting Officer of the Seattle District, U.S. Army, Corps of Engineers. **** (subcontractor name) **** shall have the right of appeal from decisions of the Contracting Officer cognizable under the "Disputes" clause of the said contract.

52.222-1 NOTICE TO THE GOVERNMENT OF LABOR DISPUTES (FEB 1997)

If 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, including all relevant information, to the Contracting Officer.

52.222-3 CONVICT LABOR (AUG 1996)

The Contractor agrees not to employ in the performance of this contract any person undergoing a sentence of imprisonment which has been imposed by any court of a State, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, or the Trust Territory of the Pacific Islands. This limitation, however, shall not prohibit the employment by the Contractor in the performance of this contract of persons on parole or probation to work at paid employment during the term of their sentence or persons who have been pardoned or who have served their terms. Nor shall it prohibit the employment by the Contractor in the performance of this contract of persons confined for violation of the laws of any of the States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, or the Trust Territory of the Pacific Islands who are authorized to work at paid employment in the community under the laws of such jurisdiction, if--

- (a)(1) The worker is paid or is in an approved work training program on a voluntary basis;
 - (2) Representatives of local union central bodies or similar labor union organizations have been consulted;
 - (3) Such paid employment will not result in the displacement of employed workers, or be applied in skills, crafts, or trades in which there is a surplus of available gainful labor in the locality, or impair existing contracts for services; and
 - (4) The rates of pay and other conditions of employment will not be less than those paid or provided for work of a similar nature in the locality in which the work is being performed; and
- (b) The Attorney General of the United States has certified that the work-release laws or regulations of the jurisdiction involved are in conformity with the requirements of Executive Order 11755, as amended by Executive Orders 12608 and 12943.

(End of clause)

52.222-4 CONTRACT WORK HOURS AND SAFETY STANDARDS ACT - OVERTIME COMPENSATION. (SEP 2000)

- (a) Overtime requirements. No Contractor or subcontractor employing laborers or mechanics (see Federal Acquisition Regulation 22.300) shall require or permit them to work over 40 hours in any workweek unless they are paid at least 1 and 1/2 times the basic rate of pay for each hour worked over 40 hours.
- (b) Violation; liability for unpaid wages; liquidated damages. The responsible Contractor and subcontractor are liable for unpaid wages if they violate the terms in paragraph (a) of this clause. In addition, the Contractor and subcontractor are liable for liquidated damages payable to the Government. The Contracting Officer will assess liquidated damages at the rate of \$10 per affected employee for each calendar day on which the employer required or permitted the employee to work in excess of the standard workweek of 40 hours without paying overtime wages required by the Contract Work Hours and Safety Standards Act.
- (c) Withholding for unpaid wages and liquidated damages. The Contracting Officer will withhold from payments due under the contract sufficient funds required to satisfy any Contractor or subcontractor liabilities for unpaid wages and liquidated damages. If amounts withheld under the contract are insufficient to satisfy Contractor or

subcontractor liabilities, the Contracting Officer will withhold payments from other Federal or Federally assisted contracts held by the same Contractor that are subject to the Contract Work Hours and Safety Standards Act.

(d) Payrolls and basic records.

(1) The Contractor and its subcontractors shall maintain payrolls and basic payroll records for all laborers and mechanics working on the contract during the contract and shall make them available to the Government until 3 years after contract completion. The records shall contain the name and address of each employee, social security number, labor classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. The records need not duplicate those required for construction work by Department of Labor regulations at 29 CFR 5.5(a)(3) implementing the Davis-Bacon Act.

(2) The Contractor and its subcontractors shall allow authorized representatives of the Contracting Officer or the Department of Labor to inspect, copy, or transcribe records maintained under paragraph (d)(1) of this clause. The Contractor or subcontractor also shall allow authorized representatives of the Contracting Officer or Department of Labor to interview employees in the workplace during working hours.

(e) Subcontracts. The Contractor shall insert the provisions set forth in paragraphs (a) through (d) of this clause in subcontracts exceeding \$100,000 and require subcontractors to include these provisions in any lower tier subcontracts. The Contractor shall be responsible for compliance by any subcontractor or lower-tier subcontractor with the provisions set forth in paragraphs (a) through (d) of this clause.

(End of clause)

52.222-6 DAVIS-BACON ACT (FEB 1995)

(a) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (d) of this clause; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such period. Such laborers and mechanics shall be paid not less than the appropriate wage rate and fringe benefits in the wage determination for the classification of work actually performed, without regard to skill, except as provided in the clause entitled Apprentices and Trainees. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein; provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph (b) of this clause) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the Contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(b)(1) The Contracting Officer shall require that any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The Contracting Officer shall approve an additional classification and wage rate and fringe benefits therefor only when all the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination.

(ii) The classification is utilized in the area by the construction industry.

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the Contracting Officer agree on the classification and wage rate (including the amount designated for fringe benefits, where appropriate), a report of the action taken shall be sent by the Contracting Officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator or an authorized representative will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the Contracting Officer or will notify the Contracting Officer within the 30-day period that additional time is necessary.

(3) In the event the Contractor, the laborers or mechanics to be employed in the classification, or their representatives, and the Contracting Officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the Contracting Officer shall refer the questions, including the views of all interested parties and the recommendation of the Contracting Officer, to the Administrator of the Wage and Hour Division for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the Contracting Officer or will notify the Contracting Officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits, where appropriate) determined pursuant to subparagraphs (b)(2) and (b)(3) of this clause shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(c) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the Contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(d) If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program; provided, That the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

52.222-7 WITHHOLDING OF FUNDS (FEB 1988)

The Contracting Officer shall, upon his or her own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the Contractor under this contract or any other Federal contract with the same Prime Contractor, or any other Federally assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same Prime Contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the Contracting Officer may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

52.222-8 PAYROLLS AND BASIC RECORDS (FEB 1988)

(a) Payrolls and basic records relating thereto shall be maintained by the Contractor during the course of the work and preserved for a period of 3 years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct

classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made, and actual wages paid. Whenever the Secretary of Labor has found, under paragraph (d) of the clause entitled Davis-Bacon Act, that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the Contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(b)(1) The Contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the Contracting Officer. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under paragraph (a) of this clause. This information may be submitted in any form desired. Optional Form WH-347 (Federal Stock Number 029-005-00014-1) is available for this purpose and may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. The Prime Contractor is responsible for the submission of copies of payrolls by all subcontractors.

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify--

(i) That the payroll for the payroll period contains the information required to be maintained under paragraph (a) of this clause and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR Part 3; and

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by subparagraph (b)(2) of this clause.

(4) The falsification of any of the certifications in this clause may subject the Contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 3729 of Title 31 of the United States Code.

(c) The Contractor or subcontractor shall make the records required under paragraph (a) of this clause available for inspection, copying, or transcription by the Contracting Officer or authorized representatives of the Contracting Officer or the Department of Labor. The Contractor or subcontractor shall permit the Contracting Officer or representatives of the Contracting Officer or the Department of Labor to interview employees during working hours on the job. If the Contractor or subcontractor fails to submit required records or to make them available, the Contracting Officer may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

(a) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the Contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in this paragraph, shall be paid not less than the applicable wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(b) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed in the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate in the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate in the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate in the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(c) Equal employment opportunity. The utilization of apprentices, trainees, and journeymen under this clause shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

52.222-10 COMPLIANCE WITH COPELAND ACT REQUIREMENTS (FEB 1988)

The Contractor shall comply with the requirements of 29 CFR Part 3, which are hereby incorporated by reference in

this contract.

52.222-11 SUBCONTRACTS (LABOR STANDARDS (FEB 1988))

(a) The Contractor or subcontractor shall insert in any subcontracts the clauses entitled Davis-Bacon Act, Contract Work Hours and Safety Standards Act-Overtime Compensation, Apprentices and Trainees, Payrolls and Basic Records, Compliance with Copeland Act Requirements, Withholding of Funds, Subcontracts (Labor Standards), Contract Termination-Debarment, Disputes Concerning Labor Standards, Compliance with Davis-Bacon and Related Act Regulations, and Certification of Eligibility, and such other clauses as the Contracting Officer may, by appropriate instructions, require, and also a clause requiring subcontractors to include these clauses in any lower tier subcontracts. The Prime Contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with all the contract clauses cited in this paragraph.

(b)(1) Within 14 days after award of the contract, the Contractor shall deliver to the Contracting Officer a completed Statement and Acknowledgment Form (SF 1413) for each subcontract, including the subcontractor's signed and dated acknowledgment that the clauses set forth in paragraph (a) of this clause have been included in the subcontract.

(2) Within 14 days after the award of any subsequently awarded subcontract the Contractor shall deliver to the Contracting Officer an updated completed SF 1413 for such additional subcontract.

52.222-12 CONTRACT TERMINATION--DEBARMENT (FEB 1988)

A breach of the contract clauses entitled Davis-Bacon Act, Contract Work Hours and Safety Standards Act--Overtime Compensation, Apprentices and Trainees, Payrolls and Basic Records, Compliance with Copeland Act Requirements, Subcontracts (Labor Standards), Compliance with Davis-Bacon and Related Act Regulations, or Certification of Eligibility may be grounds for termination of the contract, and for debarment as a Contractor and subcontractor as provided in 29 CFR 5.12.

52.222-13 COMPLIANCE WITH DAVIS-BACON AND RELATED ACT REGULATIONS (FEB 1988)

All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are hereby incorporated by reference in this contract.

52.222-14 DISPUTES CONCERNING LABOR STANDARDS (FEB 1988)

The United States Department of Labor has set forth in 29 CFR Parts 5, 6, and 7 procedures for resolving disputes concerning labor standards requirements. Such disputes shall be resolved in accordance with those procedures and not the Disputes clause of this contract. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

52.222-15 CERTIFICATION OF ELIGIBILITY (FEB 1988)

(a) By entering into this contract, the Contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(b) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(c) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

52.222-21 PROHIBITION OF SEGREGATED FACILITIES (FEB 1999)

(a) Segregated facilities, as used in this clause, 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, that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, sex, or national origin because of written or oral policies or employee custom. The term does not include separate or single-user rest rooms or necessary dressing or sleeping areas provided to assure privacy between the sexes.

(b) The Contractor agrees that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Contractor agrees that a breach of this clause is a violation of the Equal Opportunity clause in this contract.

(c) The Contractor shall include this clause in every subcontract and purchase order that is subject to the Equal Opportunity clause of this contract.

(End of clause)

52.222-23 NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY FOR CONSTRUCTION (FEB 1999)

(a) The offeror's attention is called to the Equal Opportunity clause and the Affirmative Action Compliance Requirements for Construction clause of this solicitation.

(b) The goals for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

| Goals for minority participation for each trade | Goals for female participation for each trade |
|---|---|
| 3.2% | 6.9% |

These goals are applicable to all the Contractor's construction work performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, the Contractor shall apply the goals established for the geographical area where the work is actually performed. Goals are published periodically in the Federal Register in notice form, and these notices may be obtained from any Office of Federal Contract Compliance Programs office.

(c) The Contractor's compliance with Executive Order 11246, as amended, and the regulations in 41 CFR 60-4 shall be based on (1) its implementation of the Equal Opportunity clause, (2) specific affirmative action obligations required by the clause entitled "Affirmative Action Compliance Requirements for Construction," and (3) its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade. The Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor, or from project to project, for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, Executive Order 11246, as amended, and the regulations in 41 CFR 60-4. Compliance with the goals will be measured against the total work hours performed.

(d) The Contractor shall provide written notification to the Deputy Assistant Secretary for Federal Contract Compliance, U.S. Department of Labor, within 10 working days following award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the --

- (1) Name, address, and telephone number of the subcontractor;
- (2) Employer's identification number of the subcontractor;
- (3) Estimated dollar amount of the subcontract;
- (4) Estimated starting and completion dates of the subcontract; and
- (5) Geographical area in which the subcontract is to be performed.

(e) As used in this Notice, and in any contract resulting from this solicitation, the "covered area" is Cascade County, Montana.

52.222-26 EQUAL OPPORTUNITY (FEB 1999)

(a) If, during any 12-month period (including the 12 months preceding the award of this contract), the Contractor has been or is awarded nonexempt Federal contracts and/or subcontracts that have an aggregate value in excess of \$10,000, the Contractor shall comply with subparagraphs (b)(1) through (11) of this clause. Upon request, the Contractor shall provide information necessary to determine the applicability of this clause.

(b) During performing this contract, the Contractor agrees as follows:

(1) The Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. However, it shall not be a violation of this clause for the Contractor to extend a publicly announced preference in employment to Indians living on or near an Indian reservation, in connection with employment opportunities on or near an Indian reservation, as permitted by 41 CFR 60-1.5.

(2) The Contractor shall 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. This shall include, but not be limited to, (i) employment, (ii) upgrading, (iii) demotion, (iv) transfer, (v) recruitment or recruitment advertising, (vi) layoff or termination, (vii) rates of pay or other forms of compensation, and (viii) selection for training, including apprenticeship.

(3) The Contractor shall post in conspicuous places available to employees and applicants for employment the notices to be provided by the Contracting Officer that explain this clause.

(4) The Contractor shall, 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.

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

(6) The Contractor shall comply with Executive Order 11246, as amended, and the rules, regulations, and orders of the Secretary of Labor.

(7) The Contractor shall furnish to the contracting agency all information required by Executive Order 11246, as amended, and by the rules, regulations, and orders of the Secretary of Labor. The Contractor shall also file Standard Form 100 (EEO-1), or any successor form, as prescribed in 41 CFR part 60-1. Unless the Contractor has filed within the 12 months preceding the date of contract award, the Contractor shall, within 30 days after contract award, apply to either the regional Office of Federal Contract Compliance Programs (OFCCP) or the local office of the Equal Employment Opportunity Commission for the necessary forms.

(8) The Contractor shall permit access to its premises, during normal business hours, by the contracting agency or the OFCCP for the purpose of conducting on-site compliance evaluations and complaint investigations. The Contractor shall permit the Government to inspect and copy any books, accounts, records (including computerized records), and other material that may be relevant to the matter under investigation and pertinent to compliance with Executive Order 11246, as amended, and rules and regulations that implement the Executive Order.

(9) If the OFCCP determines that the Contractor is not in compliance with this clause or any rule, regulation, or order of the Secretary of Labor, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts, under the procedures authorized in Executive Order 11246, as amended. In addition, sanctions may be imposed and remedies invoked against the Contractor as provided in Executive Order 11246, as amended; in the rules, regulations, and orders of the Secretary of Labor; or as otherwise provided by law.

(10) The Contractor shall include the terms and conditions of subparagraphs (b)(1) through (11) of this clause in every subcontract or purchase order that is not exempted by the rules, regulations, or orders of the Secretary of Labor issued under Executive Order 11246, as amended, so that these terms and conditions will be binding upon each subcontractor or vendor.

(11) The Contractor shall take such action with respect to any subcontract or purchase order as the contracting officer may direct as a means of enforcing these terms and conditions, including sanctions for noncompliance; provided, that if the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of any direction, the Contractor may request the United States to enter into the litigation to protect the interests of the United States.

(c) Notwithstanding any other clause in this contract, disputes relative to this clause will be governed by the procedures in 41 CFR 60-1.1.

52.222-27 AFFIRMATIVE ACTION COMPLIANCE REQUIREMENTS FOR CONSTRUCTION (FEB 1999)

(a) Definitions. "Covered area," as used in this clause, means the geographical area described in the solicitation for this contract.

"Deputy Assistant Secretary," as used in this clause, means Deputy Assistant Secretary for Federal Contract Compliance, U.S. Department of Labor, or a designee.

"Employer's identification number," as used in this clause, means the Federal Social Security number used on the employer's quarterly federal tax return, U.S. Treasury Department Form 941.

"Minority," as used in this clause, means--

(1) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

(2) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands);

(3) Black (all persons having origins in any of the black African racial groups not of Hispanic origin); and

(4) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race).

(b) If the Contractor, or a subcontractor at any tier, subcontracts a portion of the work involving any construction trade, each such subcontract in excess of \$10,000 shall include this clause and the Notice containing the goals for minority and female participation stated in the solicitation for this contract.

(c) If the Contractor is participating in a Hometown Plan (41 CFR 60-4) approved by the U.S. Department of Labor in a covered area, either individually or through an association, its affirmative action obligations on all work in the plan area (including goals) shall comply with the plan for those trades that have unions participating in the plan. Contractors must be able to demonstrate participation in, and compliance with, the provisions of the plan. Each Contractor or subcontractor participating in an approved plan is also required to comply with its obligations under the Equal Opportunity clause, and to make a good faith effort to achieve each goal under the plan in each trade in which it has employees. The overall good-faith performance by other Contractors or subcontractors toward a goal in an approved plan does not excuse any Contractor's or subcontractor's failure to make good-faith efforts to achieve the plan's goals.

(d) The Contractor shall implement the affirmative action procedures in subparagraphs (g)(1) through (16) of this clause. The goals stated in the solicitation for this contract are expressed as percentages of the total hours of employment and training of minority and female utilization that the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for the geographical area where that work is actually performed. The Contractor is expected to make substantially uniform progress toward its goals in each craft.

(e) Neither the terms and conditions of any collective bargaining agreement, nor the failure by a union with which the Contractor has a collective bargaining agreement, to refer minorities or women shall excuse the Contractor's obligations under this clause, Executive Order 11246, as amended, or the regulations thereunder.

(f) In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.

(g) The Contractor shall take affirmative action to ensure equal employment opportunity. The evaluation of the Contractor's compliance with this clause shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully and implement affirmative action steps at least as extensive as the following:

(1) Ensure a working environment free of harassment, intimidation, and coercion at all sites and in all facilities where the Contractor's employees are assigned to work. The Contractor, if possible, will assign two or more women to each construction project. The Contractor shall ensure that foremen, superintendents, and other onsite supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at these sites or facilities.

(2) Establish and maintain a current list of sources for minority and female recruitment. Provide written notification to minority and female recruitment sources and community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.

(3) Establish and maintain a current file of the names, addresses, and telephone numbers of each minority and female off-the-street applicant, referrals of minorities or females from unions, recruitment sources, or community organizations, and the action taken with respect to each individual. If an individual was sent to the union hiring hall for referral and not referred back to the Contractor by the union or, if referred back, not employed by the

Contractor, this shall be documented in the file, along with whatever additional actions the Contractor may have taken.

(4) Immediately notify the Deputy Assistant Secretary when the union or unions with which the Contractor has a collective bargaining agreement has not referred back to the Contractor a minority or woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.

(5) Develop on-the-job training opportunities and/or participate in training programs for the area that expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under subparagraph (g)(2) of this clause.

(6) Disseminate the Contractor's equal employment policy by--

(i) Providing notice of the policy to unions and to training, recruitment, and outreach programs, and requesting their cooperation in assisting the Contractor in meeting its contract obligations;

(ii) Including the policy in any policy manual and in collective bargaining agreements;

(iii) Publicizing the policy in the company newspaper, annual report, etc.;

(iv) Reviewing the policy with all management personnel and with all minority and female employees at least once a year; and

(v) Posting the policy on bulletin boards accessible to employees at each location where construction work is performed.

(7) Review, at least annually, the Contractor's equal employment policy and affirmative action obligations with all employees having responsibility for hiring, assignment, layoff, termination, or other employment decisions. Conduct review of this policy with all on-site supervisory personnel before initiating construction work at a job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.

(8) Disseminate the Contractor's equal employment policy externally by including it in any advertising in the news media, specifically including minority and female news media. Provide written notification to, and discuss this policy with, other Contractors and subcontractors with which the Contractor does or anticipates doing business.

(9) Direct recruitment efforts, both oral and written, to minority, female, and community organizations, to schools with minority and female students, and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than 1 month before the date for acceptance of applications for apprenticeship or training by any recruitment source, send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.

(10) Encourage present minority and female employees to recruit minority persons and women. Where reasonable, provide after-school, summer, and vacation employment to minority and female youth both on the site and in other areas of the Contractor's workforce.

(11) Validate all tests and other selection requirements where required under 41 CFR 60-3.

(12) Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities. Encourage these employees to seek or to prepare for, through appropriate training, etc., opportunities for promotion.

(13) Ensure that seniority practices, job classifications, work assignments, and other personnel practices do not have

a discriminatory effect by continually monitoring all personnel and employment-related activities to ensure that the Contractor's obligations under this contract are being carried out.

(14) Ensure that all facilities and company activities are nonsegregated except that separate or single-user rest rooms and necessary dressing or sleeping areas shall be provided to assure privacy between the sexes.

(15) Maintain a record of solicitations for subcontracts for minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.

(16) Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's equal employment policy and affirmative action obligations.

(h) The Contractor is encouraged to participate in voluntary associations that may assist in fulfilling one or more of the affirmative action obligations contained in subparagraphs (g)(1) through (16) of this clause. The efforts of a contractor association, joint contractor-union, contractor-community, or similar group of which the contractor is a member and participant may be asserted as fulfilling one or more of its obligations under subparagraphs (g)(1) through (16) of this clause, provided the Contractor--

(1) Actively participates in the group;

(2) Makes every effort to ensure that the group has a positive impact on the employment of minorities and women in the industry;

(3) Ensures that concrete benefits of the program are reflected in the Contractor's minority and female workforce participation;

(4) Makes a good-faith effort to meet its individual goals and timetables; and

(5) Can provide access to documentation that demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply is the Contractor's, and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.

(i) A single goal for minorities and a separate single goal for women shall be established. The Contractor is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and nonminority. Consequently, the Contractor may be in violation of Executive Order 11246, as amended, if a particular group is employed in a substantially disparate manner.

(j) The Contractor shall not use goals or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.

(k) The Contractor shall not enter into any subcontract with any person or firm debarred from Government contracts under Executive Order 11246, as amended.

(l) The Contractor shall carry out such sanctions and penalties for violation of this clause and of the Equal Opportunity clause, including suspension, termination, and cancellation of existing subcontracts, as may be imposed or ordered under Executive Order 11246, as amended, and its implementing regulations, by the OFCCP. Any failure to carry out these sanctions and penalties as ordered shall be a violation of this clause and Executive Order 11246, as amended.

(m) The Contractor in fulfilling its obligations under this clause shall implement affirmative action procedures at least as extensive as those prescribed in paragraph (g) of this clause, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of Executive Order 11246, as amended, the implementing regulations, or this clause, the Deputy Assistant Secretary shall take action as prescribed in 41 CFR 60-4.8.

(n) The Contractor shall designate a responsible official to--

(1) Monitor all employment-related activity to ensure that the Contractor's equal employment policy is being carried out;

(2) Submit reports as may be required by the Government; and

(3) Keep records that shall at least include for each employee the name, address, telephone number, construction trade, union affiliation (if any), employee identification number, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, separate records are not required to be maintained.

Nothing contained herein shall be construed as a limitation upon the application of other laws that establish different standards of compliance or upon the requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

52.222-35 AFFIRMATIVE ACTION FOR DISABLED VETERANS AND VETERANS OF THE VIETNAM ERA (APR 1998)

(a)) Definitions. As used in this clause--

All employment openings includes all positions except executive and top management, those positions that will be filled from within the contractor's organization, and positions lasting 3 days or less. This term includes full-time employment, temporary employment of more than 3 days' duration, and part-time employment.

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 to serve the area where the employment opening is to be filled, including the District of Columbia, Guam, the Commonwealth of Puerto Rico, and the Virgin Islands.

Positions that will be filled from within the Contractor's organization means employment openings for which no consideration will be given to persons outside the Contractor's organization (including any affiliates, subsidiaries, and parent companies) and includes any openings that the Contractor proposes to fill from regularly established "recall" lists. The exception does not apply to a particular opening once an employer decides to consider applicants outside of its organization.

Veteran of the Vietnam era means a person who--

(1) Served on active duty for a period of more than 180 days, any part of which occurred between August 5, 1964, and May 7, 1975, and was discharged or released therefrom with other than a dishonorable discharge; or

(2) Was discharged or released from active duty for a service-connected disability if any part of such active duty was performed between August 5, 1964, and May 7, 1975.

(b) General. (1) Regarding any position for which the employee or applicant for employment is qualified, the Contractor shall not discriminate against the individual because the individual is a disabled veteran or a veteran of the Vietnam era. 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--

(i) Employment;

(ii) Upgrading;

(iii) Demotion or transfer;

(iv) Recruitment;

(v) Advertising;

(vi) Layoff or termination;

(vii) Rates of pay or other forms of compensation; and

(viii) Selection for training, including apprenticeship.

(2) The Contractor agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor (Secretary) issued under the Vietnam Era Veterans' Readjustment Assistance Act of 1972 (the Act), as amended.

(c) Listing openings. (1) The Contractor agrees to list all employment openings existing at contract award or occurring during contract performance, at an appropriate office of the State employment service system in the locality where the opening occurs. These openings include those occurring at any Contractor facility, including one not connected with performing this contract. An independent corporate affiliate is exempt from this requirement.

(2) State and local government agencies holding Federal contracts of \$10,000 or more shall also list all their employment openings with the appropriate office of the State employment service.

(3) The listing of employment openings with the State employment service system is required at least concurrently with using any other recruitment source or effort and involves the obligations of placing a bona fide job order, including accepting referrals of veterans and nonveterans. This listing does not require hiring any particular job applicant or hiring from any particular group of job applicants and is not intended to relieve the Contractor from any requirements of Executive orders or regulations concerning nondiscrimination in employment.

(4) Whenever the Contractor becomes contractually bound to the listing terms of this clause, it shall advise the State 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 terms and has so advised the State system, it need not advise the State system of subsequent contracts. The Contractor may advise the State system when it is no longer bound by this contract clause.

(d) Applicability. This clause does not apply to the listing of employment openings that occur and are filled outside the 50 States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, and the Virgin Islands.

(e) Postings. (1) The Contractor agrees to post employment notices stating (i) 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, and (ii) the rights of applicants and employees.

(2) These notices shall be posted in conspicuous places that are available to employees and applicants for employment. They shall be in a form prescribed by the Deputy Assistant Secretary for Federal Contract Compliance Programs, Department of Labor (Deputy Assistant Secretary), and provided by or through the Contracting Officer.

(3) The Contractor shall 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 the Act, and is committed to take affirmative action to employ, and advance in employment, qualified disabled veterans and veterans of the Vietnam Era.

(f) Noncompliance. If the Contractor does not comply with the requirements of this clause, appropriate actions may be taken under the rules, regulations, and relevant orders of the Secretary issued pursuant to the Act.

(g) Subcontracts. The Contractor shall include the terms of this clause in every subcontract or purchase order of \$10,000 or more unless exempted by rules, regulations, or orders of the Secretary. The Contractor shall act as specified by the Deputy Assistant Secretary to enforce the terms, including action for noncompliance.

(End of clause)

52.222-36 AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES (JUN 1998)

(a) General. (1) Regarding any position for which the employee or applicant for employment is qualified, the Contractor shall not discriminate against any employee or applicant because of physical or mental disability. The Contractor agrees to take affirmative action to employ, advance in employment, and otherwise treat qualified individuals with disabilities without discrimination based upon their physical or mental disability in all employment practices such as--

(i) Recruitment, advertising, and job application procedures;

(ii) Hiring, upgrading, promotion, award of tenure, demotion, transfer, layoff, termination, right of return from layoff, and rehiring;

(iii) Rates of pay or any other form of compensation and changes in compensation;

(iv) Job assignments, job classifications, organizational structures, position descriptions, lines of progression, and seniority lists;

(v) Leaves of absence, sick leave, or any other leave;

(vi) Fringe benefits available by virtue of employment, whether or not administered by the Contractor;

(vii) Selection and financial support for training, including apprenticeships, professional meetings, conferences, and other related activities, and selection for leaves of absence to pursue training;

(viii) Activities sponsored by the Contractor, including social or recreational programs; and

(ix) Any other term, condition, or privilege of employment.

(2) The Contractor agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor (Secretary) issued under the Rehabilitation Act of 1973 (29 U.S.C. 793) (the Act), as amended.

(b) Postings. (1) The Contractor agrees to post employment notices stating--

(i) The Contractor's obligation under the law to take affirmative action to employ and advance in employment qualified individuals with disabilities; and

(ii) The rights of applicants and employees.

(2) These notices shall be posted in conspicuous places that are available to employees and applicants for employment. The Contractor shall ensure that applicants and employees with disabilities are informed of the contents of the notice (e.g., the Contractor may have the notice read to a visually disabled individual, or may lower the posted notice so that it might be read by a person in a wheelchair). The notices shall be in a form prescribed by the Deputy Assistant Secretary for Federal Contract Compliance of the U.S. Department of Labor (Deputy Assistant Secretary) and shall be provided by or through the Contracting Officer.

(3) The Contractor shall 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, qualified individuals with physical or mental disabilities.

(c) Noncompliance. If the Contractor does not comply with the requirements of this clause, appropriate actions may be taken under the rules, regulations, and relevant orders of the Secretary issued pursuant to the Act.

(d) Subcontracts. The Contractor shall include the terms of this clause in every subcontract or purchase order in excess of \$10,000 unless exempted by rules, regulations, or orders of the Secretary. The Contractor shall act as specified by the Deputy Assistant Secretary to enforce the terms, including action for noncompliance.

(End of clause)

52.222-37 EMPLOYMENT REPORTS ON DISABLED VETERANS AND VETERANS OF THE VIETNAM ERA (JAN 1999)

(a) Unless the Contractor is a State or local government agency, the Contractor shall report at least annually, as required by the Secretary of Labor, on--

(1) The number of disabled veterans and the number of veterans of the Vietnam era in the workforce of the contractor by job category and hiring location; and

(2) The total number of new employees hired during the period covered by the report, and of that total, the number of disabled veterans, and the number of veterans of the Vietnam era.

(b) The above items shall be reported by completing the form entitled "Federal Contractor Veterans' Employment Report VETS-100."

(c) Reports shall be submitted no later than September 30 of each year beginning September 30, 1988.

(d) The employment activity report required by paragraph (a)(2) of this clause shall reflect total hires during the most recent 12-month period as of the ending date selected for the employment profile report required by paragraph (a)(1) of this clause. Contractors may select an ending date: (1) As of the end of any pay period during the period January through March 1st of the year the report is due, or (2) as of December 31, if the contractor has previous written approval from the Equal Employment Opportunity Commission to do so for purposes of submitting the Employer Information Report EEO-1 (Standard Form 100).

(e) The count of veterans reported according to paragraph (a) of this clause shall be based on voluntary disclosure. Each Contractor subject to the reporting requirements at 38 U.S.C. 4212 shall invite all disabled veterans and veterans of the Vietnam era who wish to benefit under the affirmative action program at 38 U.S.C. 4212 to identify themselves to the Contractor. The invitation shall state that the information is voluntarily provided; that the information will be kept confidential; that disclosure or refusal to provide the information will not subject the applicant or employee to any adverse treatment; and that the information will be used only in accordance with the regulations promulgated under 38 U.S.C. 4212.

(f) Subcontracts. The Contractor shall include the terms of this clause in every subcontract or purchase order of \$10,000 or more unless exempted by rules, regulations, or orders of the Secretary.

(End of clause)

52.223-3 HAZARDOUS MATERIAL IDENTIFICATION AND MATERIAL SAFETY DATA (JAN 1997)

(a) "Hazardous material", as used in this clause, includes any material defined as hazardous under the latest version of Federal Standard No. 313 (including revisions adopted during the term of the contract).

(b) The offeror must list any hazardous material, as defined in paragraph (a) of this clause, to be delivered under this

contract. The hazardous material shall be properly identified and include any applicable identification number, such as National Stock Number or Special Item Number. This information shall also be included on the Material Safety Data Sheet submitted under this contract.

Material Identification No.
(If none, insert "None")

| | |
|-------|-------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

(c) This list must be updated during performance of the contract whenever the Contractor determines that any other material to be delivered under this contract is hazardous.

(d) The apparently successful offeror agrees to submit, for each item as required prior to award, a Material Safety Data Sheet, meeting the requirements of 29 CFR 1910.1200(g) and the latest version of Federal Standard No. 313, for all hazardous material identified in paragraph (b) of this clause. Data shall be submitted in accordance with Federal Standard No. 313, whether or not the apparently successful offeror is the actual manufacturer of these items. Failure to submit the Material Safety Data Sheet prior to award may result in the apparently successful offeror being considered nonresponsible and ineligible for award.

(e) If, after award, there is a change in the composition of the item(s) or a revision to Federal Standard No. 313, which renders incomplete or inaccurate the data submitted under paragraph (d) of this clause, the Contractor shall promptly notify the Contracting Officer and resubmit the data.

(f) Neither the requirements of this clause nor any act or failure to act by the Government shall relieve the Contractor of any responsibility or liability for the safety of Government, Contractor, or subcontractor personnel or property.

(g) Nothing contained in this clause shall relieve the Contractor from complying with applicable Federal, State, and local laws, codes, ordinances, and regulations (including the obtaining of licenses and permits) in connection with hazardous material.

(h) The Government's rights in data furnished under this contract with respect to hazardous material are as follows:

(1) To use, duplicate and disclose any data to which this clause is applicable. The purposes of this right are to--

(i) Apprise personnel of the hazards to which they may be exposed in using, handling, packaging, transporting, or disposing of hazardous materials;

(ii) Obtain medical treatment for those affected by the material; and

(iii) Have others use, duplicate, and disclose the data for the Government for these purposes.

(2) To use, duplicate, and disclose data furnished under this clause, in accordance with subparagraph (h)(1) of this clause, in precedence over any other clause of this contract providing for rights in data.

(3) The Government is not precluded from using similar or identical data acquired from other sources.

(End of clause)

(a) Executive Order 12856 of August 3, 1993, requires Federal facilities to comply with the provisions of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA)(42 U.S.C. 11001-11050) and the Pollution Prevention Act of 1990 (PPA)(42 U.S.C. 13101-13109).

(b) The Contractor shall provide all information needed by the Federal facility to comply with the emergency planning reporting requirements of Section 302 of EPCRA; the emergency notice requirements of Section 304 of EPCRA; the list of Material Safety Data Sheets required by Section 311 of EPCRA; the emergency and hazardous chemical inventory forms of Section 312 of EPCRA; the toxic chemical release inventory of Section 313 of EPCRA, which includes the reduction and recycling information required by Section 6607 of PPA; and the toxic chemical reduction goals requirements of Section 3-302 of Executive Order 12856.

52.223-6 DRUG-FREE WORKPLACE (JAN 1997)

(a) Definitions. As used in this clause --

"Controlled substance" means a controlled substance in schedules I through V of section 202 of the Controlled Substances Act (21 U.S.C. 812) and as further defined in regulation at 21 CFR 1308.11 - 1308.15.

"Conviction" means a finding of guilt (including a plea of nolo contendere) or imposition of sentence, or both, by any judicial body charged with the responsibility to deter- mine violations of the Federal or State criminal drug statutes.

"Criminal drug statute" means a Federal or non-Federal criminal statute involving the manufacture, distribution, dispensing, possession, or use of any controlled substance.

"Drug-free workplace" means the site(s) for the performance of work done by the Contractor in connection with a specific contract at which employees of the Contractor are prohibited from engaging in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance.

"Employee" means an employee of a Contractor directly engaged in the performance of work under a Government contract. "Directly engaged" is defined to include all direct cost employees and any other Contractor employee who has other than a minimal impact or involvement in contract performance.

"Individual" means an offeror/contractor that has no more than one employee including the offeror/contractor.

(b) The Contractor, if other than an individual, shall-- within 30 days after award (unless a longer period is agreed to in writing for contracts of 30 days or more performance duration), or as soon as possible for contracts of less than 30 days performance duration--

(1) Publish a statement notifying its employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the Contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition;

(2) Establish an ongoing drug-free awareness program to inform such employees about--

(i) The dangers of drug abuse in the workplace;

(ii) The Contractor's policy of maintaining a drug-free workplace;

(iii) Any available drug counseling, rehabilitation, and employee assistance programs; and

(iv) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;

- (3) Provide all employees engaged in performance of the contract with a copy of the statement required by subparagraph (b)(1) of this clause;
- (4) Notify such employees in writing in the statement required by subparagraph (b)(1) of this clause that, as a condition of continued employment on this contract, the employee will--
- (i) Abide by the terms of the statement; and
 - (ii) Notify the employer in writing of the employee's conviction under a criminal drug statute for a violation occurring in the workplace no later than 5 days after such conviction.
- (5) Notify the Contracting Officer in writing within 10 days after receiving notice under subdivision (b)(4)(ii) of this clause, from an employee or otherwise receiving actual notice of such conviction. The notice shall include the position title of the employee;
- (6) Within 30 days after receiving notice under subdivision (b)(4)(ii) of this clause of a conviction, take one of the following actions with respect to any employee who is convicted of a drug abuse violation occurring in the workplace:
- (i) Taking appropriate personnel action against such employee, up to and including termination; or
 - (ii) Require such employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency; and
- (7) Make a good faith effort to maintain a drug-free workplace through implementation of subparagraphs (b)(1) through (b)(6) of this clause.
- (c) The Contractor, if an individual, agrees by award of the contract or acceptance of a purchase order, not to engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance while performing this contract.
- (d) In addition to other remedies available to the Government, the Contractor's failure to comply with the requirements of paragraph (b) or (c) of this clause may, pursuant to FAR 23.506, render the Contractor subject to suspension of contract payments, termination of the contract for default, and suspension or debarment.
- (End of clause)

52.223-14 TOXIC CHEMICAL RELEASE REPORTING (OCT 2000)

- (a) Unless otherwise exempt, the Contractor, as owner or operator of a facility used in the performance of this contract, shall file by July 1 for the prior calendar year an annual Toxic Chemical Release Inventory Form (Form R) as described in sections 313(a) and (g) of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11023(a) and (g)), and section 6607 of the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13106). The Contractor shall file, for each facility subject to the Form R filing and reporting requirements, the annual Form R throughout the life of the contract.
- (b) A Contractor owned or operated facility used in the performance of this contract is exempt from the requirement to file an annual Form R if--
- (1) The facility does not manufacture, process, or otherwise use any toxic chemicals listed under section 313(c) of EPCRA, 42 U.S.C. 11023(c);
 - (2) The facility does not have 10 or more full-time employees as specified in section 313(b)(1)(A) of EPCRA, 42 U.S.C. 11023(b)(1)(A);

(3) The facility does not meet the reporting thresholds of toxic chemicals established under of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);

(4) The facility does not fall within Standard Industrial Classification Code (SIC) major groups 20 through 39 or their corresponding North American Industry Classification System (NAICS) sectors 31 through 33; or

(5) The facility is not located within any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, or any other territory or possession over which the United States has jurisdiction.

(c) If the Contractor has certified to an exemption in accordance with one or more of the criteria in paragraph (b) of this clause, and after award of the contract circumstances change so that any of its owned or operated facilities used in the performance of this contract is no longer exempt--

(1) The Contractor shall notify the Contracting Officer; and

(2) The Contractor, as owner or operator of a facility used in the performance of this contract that is no longer exempt, shall (i) submit a Toxic Chemical Release Inventory Form (Form R) on or before July 1 for the prior calendar year during which the facility becomes eligible; and (ii) continue to file the annual Form R for the life of the contract for such facility.

(d) The Contracting Officer may terminate this contract or take other action as appropriate, if the Contractor fails to comply accurately and fully with the EPCRA and PPA toxic chemical release filing and reporting requirements.

(e) Except for acquisitions of commercial items, as defined in FAR Part 2, the Contractor shall--

(1) For competitive subcontracts expected to exceed \$100,000 (including all options), include a solicitation provision substantially the same as the provision at FAR 52.223-13, Certification of Toxic Chemical Release Reporting; and

(2) Include in any resultant subcontract exceeding \$100,000 (including all options), the substance of this clause, except this paragraph (e).

52.225-9 BUY AMERICAN ACT--BALANCE OF PAYMENTS PROGRAM—CONSTRUCTION MATERIALS (FEB 2000)

(a) Definitions. As used in this clause--

Component means any article, material, or supply incorporated directly into construction materials.

Construction material means an article, material, or supply brought to the construction site by the Contractor or a subcontractor for incorporation into the building or work. The term also includes an item brought to the site preassembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single and distinct construction material regardless of when or how the individual parts or components of those systems are delivered to the construction site. Materials purchased directly by the Government are supplies, not construction material.

Cost of components means--

(1) For components purchased by the Contractor, the acquisition cost, including transportation costs to the place of incorporation into the end product (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or

(2) For components manufactured by the Contractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the end product.

Domestic construction material means--

- (1) An unmanufactured construction material mined or produced in the United States; or
- (2) A construction material manufactured in the United States, if the cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind for which nonavailability determinations have been made are treated as domestic.

Foreign construction material means a construction material other than a domestic construction material.

United States means the 50 States and the District of Columbia, U.S. territories and possessions, Puerto Rico, the Northern Mariana Islands, and any other place subject to U.S. jurisdiction, but does not include leased bases.

(b) Domestic preference. (1) This clause implements the Buy American Act (41 U.S.C. 10a-10d) and the Balance of Payments Program by providing a preference for domestic construction material. The Contractor shall use only domestic construction material in performing this contract, except as provided in paragraphs (b)(2) and (b)(3) of this clause.

(2) This requirement does not apply to the construction material or components listed by the Government as follows: None.

(3) The Contracting Officer may add other foreign construction material to the list in paragraph (b)(2) of this clause if the Government determines that

- (i) The cost of domestic construction material would be unreasonable. The cost of a particular domestic construction material subject to the requirements of the Buy American Act is unreasonable when the cost of such material exceeds the cost of foreign material by more than 6 percent. For determination of unreasonable cost under the Balance of Payments Program, the Contracting Officer will use a factor of 50 percent;
- (ii) The application of the restriction of the Buy American Act or Balance of Payments Program to a particular construction material would be impracticable or inconsistent with the public interest; or
- (iii) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality.

(c) Request for determination of inapplicability of the Buy American Act or Balance of Payments Program. (1)(i) Any Contractor request to use foreign construction material in accordance with paragraph (b)(3) of this clause shall include adequate information for Government evaluation of the request, including--

- (A) A description of the foreign and domestic construction materials;
- (B) Unit of measure;
- (C) Quantity;
- (D) Price;
- (E) Time of delivery or availability;

(F) Location of the construction project;

(G) Name and address of the proposed supplier; and

(H) A detailed justification of the reason for use of foreign construction materials cited in accordance with paragraph (b)(3) of this clause.

(ii) A request based on unreasonable cost shall include a reasonable survey of the market and a completed price comparison table in the format in paragraph (d) of this clause.

(iii) The price of construction material shall include all delivery costs to the construction site and any applicable duty (whether or not a duty-free certificate may be issued).

(iv) Any Contractor request for a determination submitted after contract award shall explain why the Contractor could not reasonably foresee the need for such determination and could not have requested the determination before contract award. If the Contractor does not submit a satisfactory explanation, the Contracting Officer need not make a determination.

(2) If the Government determines after contract award that an exception to the Buy American Act or Balance of Payments Program applies and the Contracting Officer and the Contractor negotiate adequate consideration, the Contracting Officer will modify the contract to allow use of the foreign construction material. However, when the basis for the exception is the unreasonable price of a domestic construction material, adequate consideration is not less than the differential established in paragraph (b)(3)(i) of this clause.

(3) Unless the Government determines that an exception to the Buy American Act or Balance of Payments Program applies, use of foreign construction material is noncompliant with the Buy American Act or Balance of Payments Program.

(d) Data. To permit evaluation of requests under paragraph (c) of this clause based on unreasonable cost, the Contractor shall include the following information and any applicable supporting data based on the survey of suppliers:

Foreign and Domestic Construction Materials Price Comparison

| Construction material description | Unit of measure | Quantity | Price (dollars) \1\ |
|-----------------------------------|-----------------|----------|---------------------|
|-----------------------------------|-----------------|----------|---------------------|

Item 1

Foreign construction material.... ..

Domestic construction material... ..

Item 2

Foreign construction material.... ..

Domestic construction material... ..

Include all delivery costs to the construction site and any applicable duty (whether or not a duty-free entry certificate is issued).

List name, address, telephone number, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.

Include other applicable supporting information.

(End of clause)

(a) The Contractor shall not acquire, for use in the performance of this contract, any supplies or services originating from sources within, or that were located in or transported from or through, countries whose products are banned from importation into the United States under regulations of the Office of Foreign Assets Control, Department of the Treasury. Those countries are Cuba, Iran, Iraq, Libya, North Korea, Sudan, the territory of Afghanistan controlled by the Taliban, and Serbia (excluding the territory of Kosovo).

(b) The Contractor shall not acquire for use in the performance of this contract any supplies or services from entities controlled by the government of Iraq.

(c) The Contractor shall insert this clause, including this paragraph (c), in all subcontracts.

(End of clause)

52.226-1 UTILIZATION OF INDIAN ORGANIZATIONS AND INDIAN-OWNED ECONOMIC ENTERPRISES (JUN 2000)

(a) Definitions. As used in this clause:

"Indian" means any person who is a member of any Indian tribe, band, group, pueblo or community that is recognized by the Federal Government as eligible for services from the Bureau of Indian Affairs (BIA) in accordance with 25 U.S.C. 1452(c) and any "Native" as defined in the Alaska Native Claims Settlement Act (43 U.S.C. 1601).

"Indian organization" means the governing body of any Indian tribe or entity established or recognized by the governing body of an Indian tribe for the purposes of 25 U.S.C., chapter 17.

"Indian-owned economic enterprise" means any Indian-owned (as determined by the Secretary of the Interior) commercial, industrial, or business activity established or organized for the purpose of profit, provided that Indian ownership constitute not less than 51 percent of the enterprise.

"Indian tribe" means any Indian tribe, band, group, pueblo or community, including native villages and native groups (including corporations organized by Kenai, Juneau, Sitka, and Kodiak) as defined in the Alaska Native Claims Settlement Act, that is recognized by the Federal Government as eligible for services from BIA in accordance with 25 U.S.C. 1542(c).

"Interested party" means a prime contractor or an actual or prospective offeror whose direct economic interest would be affected by the award of a subcontract or by the failure to award a subcontract.

(b) The Contractor shall use its best efforts to give Indian organizations and Indian-owned economic enterprises (25 U.S.C. 1544) the maximum practicable opportunity to participate in the subcontracts it awards to the fullest extent consistent with efficient performance of its contract.

(1) The Contracting Officer and the Contractor, acting in good faith, may rely on the representation of an Indian organization or Indian-owned economic enterprise as to its eligibility, unless an interested party challenges its status or the Contracting Officer has independent reason to question that status. In the event of a challenge to the representation of a subcontractor, the Contracting Officer will refer the matter to the U.S. Department of the Interior, Bureau of Indian Affairs (BIA), Attn: Chief, Division of Contracting and Grants Administration, 1849 C Street, NW., MS 2626-MIB, Washington, DC 20240-4000.

The BIA will determine the eligibility and notify the Contracting Officer. No incentive payment will be made within 50 working days of subcontract award or while a challenge is pending. If a subcontractor is determined to be an ineligible participant, no incentive payment will be made under the Indian Incentive Program.

(2) The Contractor may request an adjustment under the Indian Incentive Program to the following:

- (i) The estimated cost of a cost-type contract.
 - (ii) The target cost of a cost-plus-incentive-fee prime contract.
 - (iii) The target cost and ceiling price of a fixed-price incentive prime contract.
 - (iv) The price of a firm-fixed-price prime contract.
- (3) The amount of the adjustment to the prime contract is 5 percent of the estimated cost, target cost, or firm-fixed-price included in the subcontract initially awarded to the Indian organization or Indian-owned economic enterprise.
- (4) The Contractor has the burden of proving the amount claimed and must assert its request for an adjustment prior to completion of contract performance.
- (c) The Contracting Officer, subject to the terms and conditions of the contract and the availability of funds, will authorize an incentive payment of 5 percent of the amount paid to the subcontractor. The Contracting Officer will seek funding in accordance with agency procedures.

(End of clause)

52.227-1 AUTHORIZATION AND CONSENT (JUL 1995)

- (a) The Government authorizes and consents to all use and manufacture, in performing this contract or any subcontract at any tier, of any invention described in and covered by a United States patent (1) embodied in the structure or composition of any article the delivery of which is accepted by the Government under this contract or (2) used in machinery, tools, or methods whose use necessarily results from compliance by the Contractor or a subcontractor with (i) specifications or written provisions forming a part of this contract or (ii) specific written instructions given by the Contracting Officer directing the manner of performance. 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 clause, 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.
- (b) The Contractor agrees to include, and require inclusion of, this clause, suitably modified to identify the parties, in all subcontracts at any tier for supplies or services (including construction, architect-engineer services, and materials, supplies, models, samples, and design or testing services expected to exceed the simplified acquisition threshold (however, omission of this clause from any subcontract, including those at or below the simplified acquisition threshold, does not affect this authorization and consent.)

52.227-2 NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT (AUG 1996)

- (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 under this contract, 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) The Contractor agrees to include, and require inclusion of, this clause in all subcontracts at any tier for supplies or services (including construction and architect-engineer subcontracts and those for material, supplies, models, samples, or design or testing services) expected to exceed the simplified acquisition threshold at (FAR) 2.101 to exceed the dollar amount set forth in 13.000 of the Federal Acquisition Regulation (FAR).

(End of clause)

52.227-4 PATENT INDEMNITY--CONSTRUCTION CONTRACTS (APR 1984)

Except as otherwise provided, the Contractor agrees to indemnify the Government and its officers, agents, and employees against liability, including costs and expenses, for infringement upon any United States patent (except a patent issued upon an application that is now or may hereafter be withheld from issue pursuant to a Secrecy Order under 35 U.S.C. 181) arising out of performing this contract or out of the use or disposal by or for the account of the Government of supplies furnished or work performed under this contract.

52.228-2 ADDITIONAL BOND SECURITY (OCT 1997)

The Contractor shall promptly furnish additional security required to protect the Government and persons supplying labor or materials under this contract if--

- (a) Any surety upon any bond, or issuing financial institution for other security, furnished with this contract becomes unacceptable to the Government.
- (b) Any surety fails to furnish reports on its financial condition as required by the Government;
- (c) The contract price is increased so that the penal sum of any bond becomes inadequate in the opinion of the Contracting Officer; or
- (d) An irrevocable letter of credit (ILC) used as security will expire before the end of the period of required security. If the Contractor does not furnish an acceptable extension or replacement ILC, or other acceptable substitute, at least 30 days before an ILC's scheduled expiration, the Contracting officer has the right to immediately draw on the ILC.

52.228-5 INSURANCE--WORK ON A GOVERNMENT INSTALLATION (JAN 1997)

- (a) The Contractor shall, at its own expense, provide and maintain during the entire performance of this contract, at least the kinds and minimum amounts of insurance required in the Schedule or elsewhere in the contract.
- (b) Before commencing work under this contract, the Contractor shall notify the Contracting Officer in writing that the required insurance has been obtained. The policies evidencing required insurance shall contain an endorsement to the effect that any cancellation or any material change adversely affecting the Government's interest shall not be effective (1) for such period as the laws of the State in which this contract is to be performed prescribe, or (2) until 30 days after the insurer or the Contractor gives written notice to the Contracting Officer, whichever period is longer.
- (c) The Contractor shall insert the substance of this clause, including this paragraph (c), in subcontracts under this contract that require work on a Government installation and shall require subcontractors to provide and maintain the insurance required in the Schedule or elsewhere in the contract. The Contractor shall maintain a copy of all subcontractors' proofs of required insurance, and shall make copies available to the Contracting Officer upon request.

(End of clause)

52.228-11 PLEDGES OF ASSETS (FEB 1992)

(a) Offerors shall obtain from each person acting as an individual surety on a bid guarantee, a performance bond, or a payment bond--

(1) Pledge of assets; and

(2) Standard Form 28, Affidavit of Individual Surety.

(b) Pledges of assets from each person acting as an individual surety shall be in the form of--

(1) Evidence of an escrow account containing cash, certificates of deposit, commercial or Government securities, or other assets described in FAR 28.203-2 (except see 28.203-2(b)(2) with respect to Government securities held in book entry form) and/or;

(2) A recorded lien on real estate. The offeror will be required to provide--

(i) Evidence of title in the form of a certificate of title prepared by a title insurance company approved by the United States Department of Justice. This title evidence must show fee simple title vested in the surety along with any concurrent owners; whether any real estate taxes are due and payable; and any recorded encumbrances against the property, including the lien filed in favor of the Government as required by FAR 28.203-3(d);

(ii) Evidence of the amount due under any encumbrance shown in the evidence of title;

(iii) A copy of the current real estate tax assessment of the property or a current appraisal dated no earlier than 6 months prior to the date of the bond, prepared by a professional appraiser who certifies that the appraisal has been conducted in accordance with the generally accepted appraisal standards as reflected in the Uniform Standards of Professional Appraisal Practice, as promulgated by the Appraisal Foundation.

(End of clause)

52.228-12 PROSPECTIVE SUBCONTRACTOR REQUESTS FOR BONDS. (OCT 1995)

In accordance with Section 806(a)(3) of Pub. L. 102-190, as amended by Sections 2091 and 8105 of Pub. L. 103-355, upon the request of a prospective subcontractor or supplier offering to furnish labor or material for the performance of this contract for which a payment bond has been furnished to the Government pursuant to the Miller Act, the Contractor shall promptly provide a copy of such payment bond to the requester.

52.228-14 IRREVOCABLE LETTER OF CREDIT (DEC 1999)

(a) "Irrevocable letter of credit" (ILC), as used in this clause, means a written commitment by a federally insured financial institution to pay all or part of a stated amount of money, until the expiration date of the letter, upon presentation by the Government (the beneficiary) of a written demand therefor. Neither the financial institution nor the offeror/Contractor can revoke or condition the letter of credit.

(b) If the offeror intends to use an ILC in lieu of a bid bond, or to secure other types of bonds such as performance and payment bonds, the letter of credit and letter of confirmation formats in paragraphs (e) and (f) of this clause shall be used.

(c) The letter of credit shall be irrevocable, shall require presentation of no document other than a written demand and the ILC (including confirming letter, if any), shall be issued/confirmed by an acceptable federally insured

financial institution as provided in paragraph (d) of this clause, and--

(1) If used as a bid guarantee, the ILC shall expire no earlier than 60 days after the close of the bid acceptance period;

(2) If used as an alternative to corporate or individual sureties as security for a performance or payment bond, the offeror/Contractor may submit an ILC with an initial expiration date estimated to cover the entire period for which financial security is required or may submit an ILC with an initial expiration date that is a minimum period of one year from the date of issuance. The ILC shall provide that, unless the issuer provides the beneficiary written notice of non-renewal at least 60 days in advance of the current expiration date, the ILC is automatically extended without amendment for one year from the expiration date, or any future expiration date, until the period of required coverage is completed and the Contracting Officer provides the financial institution with a written statement waiving the right to payment. The period of required coverage shall be:

(i) For contracts subject to the Miller Act, the later of--

(A) One year following the expected date of final payment;

(B) For performance bonds only, until completion of any warranty period; or

(C) For payment bonds only, until resolution of all claims filed against the payment bond during the one-year period following final payment.

(ii) For contracts not subject to the Miller Act, the later of--

(A) 90 days following final payment; or

(B) For performance bonds only, until completion of any warranty period.

(d) Only federally insured financial institutions rated investment grade or higher shall issue or confirm the ILC. The offeror/Contractor shall provide the Contracting Officer a credit rating that indicates the financial institution has the required rating(s) as of the date of issuance of the ILC. Unless the financial institution issuing the ILC had letter of credit business of less than \$25 million in the past year, ILCs over \$5 million must be confirmed by another acceptable financial institution that had letter of credit business of less than \$25 million in the past year.

(e) The following format shall be used by the issuing financial institution to create an ILC:

[Issuing Financial Institution's Letterhead or Name and Address]

Issue Date _____

IRREVOCABLE LETTER OF CREDIT NO. _____

Account party's name _____

Account party's address _____

For Solicitation No. _____ (for reference only)

TO: [U.S. Government agency]

[U.S. Government agency's address]

1. We hereby establish this irrevocable and transferable Letter of Credit in your favor for one or more drawings up to United States \$ _____. This Letter of Credit is payable at [issuing financial institution's and, if any, confirming financial institution's] office at [issuing financial institution's address and, if any, confirming financial institution's address] and expires with our close of business on _____, or any automatically extended expiration date.

2. We hereby undertake to honor your or the transferee's sight draft(s) drawn on the issuing or, if any, the confirming financial institution, for all or any part of this credit if presented with this Letter of Credit and confirmation, if any, at the office specified in paragraph 1 of this Letter of Credit on or before the expiration date or any automatically extended expiration date.

3. [This paragraph is omitted if used as a bid guarantee, and subsequent paragraphs are renumbered.] It is a condition of this Letter of Credit that it is deemed to be automatically extended without amendment for one year from the expiration date hereof, or any future expiration date, unless at least 60 days prior to any expiration date, we notify you or the transferee by registered mail, or other receipted means of delivery, that we elect not to consider this Letter of Credit renewed for any such additional period. At the time we notify you, we also agree to notify the account party (and confirming financial institution, if any) by the same means of delivery.

4. This Letter of Credit is transferable. Transfers and assignments of proceeds are to be effected without charge to either the beneficiary or the transferee/assignee of proceeds. Such transfer or assignment shall be only at the written direction of the Government (the beneficiary) in a form satisfactory to the issuing financial institution and the confirming financial institution, if any.

5. This Letter of Credit is subject to the Uniform Customs and Practice (UCP) for Documentary Credits, 1993 Revision, International Chamber of Commerce Publication No. 500, and to the extent not inconsistent therewith, to the laws of _____ [state of confirming financial institution, if any, otherwise state of issuing financial institution].

6. If this credit expires during an interruption of business of this financial institution as described in Article 17 of the UCP, the financial institution specifically agrees to effect payment if this credit is drawn against within 30 days after the resumption of our business.

Sincerely,

[Issuing financial institution]

(f) The following format shall be used by the financial institution to confirm an ILC:

[Confirming Financial Institution's Letterhead or Name and Address]

(Date) _____

Our Letter of Credit Advice Number _____

Beneficiary: _____ [U.S. Government agency]

Issuing Financial Institution: _____

Issuing Financial Institution's LC No.: _____

Gentlemen:

1. We hereby confirm the above indicated Letter of Credit, the original of which is attached, issued by _____

[name of issuing financial institution] for drawings of up to United States dollars _____/U.S. \$_____ and expiring with our close of business on _____ [the expiration date], or any automatically extended expiration date.

2. Draft(s) drawn under the Letter of Credit and this Confirmation are payable at our office located at _____.

3. We hereby undertake to honor sight draft(s) drawn under and presented with the Letter of Credit and this Confirmation at our offices as specified herein.

4. [This paragraph is omitted if used as a bid guarantee, and subsequent paragraphs are renumbered.] It is a condition of this confirmation that it be deemed automatically extended without amendment for one year from the expiration date hereof, or any automatically extended expiration date, unless:

(a) At least 60 days prior to any such expiration date, we shall notify the Contracting Officer, or the transferee and the issuing financial institution, by registered mail or other receipted means of delivery, that we elect not to consider this confirmation extended for any such additional period; or

(b) The issuing financial institution shall have exercised its right to notify you or the transferee, the account party, and ourselves, of its election not to extend the expiration date of the Letter of Credit.

5. This confirmation is subject to the Uniform Customs and Practice (UCP) for Documentary Credits, 1993 Revision, International Chamber of Commerce Publication No. 500, and to the extent not inconsistent therewith, to the laws of _____ [state of confirming financial institution].

6. If this confirmation expires during an interruption of business of this financial institution as described in Article 17 of the UCP, we specifically agree to effect payment if this credit is drawn against within 30 days after the resumption of our business.

Sincerely,

[Confirming financial institution]

(g) The following format shall be used by the Contracting Officer for a sight draft to draw on the Letter of Credit:

SIGHT DRAFT

[City, State]

(Date) _____

[Name and address of financial institution]

Pay to the order of _____ [Beneficiary Agency] _____ the sum of United States \$_____.
This draft is drawn under Irrevocable Letter of Credit No. _____.

[Beneficiary Agency]

By: _____

(End of clause)

52.228-15 PERFORMANCE AND PAYMENT BONDS--CONSTRUCTION (JUL 2000)-

(a) Definitions. As used in this clause--

Original contract price means the award price of the contract; or, for requirements contracts, the price payable for the estimated total quantity; or, for indefinite-quantity contracts, the price payable for the specified minimum quantity. Original contract price does not include the price of any options, except those options exercised at the time of contract award.

(b) Amount of required bonds. Unless the resulting contract price is \$100,000 or less, the successful offeror shall furnish performance and payment bonds to the Contracting Officer as follows:

(1) Performance bonds (Standard Form 25). The penal amount of performance bonds at the time of contract award shall be 100 percent of the original contract price.

(2) Payment Bonds (Standard Form 25-A). The penal amount of payment bonds at the time of contract award shall be 100 percent of the original contract price.

(3) Additional bond protection. (i) The Government may require additional performance and payment bond protection if the contract price is increased. The increase in protection generally will equal 100 percent of the increase in contract price.

(ii) The Government may secure the additional protection by directing the Contractor to increase the penal amount of the existing bond or to obtain an additional bond.

(c) Furnishing executed bonds. The Contractor shall furnish all executed bonds, including any necessary reinsurance agreements, to the Contracting Officer, within the time period specified in the Bid Guarantee provision of the solicitation, or otherwise specified by the Contracting Officer, but in any event, before starting work.

(d) Surety or other security for bonds. The bonds shall be in the form of firm commitment, supported by corporate sureties whose names appear on the list contained in Treasury Department Circular 570, individual sureties, or by other acceptable security such as postal money order, certified check, cashier's check, irrevocable letter of credit, or, in accordance with Treasury Department regulations, certain bonds or notes of the United States. Treasury Circular 570 is published in the Federal Register or may be obtained from the U.S. Department of Treasury, Financial Management Service, Surety Bond Branch, 401 14th Street, NW, 2nd Floor, West Wing, Washington, DC 20227.

(e) Notice of subcontractor waiver of protection (40 U.S.C. 270b(c)). Any waiver of the right to sue on the payment bond is void unless it is in writing, signed by the person whose right is waived, and executed after such person has first furnished labor or material for use in the performance of the contract.

(End of clause)

52.229-3 FEDERAL, STATE, AND LOCAL TAXES (JAN 1991)

(a) "Contract date," as used in this clause, means the date set for bid opening or, if this is a negotiated contract or a modification, the effective date of this contract or modification.

"All applicable Federal, State, and local taxes and duties," as used in this clause, means all taxes and duties, in effect on the contract date, that the taxing authority is imposing and collecting on the transactions or property covered by this contract.

"After-imposed Federal tax," as used in this clause, means any new or increased Federal excise tax or duty, or tax

that was exempted or excluded on the contract date but whose exemption was later revoked or reduced during the contract period, on the transactions or property covered by this contract that the Contractor is required to pay or bear as the result of legislative, judicial, or administrative action taking effect after the contract date. It does not include social security tax or other employment taxes.

"After-relieved Federal tax," as used in this clause, means any amount of Federal excise tax or duty, except social security or other employment taxes, that would otherwise have been payable on the transactions or property covered by this contract, but which the Contractor is not required to pay or bear, or for which the Contractor obtains a refund or drawback, as the result of legislative, judicial, or administrative action taking effect after the contract date.

(b) The contract price includes all applicable Federal, State, and local taxes and duties.

(c) The contract price shall be increased by the amount of any after-imposed Federal tax, provided the Contractor warrants in writing that no amount for such newly imposed Federal excise tax or duty or rate increase was included in the contract price, as a contingency reserve or otherwise.

(d) The contract price shall be decreased by the amount of any after-relieved Federal tax.

(e) The contract price shall be decreased by the amount of any Federal excise tax or duty, except social security or other employment taxes, that the Contractor is required to pay or bear, or does not obtain a refund of, through the Contractor's fault, negligence, or failure to follow instructions of the Contracting Officer.

(f) No adjustment shall be made in the contract price under this clause unless the amount of the adjustment exceeds \$250.

(g) The Contractor shall promptly notify the Contracting Officer of all matters relating to any Federal excise tax or duty that reasonably may be expected to result in either an increase or decrease in the contract price and shall take appropriate action as the Contracting Officer directs.

(h) The Government shall, without liability, furnish evidence appropriate to establish exemption from any Federal, State, or local tax when the Contractor requests such evidence and a reasonable basis exists to sustain the exemption.

(End of clause)

52.232-5 PAYMENTS UNDER FIXED-PRICE CONSTRUCTION CONTRACTS (MAY 1997)

(a) Payment of price. The Government shall pay the Contractor the contract price as provided in this contract.

(b) Progress payments. The Government shall make progress payments monthly as the work proceeds, or at more frequent intervals as determined by the Contracting Officer, on estimates of work accomplished which meets the standards of quality established under the contract, as approved by the Contracting Officer.

(1) The Contractor's request for progress payments shall include the following substantiation:

(i) An itemization of the amounts requested, related to the various elements of work required by the contract covered by the payment requested.

(ii) A listing of the amount included for work performed by each subcontractor under the contract.

(iii) A listing of the total amount of each subcontract under the contract.

(iv) A listing of the amounts previously paid to each such subcontractor under the contract.

(v) Additional supporting data in a form and detail required by the Contracting Officer.

(2) In the preparation of estimates, the Contracting Officer may authorize material delivered on the site and preparatory work done to be taken into consideration. Material delivered to the Contractor at locations other than the site also may be taken into consideration if--

(i) Consideration is specifically authorized by this contract; and

(ii) The Contractor furnishes satisfactory evidence that it has acquired title to such material and that the material will be used to perform this contract.

(c) Contractor certification. Along with each request for progress payments, the Contractor shall furnish the following certification, or payment shall not be made: (However, if the Contractor elects to delete paragraph (c)(4) from the certification, the certification is still acceptable.)

I hereby certify, to the best of my knowledge and belief, that--

(1) The amounts requested are only for performance in accordance with the specifications, terms, and conditions of the contract;

(2) Payments to subcontractors and suppliers have been made from previous payments received under the contract, and timely payments will be made from the proceeds of the payment covered by this certification, in accordance with subcontract agreements and the requirements of chapter 39 of Title 31, United States Code;

(3) This request for progress payments does not include any amounts which the prime contractor intends to withhold or retain from a subcontractor or supplier in accordance with the terms and conditions of the subcontract; and

(4) This certification is not to be construed as final acceptance of a subcontractor's performance.

(Name)

(Title)

(Date)

(d) Refund of unearned amounts. If the Contractor, after making a certified request for progress payments, discovers that a portion or all of such request constitutes a payment for performance by the Contractor that fails to conform to the specifications, terms, and conditions of this contract (hereinafter referred to as the "unearned amount"), the Contractor shall--

(1) Notify the Contracting Officer of such performance deficiency; and

(2) Be obligated to pay the Government an amount (computed by the Contracting Officer in the manner provided in paragraph (j) of this clause) equal to interest on the unearned amount from the 8th day after the date of receipt of the unearned amount until--

(i) The date the Contractor notifies the Contracting Officer that the performance deficiency has been corrected; or

(ii) The date the Contractor reduces the amount of any subsequent certified request for progress payments by an amount equal to the unearned amount.

(e) Retainage. If the Contracting Officer finds that satisfactory progress was achieved during any period for which a progress payment is to be made, the Contracting Officer shall authorize payment to be made in full. However, if satisfactory progress has not been made, the Contracting Officer may retain a maximum of 10 percent of the amount of the payment until satisfactory progress is achieved. When the work is substantially complete, the Contracting Officer may retain from previously withheld funds and future progress payments that amount the Contracting Officer considers adequate for protection of the Government and shall release to the Contractor all the remaining withheld funds. Also, on completion and acceptance of each separate building, public work, or other division of the contract, for which the price is stated separately in the contract, payment shall be made for the completed work without retention of a percentage.

(f) Title, liability, and reservation of rights. All material and work covered by progress payments made shall, at the time of payment, become the sole property of the Government, but this shall not be construed as--

(1) Relieving the Contractor from the sole responsibility for all material and work upon which payments have been made or the restoration of any damaged work; or

(2) Waiving the right of the Government to require the fulfillment of all of the terms of the contract.

(g) Reimbursement for bond premiums. In making these progress payments, the Government shall, upon request, reimburse the Contractor for the amount of premiums paid for performance and payment bonds (including coinsurance and reinsurance agreements, when applicable) after the Contractor has furnished evidence of full payment to the surety. The retainage provisions in paragraph (e) of this clause shall not apply to that portion of progress payments attributable to bond premiums.

(h) Final payment. The Government shall pay the amount due the Contractor under this contract after--

(1) Completion and acceptance of all work;

(2) Presentation of a properly executed voucher; and

(3) Presentation of release of all claims against the Government arising by virtue of this contract, other than claims, in stated amounts, that the Contractor has specifically excepted from the operation of the release. A release may also be required of the assignee if the Contractor's claim to amounts payable under this contract has been assigned under the Assignment of Claims Act of 1940 (31 U.S.C. 3727 and 41 U.S.C. 15).

(i) Limitation because of undefinitized work. Notwithstanding any provision of this contract, progress payments shall not exceed 80 percent on work accomplished on undefinitized contract actions. A "contract action" is any action resulting in a contract, as defined in FAR Subpart 2.1, including contract modifications for additional supplies or services, but not including contract modifications that are within the scope and under the terms of the contract, such as contract modifications issued pursuant to the Changes clause, or funding and other administrative changes.

(j) Interest computation on unearned amounts. In accordance with 31 U.S.C. 3903(c)(1), the amount payable under subparagraph (d)(2) of this clause shall be--

(1) Computed at the rate of average bond equivalent rates of 91-day Treasury bills auctioned at the most recent auction of such bills prior to the date the Contractor receives the unearned amount; and

(2) Deducted from the next available payment to the Contractor.

52.232-23 ASSIGNMENT OF CLAIMS (JAN 1986)

(a) The Contractor, under the Assignment of Claims Act, as amended, 31 U.S.C. 3727, 41 U.S.C. 15 (hereafter

referred to as "the Act"), may assign its rights to be paid amounts due or to become due as a result of the performance of this contract to a bank, trust company, or other financing institution, including any Federal lending agency. The assignee under such an assignment may thereafter further assign or reassign its right under the original assignment to any type of financing institution described in the preceding sentence.

(b) Any assignment or reassignment authorized under the Act and this clause shall cover all unpaid amounts payable under this contract, and shall not be made to more than one party, except that an assignment or reassignment may be made to one party as agent or trustee for two or more parties participating in the financing of this contract.

(c) The Contractor shall not furnish or disclose to any assignee under this contract any classified document (including this contract) or information related to work under this contract until the Contracting Officer authorizes such action in writing.

52.232-27 PROMPT PAYMENT FOR CONSTRUCTION CONTRACTS (JUN 1997)

Notwithstanding any other payment terms in this contract, the Government will make invoice payments and contract financing payments under the terms and conditions specified in this clause. Payment shall be considered as being made on the day a check is dated or the date of an electronic funds transfer. Definitions of pertinent terms are set forth in section 32.902 of the Federal Acquisition Regulation. All days referred to in this clause are calendar days, unless otherwise specified. (However, see subparagraph (a)(3) concerning payments due on Saturdays, Sundays, and legal holidays.)

(a) Invoice payments. (1) Types of invoice payments. For purposes of this clause, there are several types of invoice payments that may occur under this contract, as follows:

(i) Progress payments, if provided for elsewhere in this contract, based on Contracting Officer approval of the estimated amount and value of work or services performed, including payments for reaching milestones in any project:

(A) The due date for making such payments shall be 14 days after receipt of the payment request by the designated billing office. If the designated billing office fails to annotate the payment request with the actual date of receipt at the time of receipt, the payment due date shall be the 14th day after the date of the Contractor's payment request, provided a proper payment request is received and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements.

(B) The due date for payment of any amounts retained by the Contracting Officer in accordance with the clause at 52.232-5, Payments Under Fixed-Price Construction Contracts, shall be as specified in the contract or, if not specified, 30 days after approval for release to the Contractor by the Contracting Officer.

(ii) Final payments based on completion and acceptance of all work and presentation of release of all claims against the Government arising by virtue of the contract, and payments for partial deliveries that have been accepted by the Government (e.g., each separate building, public work, or other division of the contract for which the price is stated separately in the contract):

(A) The due date for making such payments shall be either the 30th day after receipt by the designated billing office of a proper invoice from the Contractor, or the 30th day after Government acceptance of the work or services completed by the Contractor, whichever is later. If the designated billing office fails to annotate the invoice with the date of actual receipt at the time of receipt, the invoice payment due date shall be the 30th day after the date of the Contractor's invoice, provided a proper invoice is received and there is no disagreement over quantity, quality, or Contractor compliance with contract requirements.

(B) On a final invoice where the payment amount is subject to contract settlement actions (e.g., release of claims), acceptance shall be deemed to have occurred on the effective date of the contract settlement.

(2) Contractor's invoice. The Contractor shall prepare and submit invoices to the designated billing office specified in the contract. A proper invoice must include the items listed in subdivisions (a)(2)(i) through (a)(2)(ix) of this clause. If the invoice does not comply with these requirements, it shall be returned within 7 days after the date the designated billing office received the invoice, with a statement of the reasons why it is not a proper invoice. Untimely notification will be taken into account in computing any interest penalty owed the Contractor in the manner described in subparagraph (a)(4) of this clause.

(i) Name and address of the Contractor.

(ii) Invoice date. (The Contractor is encouraged to date invoices as close as possible to the date of mailing or transmission.)

(iii) Contract number or other authorization for work or services performed (including order number and contract line item number).

(iv) Description of work or services performed.

(v) Delivery and payment terms (e.g., prompt payment discount terms).

(vi) Name and address of Contractor official to whom payment is to be sent (must be the same as that in the contract or in a proper notice of assignment).

(vii) Name (where practicable), title, phone number, and mailing address of person to be notified in the event of a defective invoice.

(viii) For payments described in subdivision (a)(1)(i) of this clause, substantiation of the amounts requested and certification in accordance with the requirements of the clause at 52.232-5, Payments Under Fixed-Price Construction Contracts.

(ix) Any other information or documentation required by the contract.

(x) While not required, the Contractor is strongly encouraged to assign an identification number to each invoice.

(3) Interest penalty. An interest penalty shall be paid automatically by the designated payment office, without request from the Contractor, if payment is not made by the due date and the conditions listed in subdivisions (a)(3)(i) through (a)(3)(iii) of this clause are met, if applicable. However, when the due date falls on a Saturday, Sunday, or legal holiday when Federal Government offices are closed and Government business is not expected to be conducted, payment may be made on the following business day without incurring a late payment interest penalty.

(i) A proper invoice was received by the designated billing office.

(ii) A receiving report or other Government documentation authorizing payment was processed and there was no disagreement over quantity, quality, Contractor compliance with any contract term or condition, or requested progress payment amount.

(iii) In the case of a final invoice for any balance of funds due the Contractor for work or services performed, the amount was not subject to further contract settlement actions between the Government and the Contractor.

(4) Computing penalty amount. The interest penalty shall be at the rate established by the Secretary of the Treasury under section 12 of the Contract Disputes Act of 1978 (41 U.S.C. 611) that is in effect on the day after the due date, except where the interest penalty is prescribed by other governmental authority (e.g., tariffs). This rate is referred to as the "Renegotiation Board Interest Rate," and it is published in the Federal Register semiannually on or about January 1 and July 1. The interest penalty shall accrue daily on the invoice principal payment amount approved by

the Government until the payment date of such approved principal amount; and will be compounded in 30-day increments inclusive from the first day after the due date through the payment date. That is, interest accrued at the end of any 30-day period will be added to the approved invoice principal payment amount and will be subject to interest penalties if not paid in the succeeding 30-day period. If the designated billing office failed to notify the Contractor of a defective invoice within the periods prescribed in subparagraph (a)(2) of this clause, the due date on the corrected invoice will be adjusted by subtracting from such date the number of days taken beyond the prescribed notification of defects period. Any interest penalty owed the Contractor will be based on this adjusted due date. Adjustments will be made by the designated payment office for errors in calculating interest penalties.

(i) For the sole purpose of computing an interest penalty that might be due the Contractor for payments described in subdivision (a)(1)(ii) of this clause, Government acceptance or approval shall be deemed to have occurred constructively on the 7th day after the Contractor has completed the work or services in accordance with the terms and conditions of the contract. In the event that actual acceptance or approval occurs within the constructive acceptance or approval period, the determination of an interest penalty shall be based on the actual date of acceptance or approval. Constructive acceptance or constructive approval requirements do not apply if there is a disagreement over quantity, quality, or Contractor compliance with a contract provision. These requirements also do not compel Government officials to accept work or services, approve Contractor estimates, perform contract administration functions, or make payment prior to fulfilling their responsibilities.

(ii) The following periods of time will not be included in the determination of an interest penalty:

(A) The period taken to notify the Contractor of defects in invoices submitted to the Government, but this may not exceed 7 days.

(B) The period between the defects notice and resubmission of the corrected invoice by the Contractor.

(C) For incorrect electronic funds transfer (EFT) information, in accordance with the EFT clause of this contract.

(iii) Interest penalties will not continue to accrue after the filing of a claim for such penalties under the clause at 52.233-1, Disputes, or for more than 1 year. Interest penalties of less than \$1 need not be paid.

(iv) Interest penalties are not required on payment delays due to disagreement between the Government and the Contractor over the payment amount or other issues involving contract compliance, or on amounts temporarily withheld or retained in accordance with the terms of the contract. Claims involving disputes, and any interest that may be payable, will be resolved in accordance with the clause at 52.233-1, Disputes.

(5) Prompt payment discounts. An interest penalty also shall be paid automatically by the designated payment office, without request from the Contractor, if a discount for prompt payment is taken improperly. The interest penalty will be calculated on the amount of discount taken for the period beginning with the first day after the end of the discount period through the date when the Contractor is paid.

(6) Additional interest penalty. (i) If this contract was awarded on or after October 1, 1989, a penalty amount, calculated in accordance with subdivision (a)(6)(iii) of this clause, shall be paid in addition to the interest penalty amount if the Contractor--

(A) Is owed an interest penalty of \$1 or more;

(B) Is not paid the interest penalty within 10 days after the date the invoice amount is paid; and

(C) Makes a written demand to the designated payment office for additional penalty payment, in accordance with subdivision (a)(6)(ii) of this clause, postmarked not later than 40 days after the date the invoice amount is paid.

(ii)(A) Contractors shall support written demands for additional penalty payments with the following data. No additional data shall be required. Contractors shall--

(1) Specifically assert that late payment interest is due under a specific invoice, and request payment of all overdue late payment interest penalty and such additional penalty as may be required;

(2) Attach a copy of the invoice on which the unpaid late payment interest was due; and

(3) State that payment of the principal has been received, including the date of receipt.

(B) Demands must be postmarked on or before the 40th day after payment was made, except that--

(1) If the postmark is illegible or nonexistent, the demand must have been received and annotated with the date of receipt by the designated payment office on or before the 40th day after payment was made; or

(2) If the postmark is illegible or nonexistent and the designated payment office fails to make the required annotation, the demand's validity will be determined by the date the Contractor has placed on the demand; provided such date is no later than the 40th day after payment was made.

(iii)(A) The additional penalty shall be equal to 100 percent of any original late payment interest penalty, except--

(1) The additional penalty shall not exceed \$5,000;

(2) The additional penalty shall never be less than \$25; and

(3) No additional penalty is owed if the amount of the underlying interest penalty is less than \$1.

(B) If the interest penalty ceases to accrue in accordance with the limits stated in subdivision (a)(4)(iii) of this clause, the amount of the additional penalty shall be calculated on the amount of interest penalty that would have accrued in the absence of these limits, subject to the overall limits on the additional penalty specified in subdivision (a)(6)(iii)(A) of this clause.

(C) For determining the maximum and minimum additional penalties, the test shall be the interest penalty due on each separate payment made for each separate contract. The maximum and minimum additional penalty shall not be based upon individual invoices unless the invoices are paid separately. Where payments are consolidated for disbursing purposes, the maximum and minimum additional penalty determination shall be made separately for each contract therein.

(D) The additional penalty does not apply to payments regulated by other Government regulations (e.g., payments under utility contracts subject to tariffs and regulation).

(b) Contract financing payments. (1) Due dates for recurring financing payments. If this contract provides for contract financing, requests for payment shall be submitted to the designated billing office as specified in this contract or as directed by the Contracting Officer. Contract financing payments shall be made on the 14th day after receipt of a proper contract financing request by the designated billing office. In the event that an audit or other review of a specific financing request is required to ensure compliance with the terms and conditions of the contract, the designated payment office is not compelled to make payment by the due date specified.

(2) Due dates for other contract financing. For advance payments, loans, or other arrangements that do not involve recurring submissions of contract financing requests, payment shall be made in accordance with the corresponding contract terms or as directed by the Contracting Officer.

(3) Interest penalty not applicable. Contract financing payments shall not be assessed an interest penalty for payment delays.

(c) Subcontract clause requirements. The Contractor shall include in each subcontract for property or services (including a material supplier) for the purpose of performing this contract the following:

- (1) Prompt payment for subcontractors. A payment clause that obligates the Contractor to pay the subcontractor for satisfactory performance under its subcontract not later than 7 days from receipt of payment out of such amounts as are paid to the Contractor under this contract.
- (2) Interest for subcontractors. An interest penalty clause that obligates the Contractor to pay to the subcontractor an interest penalty for each payment not made in accordance with the payment clause--
- (i) For the period beginning on the day after the required payment date and ending on the date on which payment of the amount due is made; and
- (ii) Computed at the rate of interest established by the Secretary of the Treasury, and published in the Federal Register, for interest payments under section 12 of the Contract Disputes Act of 1978 (41 U.S.C. 611) in effect at the time the Contractor accrues the obligation to pay an interest penalty.
- (3) Subcontractor clause flowdown. A clause requiring each subcontractor to include a payment clause and an interest penalty clause conforming to the standards set forth in subparagraphs (c)(1) and (c)(2) of this clause in each of its subcontracts, and to require each of its subcontractors to include such clauses in their subcontracts with each lower-tier subcontractor or supplier.
- (d) Subcontract clause interpretation. The clauses required by paragraph (c) of this clause shall not be construed to impair the right of the Contractor or a subcontractor at any tier to negotiate, and to include in their subcontract, provisions that--
- (1) Retainage permitted. Permit the Contractor or a subcontractor to retain (without cause) a specified percentage of each progress payment otherwise due to a subcontractor for satisfactory performance under the subcontract without incurring any obligation to pay a late payment interest penalty, in accordance with terms and conditions agreed to by the parties to the subcontract, giving such recognition as the parties deem appropriate to the ability of a subcontractor to furnish a performance bond and a payment bond;
- (2) Withholding permitted. Permit the Contractor or subcontractor to make a determination that part or all of the subcontractor's request for payment may be withheld in accordance with the subcontract agreement; and
- (3) Withholding requirements. Permit such withholding without incurring any obligation to pay a late payment penalty if--
- (i) A notice conforming to the standards of paragraph (g) of this clause previously has been furnished to the subcontractor; and
- (ii) A copy of any notice issued by a Contractor pursuant to subdivision (d)(3)(i) of this clause has been furnished to the Contracting Officer.
- (e) Subcontractor withholding procedures. If a Contractor, after making a request for payment to the Government but before making a payment to a subcontractor for the subcontractor's performance covered by the payment request, discovers that all or a portion of the payment otherwise due such subcontractor is subject to withholding from the subcontractor in accordance with the subcontract agreement, then the Contractor shall--
- (1) Subcontractor notice. Furnish to the subcontractor a notice conforming to the standards of paragraph (g) of this clause as soon as practicable upon ascertaining the cause giving rise to a withholding, but prior to the due date for subcontractor payment;
- (2) Contracting Officer notice. Furnish to the Contracting Officer, as soon as practicable, a copy of the notice furnished to the subcontractor pursuant to subparagraph (e)(1) of this clause;
- (3) Subcontractor progress payment reduction. Reduce the subcontractor's progress payment by an amount not to exceed the amount specified in the notice of withholding furnished under subparagraph (e)(1) of this clause;

(4) Subsequent subcontractor payment. Pay the subcontractor as soon as practicable after the correction of the identified subcontract performance deficiency, and--

(i) Make such payment within--

(A) Seven days after correction of the identified subcontract performance deficiency (unless the funds therefor must be recovered from the Government because of a reduction under subdivision (e)(5)(i) of this clause; or

(B) Seven days after the Contractor recovers such funds from the Government; or

(ii) Incur an obligation to pay a late payment interest penalty computed at the rate of interest established by the Secretary of the Treasury, and published in the Federal Register, for interest payments under section 12 of the Contracts Disputes Act of 1978 (41 U.S.C. 611) in effect at the time the Contractor accrues the obligation to pay an interest penalty;

(5) Notice to Contracting Officer. Notify the Contracting Officer upon--

(i) Reduction of the amount of any subsequent certified application for payment; or

(ii) Payment to the subcontractor of any withheld amounts of a progress payment, specifying--

(A) The amounts withheld under subparagraph (e)(1) of this clause; and

(B) The dates that such withholding began and ended; and

(6) Interest to Government. Be obligated to pay to the Government an amount equal to interest on the withheld payments (computed in the manner provided in 31 U.S.C. 3903(c)(1)), from the 8th day after receipt of the withheld amounts from the Government until--

(i) The day the identified subcontractor performance deficiency is corrected; or

(ii) The date that any subsequent payment is reduced under subdivision (e)(5)(i) of this clause.

(f) Third-party deficiency reports. (1) Withholding from subcontractor. If a Contractor, after making payment to a first-tier subcontractor, receives from a supplier or subcontractor of the first-tier subcontractor (hereafter referred to as a "second-tier subcontractor") a written notice in accordance with section 2 of the Act of August 24, 1935 (40 U.S.C. 270b, Miller Act), asserting a deficiency in such first-tier subcontractor's performance under the contract for which the Contractor may be ultimately liable, and the Contractor determines that all or a portion of future payments otherwise due such first-tier subcontractor is subject to withholding in accordance with the subcontract agreement, the Contractor may, without incurring an obligation to pay an interest penalty under subparagraph (e)(6) of this clause--

(i) Furnish to the first-tier subcontractor a notice conforming to the standards of paragraph (g) of this clause as soon as practicable upon making such determination; and

(ii) Withhold from the first-tier subcontractor's next available progress payment or payments an amount not to exceed the amount specified in the notice of withholding furnished under subdivision (f)(1)(i) of this clause.

(2) Subsequent payment or interest charge. As soon as practicable, but not later than 7 days after receipt of satisfactory written notification that the identified subcontract performance deficiency has been corrected, the Contractor shall--

(i) Pay the amount withheld under subdivision (f)(1)(ii) of this clause to such first-tier subcontractor; or

(ii) Incur an obligation to pay a late payment interest penalty to such first-tier subcontractor computed at the rate of interest established by the Secretary of the Treasury, and published in the Federal Register, for interest payments under section 12 of the Contracts Disputes Act of 1978 (41 U.S.C. 611) in effect at the time the Contractor accrues the obligation to pay an interest penalty.

(g) Written notice of subcontractor withholding. A written notice of any withholding shall be issued to a subcontractor (with a copy to the Contracting Officer of any such notice issued by the Contractor), specifying--

(1) The amount to be withheld;

(2) The specific causes for the withholding under the terms of the subcontract; and

(3) The remedial actions to be taken by the subcontractor in order to receive payment of the amounts withheld.

(h) Subcontractor payment entitlement. The Contractor may not request payment from the Government of any amount withheld or retained in accordance with paragraph (d) of this clause until such time as the Contractor has determined and certified to the Contracting Officer that the subcontractor is entitled to the payment of such amount.

(i) Prime-subcontractor disputes. A dispute between the Contractor and subcontractor relating to the amount or entitlement of a subcontractor to a payment or a late payment interest penalty under a clause included in the subcontract pursuant to paragraph (c) of this clause does not constitute a dispute to which the United States is a party. The United States may not be interpleaded in any judicial or administrative proceeding involving such a dispute.

(j) Preservation of prime-subcontractor rights. Except as provided in paragraph (i) of this clause, this clause shall not limit or impair any contractual, administrative, or judicial remedies otherwise available to the Contractor or a subcontractor in the event of a dispute involving late payment or nonpayment by the Contractor or deficient subcontract performance or nonperformance by a subcontractor.

(k) Non-recourse for prime contractor interest penalty. The Contractor's obligation to pay an interest penalty to a subcontractor pursuant to the clauses included in a subcontract under paragraph (c) of this clause shall not be construed to be an obligation of the United States for such interest penalty. A cost-reimbursement claim may not include any amount for reimbursement of such interest penalty.

52.232-33 PAYMENT BY ELECTRONIC FUNDS TRANSFER—CENTRAL CONTRACTOR REGISTRATION (MAY 1999)

(a) Method of payment. (1) All payments by the Government under this contract shall be made by electronic funds transfer (EFT), except as provided in paragraph (a)(2) of this clause. As used in this clause, the term "EFT" refers to the funds transfer and may also include the payment information transfer.

(2) In the event the Government is unable to release one or more payments by EFT, the Contractor agrees to either--

(i) Accept payment by check or some other mutually agreeable method of payment; or

(ii) Request the Government to extend the payment due date until such time as the Government can make payment by EFT (but see paragraph (d) of this clause).

(b) Contractor's EFT information. The Government shall make payment to the Contractor using the EFT information contained in the Central Contractor Registration (CCR) database. In the event that the EFT information changes, the Contractor shall be responsible for providing the updated information to the CCR database.

(c) Mechanisms for EFT payment. The Government may make payment by EFT through either the Automated Clearing House (ACH) network, subject to the rules of the National Automated Clearing House Association, or the

Fedwire Transfer System. The rules governing Federal payments through the ACH are contained in 31 CFR part 210.

(d) Suspension of payment. If the Contractor's EFT information in the CCR database is incorrect, then the Government need not make payment to the Contractor under this contract until correct EFT information is entered into the CCR database; and any invoice or contract financing request shall be deemed not to be a proper invoice for the purpose of prompt payment under this contract. The prompt payment terms of the contract regarding notice of an improper invoice and delays in accrual of interest penalties apply.

(e) Contractor EFT arrangements. If the Contractor has identified multiple payment receiving points (i.e., more than one remittance address and/or EFT information set) in the CCR database, and the Contractor has not notified the Government of the payment receiving point applicable to this contract, the Government shall make payment to the first payment receiving point (EFT information set or remittance address as applicable) listed in the CCR database.

(f) Liability for uncompleted or erroneous transfers. (1) If an uncompleted or erroneous transfer occurs because the Government used the Contractor's EFT information incorrectly, the Government remains responsible for--

- (i) Making a correct payment;
- (ii) Paying any prompt payment penalty due; and
- (iii) Recovering any erroneously directed funds.

(2) If an uncompleted or erroneous transfer occurs because the Contractor's EFT information was incorrect, or was revised within 30 days of Government release of the EFT payment transaction instruction to the Federal Reserve System, and--

- (i) If the funds are no longer under the control of the payment office, the Government is deemed to have made payment and the Contractor is responsible for recovery of any erroneously directed funds; or
- (ii) If the funds remain under the control of the payment office, the Government shall not make payment, and the provisions of paragraph (d) of this clause shall apply.

(g) EFT and prompt payment. A payment shall be deemed to have been made in a timely manner in accordance with the prompt payment terms of this contract if, in the EFT payment transaction instruction released to the Federal Reserve System, the date specified for settlement of the payment is on or before the prompt payment due date, provided the specified payment date is a valid date under the rules of the Federal Reserve System.

(h) EFT and assignment of claims. If the Contractor assigns the proceeds of this contract as provided for in the assignment of claims terms of this contract, the Contractor shall require as a condition of any such assignment, that the assignee shall register in the CCR database and shall be paid by EFT in accordance with the terms of this clause. In all respects, the requirements of this clause shall apply to the assignee as if it were the Contractor. EFT information that shows the ultimate recipient of the transfer to be other than the Contractor, in the absence of a proper assignment of claims acceptable to the Government, is incorrect EFT information within the meaning of paragraph (d) of this clause.

(i) Liability for change of EFT information by financial agent. The Government is not liable for errors resulting from changes to EFT information made by the Contractor's financial agent.

(j) Payment information. The payment or disbursing office shall forward to the Contractor available payment information that is suitable for transmission as of the date of release of the EFT instruction to the Federal Reserve System. The Government may request the Contractor to designate a desired format and method(s) for delivery of payment information from a list of formats and methods the payment office is capable of executing. However, the Government does not guarantee that any particular format or method of delivery is available at any particular payment office and retains the latitude to use the format and delivery method most convenient to the Government. If

the Government makes payment by check in accordance with paragraph (a) of this clause, the Government shall mail the payment information to the remittance address contained in the CCR database.

(End of Clause)

52.233-1 DISPUTES. (DEC 1998) -- ALTERNATE I (DEC 1991)

(a) This contract is subject to the Contract Disputes Act of 1978, as amended (41 U.S.C. 601-613).

(b) Except as provided in the Act, all disputes arising under or relating to this contract shall be resolved under this clause.

(c) "Claim," as used in this clause, means a written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating to this contract. A claim arising under a contract, unlike a claim relating to that contract, is a claim that can be resolved under a contract clause that provides for the relief sought by the claimant. However, a written demand or written assertion by the Contractor seeking the payment of money exceeding \$100,000 is not a claim under the Act until certified as required by subparagraph (d)(2) of this clause. A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim under the Act. The submission may be converted to a claim under the Act, by complying with the submission and certification requirements of this clause, if it is disputed either as to liability or amount or is not acted upon in a reasonable time.

(d)(1) A claim by the Contractor shall be made in writing and, unless otherwise stated in this contract, submitted within 6 years after accrual of the claim to the Contracting Officer for a written decision. A claim by the Government against the Contractor shall be subject to a written decision by the Contracting Officer.

(2) (i) Contractors shall provide the certification specified in subparagraph (d)(2)(iii) of this clause when submitting any claim -

(A) Exceeding \$100,000; or

(B) Regardless of the amount claimed, when using -

(1) Arbitration conducted pursuant to 5 U.S.C. 575-580; or

(2) Any other alternative means of dispute resolution (ADR) technique that the agency elects to handle in accordance with the Administrative Dispute Resolution Act (ADRA).

(ii) The certification requirement does not apply to issues in controversy that have not been submitted as all or part of a claim.

(iii) The certification shall state as follows: "I certify that the claim is made in good faith; that the supporting data are accurate and complete to the best of my knowledge and belief; that the amount requested accurately reflects the contract adjustment for which the Contractor believes the Government is liable; and that I am duly authorized to certify the claim on behalf of the Contractor.

(3) The certification may be executed by any person duly authorized to bind the Contractor with respect to the claim.

(e) For Contractor claims of \$100,000 or less, the Contracting Officer must, if requested in writing by the Contractor, render a decision within 60 days of the request. For Contractor-certified claims over \$100,000, the Contracting Officer must, within 60 days, decide the claim or notify the Contractor of the date by which the decision will be made.

(f) The Contracting Officer's decision shall be final unless the Contractor appeals or files a suit as provided in the Act.

(g) If the claim by the Contractor is submitted to the Contracting Officer or a claim by the Government is presented to the Contractor, the parties, by mutual consent, may agree to use ADR. If the Contractor refuses an offer for alternative disputes resolution, the Contractor shall inform the Contracting Officer, in writing, of the Contractor's specific reasons for rejecting the request. When using arbitration conducted pursuant to 5 U.S.C. 575-580, or when using any other ADR technique that the agency elects to handle in accordance with the ADRA, any claim, regardless of amount, shall be accompanied by the certification described in subparagraph (d)(2)(iii) of this clause, and executed in accordance with subparagraph (d)(3) of this clause.

(h) The Government shall pay interest on the amount found due and unpaid from (1) the date the Contracting Officer receives the claim (certified, if required); or (2) the date that payment otherwise would be due, if that date is later, until the date of payment. With regard to claims having defective certifications, as defined in (FAR) 48 CFR 33.201, interest shall be paid from the date that the Contracting Officer initially receives the claim. Simple interest on claims shall be paid at the rate, fixed by the Secretary of the Treasury as provided in the Act, which is applicable to the period during which the Contracting Officer receives the claim and then at the rate applicable for each 6-month period as fixed by the Treasury Secretary during the pendency of the claim.

(i) The Contractor shall proceed diligently with performance of this contract, pending final resolution of any request for relief, claim, appeal, or action arising under or relating to the contract, and comply with any decision of the Contracting Officer.

(End of clause)

52.233-3 PROTEST AFTER AWARD (AUG. 1996)

(a) Upon receipt of a notice of protest (as defined in FAR 33.101) or a determination that a protest is likely (see FAR 33.102(d)), the Contracting Officer may, by written order to the Contractor, direct the Contractor to stop performance of the work called for by this contract. The order shall be specifically identified as a stop-work order issued under this clause. Upon receipt of the order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. Upon receipt of the final decision in the protest, the Contracting Officer shall either--

(1) Cancel the stop-work order; or

(2) Terminate the work covered by the order as provided in the Default, or the Termination for Convenience of the Government, clause of this contract.

(b) If a stop-work order issued under this clause is canceled either before or after a final decision in the protest, the Contractor shall resume work. The Contracting Officer shall make an equitable adjustment in the delivery schedule or contract price, or both, and the contract shall be modified, in writing, accordingly, if--

(1) The stop-work order results in an increase in the time required for, or in the Contractor's cost properly allocable to, the performance of any part of this contract; and

(2) The Contractor asserts its right to an adjustment within 30 days after the end of the period of work stoppage; provided, that if the Contracting Officer decides the facts justify the action, the Contracting Officer may receive and act upon a proposal at any time before final payment under this contract.

(c) If a stop-work order is not canceled and the work covered by the order is terminated for the convenience of the Government, the Contracting Officer shall allow reasonable costs resulting from the stop-work order in arriving at the termination settlement.

(d) If a stop-work order is not canceled and the work covered by the order is terminated for default, the Contracting Officer shall allow, by equitable adjustment or otherwise, reasonable costs resulting from the stop-work order.

- (e) The Government's rights to terminate this contract at any time are not affected by action taken under this clause.
- (f) If, as the result of the Contractor's intentional or negligent misstatement, misrepresentation, or miscertification, a protest related to this contract is sustained, and the Government pays costs, as provided in FAR 33.102(b)(2) or 33.104(h)(1), the Government may require the Contractor to reimburse the Government the amount of such costs. In addition to any other remedy available, and pursuant to the requirements of Subpart 32.6, the Government may collect this debt by offsetting the amount against any payment due the Contractor under any contract between the Contractor and the Government.

52.236-2 DIFFERING SITE CONDITIONS (APR 1984)

As prescribed in 36.502, insert the following clause in solicitations and contracts when a fixed-price construction contract or a fixed-price dismantling, demolition, or removal of improvements contract is contemplated and the contract amount is expected to exceed the small purchase limitation. The Contracting Officer may insert the clause in solicitations and contracts when a fixed-price construction or a fixed-price contract for dismantling, demolition, or removal of improvements is contemplated and the contract amount is expected to be within the small purchase limitation.

(a) The Contractor shall promptly, and before the conditions are disturbed, give a written notice to the Contracting Officer of

(1) subsurface or latent physical conditions at the site which differ materially from those indicated in this contract, or

(2) unknown physical conditions at the site, of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as inhering in work of the character provided for in the contract.

(b) The Contracting Officer shall investigate the site conditions promptly after receiving the notice. If the conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performing any part of the work under this contract, whether or not changed as a result of the conditions, an equitable adjustment shall be made under this clause and the contract modified in writing accordingly.

(c) No request by the Contractor for an equitable adjustment to the contract under this clause shall be allowed, unless the Contractor has given the written notice required; provided, that the time prescribed in (a) above for giving written notice may be extended by the Contracting Officer.

(d) No request by the Contractor for an equitable adjustment to the contract for differing site conditions shall be allowed if made after final payment under this contract.

52.236-3 SITE INVESTIGATION AND CONDITIONS AFFECTING THE WORK (APR 1984)

(a) The Contractor acknowledges that it has taken steps reasonably necessary to ascertain the nature and location of the work, and that it has investigated and satisfied itself as to the general and local conditions which can affect the work or its cost, including but not limited to

(1) conditions bearing upon transportation, disposal, handling, and storage of materials;

(2) the availability of labor, water, electric power, and roads;

(3) uncertainties of weather, river stages, tides, or similar physical conditions at the site;

(4) the conformation and conditions of the ground; and (5) the character of equipment and facilities needed preliminary to and during work performance. The Contractor also acknowledges that it has satisfied itself as to the

character, quality, and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site, including all exploratory work done by the Government, as well as from the drawings and specifications made a part of this contract. Any failure of the Contractor to take the actions described and acknowledged in this paragraph will not relieve the Contractor from responsibility for estimating properly the difficulty and cost of successfully performing the work, or for proceeding to successfully perform the work without additional expense to the Government.

(b) The Government assumes no responsibility for any conclusions or interpretations made by the Contractor based on the information made available by the Government. Nor does the Government assume responsibility for any understanding reached or representation made concerning conditions which can affect the work by any of its officers or agents before the execution of this contract, unless that understanding or representation is expressly stated in this contract.

52.236-5 MATERIAL AND WORKMANSHIP (APR 1984)

(a) All equipment, material, and articles incorporated into the work covered by this contract shall be new and of the most suitable grade for the purpose intended, unless otherwise specifically provided in this contract. References in the specifications to equipment, material, articles, or patented processes by trade name, make, or catalog number, shall be regarded as establishing a standard of quality and shall not be construed as limiting competition. The Contractor may, at its option, use any equipment, material, article, or process that, in the judgment of the Contracting Officer, is equal to that named in the specifications, unless otherwise specifically provided in this contract.

(b) The Contractor shall obtain the Contracting Officer's approval of the machinery and mechanical and other equipment to be incorporated into the work. When requesting approval, the Contractor shall furnish to the Contracting Officer the name of the manufacturer, the model number, and other information concerning the performance, capacity, nature, and rating of the machinery and mechanical and other equipment. When required by this contract or by the Contracting Officer, the Contractor shall also obtain the Contracting Officer's approval of the material or articles which the Contractor contemplates incorporating into the work. When requesting approval, the Contractor shall provide full information concerning the material or articles. When directed to do so, the Contractor shall submit samples for approval at the Contractor's expense, with all shipping charges prepaid. Machinery, equipment, material, and articles that do not have the required approval shall be installed or used at the risk of subsequent rejection.

(c) All work under this contract shall be performed in a skillful and workmanlike manner. The Contracting Officer may require, in writing, that the Contractor remove from the work any employee the Contracting Officer deems incompetent, careless, or otherwise objectionable.

52.236-6 SUPERINTENDENCE BY THE CONTRACTOR (APR 1984)

At all times during performance of this contract and until the work is completed and accepted, the Contractor shall directly superintend the work or assign and have on the worksite a competent superintendent who is satisfactory to the Contracting Officer and has authority to act for the Contractor.

52.236-7 PERMITS AND RESPONSIBILITIES (NOV 1991)

The Contractor shall, without additional expense to the Government, be responsible for obtaining any necessary licenses and permits, and for complying with any Federal, State, and municipal laws, codes, and regulations applicable to the performance of the work. The Contractor shall also be responsible for all damages to persons or property that occur as a result of the Contractor's fault or negligence. The Contractor shall also be responsible for all materials delivered and work performed until completion and acceptance of the entire work, except for any completed unit of work which may have been accepted under the contract.

52.236-8 OTHER CONTRACTS (APR 1984)

The Government may undertake or award other contracts for additional work at or near the site of the work under this contract. The Contractor shall fully cooperate with the other contractors and with Government employees and shall carefully adapt scheduling and performing the work under this contract to accommodate the additional work, heeding any direction that may be provided by the Contracting Officer. The Contractor shall not commit or permit any act that will interfere with the performance of work by any other contractor or by Government employees.

52.236-9 PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES, AND IMPROVEMENTS (APR 1984)

(a) The Contractor shall preserve and protect all structures, equipment, and vegetation (such as trees, shrubs, and grass) on or adjacent to the work site, which are not to be removed and which do not unreasonably interfere with the work required under this contract. The Contractor shall only remove trees when specifically authorized to do so, and shall avoid damaging vegetation that will remain in place. If any limbs or branches of trees are broken during contract performance, or by the careless operation of equipment, or by workmen, the Contractor shall trim those limbs or branches with a clean cut and paint the cut with a tree-pruning compound as directed by the Contracting Officer.

(b) The Contractor shall protect from damage all existing improvements and utilities

(1) at or near the work site, and

(2) on adjacent property of a third party, the locations of which are made known to or should be known by the Contractor. The Contractor shall repair any damage to those facilities, including those that are the property of a third party, resulting from failure to comply with the requirements of this contract or failure to exercise reasonable care in performing the work. If the Contractor fails or refuses to repair the damage promptly, the Contracting Officer may have the necessary work performed and charge the cost to the Contractor.

52.236-10 OPERATIONS AND STORAGE AREAS (APR 1984)

(a) The Contractor shall confine all operations (including storage of materials) on Government premises to areas authorized or approved by the Contracting Officer. The Contractor shall hold and save the Government, its officers and agents, free and harmless from liability of any nature occasioned by the Contractor's performance.

(b) Temporary buildings (e.g., storage sheds, shops, offices) and utilities may be erected by the Contractor only with the approval of the Contracting Officer and shall be built with labor and materials furnished by the Contractor without expense to the Government. The temporary buildings and utilities shall remain the property of the Contractor and shall be removed by the Contractor at its expense upon completion of the work. With the written consent of the Contracting Officer, the buildings and utilities may be abandoned and need not be removed.

(c) The Contractor shall, under regulations prescribed by the Contracting Officer, use only established roadways, or use temporary roadways constructed by the Contractor when and as authorized by the Contracting Officer. When materials are transported in prosecuting the work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by any Federal, State, or local law or regulation. When it is necessary to cross curbs or sidewalks, the Contractor shall protect them from damage. The Contractor shall repair or pay for the repair of any damaged curbs, sidewalks, or roads.

52.236-11 USE AND POSSESSION PRIOR TO COMPLETION (APR 1984)

(a) The Government shall have the right to take possession of or use any completed or partially completed part of the work. Before taking possession of or using any work, the Contracting Officer shall furnish the Contractor a list of items of work remaining to be performed or corrected on those portions of the work that the Government intends to take possession of or use. However, failure of the Contracting Officer to list any item of work shall not relieve the Contractor of responsibility for complying with the terms of the contract. The Government's possession or use shall not be deemed an acceptance of any work under the contract.

(b) While the Government has such possession or use, the Contractor shall be relieved of the responsibility for the loss of or damage to the work resulting from the Government's possession or use, notwithstanding the terms of the clause in this contract entitled "Permits and Responsibilities." If prior possession or use by the Government delays the progress of the work or causes additional expense to the Contractor, an equitable adjustment shall be made in the contract price or the time of completion, and the contract shall be modified in writing accordingly.

52.236-12 CLEANING UP (APR 1984)

The Contractor shall at all times keep the work area, including storage areas, free from accumulations of waste materials. Before completing the work, the Contractor shall remove from the work and premises any rubbish, tools, scaffolding, equipment, and materials that are not the property of the Government. Upon completing the work, the Contractor shall leave the work area in a clean, neat, and orderly condition satisfactory to the Contracting Officer.

52.236-13 ACCIDENT PREVENTION (NOV 1991)

(a) The Contractor shall provide and maintain work environments and procedures which will

- (1) safeguard the public and Government personnel, property, materials, supplies, and equipment exposed to Contractor operations and activities;
- (2) avoid interruptions of Government operations and delays in project completion dates; and
- (3) control costs in the performance of this contract.

(b) For these purposes on contracts for construction or dismantling, demolition, or removal of improvements, the Contractor shall-

- (1) Provide appropriate safety barricades, signs, and signal lights;
- (2) Comply with the standards issued by the Secretary of Labor at 29 CFR Part 1926 and 29 CFR Part 1910; and
- (3) Ensure that any additional measures the Contracting Officer determines to be reasonably necessary for the purposes are taken.

(c) If this contract is for construction or dismantling, demolition or removal of improvements with any Department of Defense agency or component, the Contractor shall comply with all pertinent provisions of the latest version of U.S. Army Corps of Engineers Safety and Health Requirements Manual, EM 385-1-1, in effect on the date of the solicitation.

(d) Whenever the Contracting Officer becomes aware of any noncompliance with these requirements or any condition which poses a serious or imminent danger to the health or safety of the public or Government personnel, the Contracting Officer shall notify the Contractor orally, with written confirmation, and request immediate initiation of corrective action. This notice, when delivered to the Contractor or the Contractor's representative at the work site, shall be deemed sufficient notice of the noncompliance and that corrective action is required. After receiving the notice, the Contractor shall immediately take corrective action. If the Contractor fails or refuses to promptly take corrective action, the Contracting Officer may issue an order stopping all or part of the work until

satisfactory corrective action has been taken. The Contractor shall not be entitled to any equitable adjustment of the contract price or extension of the performance schedule on any stop work order issued under this clause.

(e) The Contractor shall insert this clause, including this paragraph (e), with appropriate changes in the designation of the parties, in subcontracts.

52.236-15 SCHEDULES FOR CONSTRUCTION CONTRACTS (APR 1984)

(a) The Contractor shall, within five days after the work commences on the contract or another period of time determined by the Contracting Officer, prepare and submit to the Contracting Officer for approval three copies of a practicable schedule showing the order in which the Contractor proposes to perform the work, and the dates on which the Contractor contemplates starting and completing the several salient features of the work (including acquiring materials, plant, and equipment). The schedule shall be in the form of a progress chart of suitable scale to indicate appropriately the percentage of work scheduled for completion by any given date during the period. If the Contractor fails to submit a schedule within the time prescribed, the Contracting Officer may withhold approval of progress payments until the Contractor submits the required schedule.

(b) The Contractor shall enter the actual progress on the chart as directed by the Contracting Officer, and upon doing so shall immediately deliver three copies of the annotated schedule to the Contracting Officer. If, in the opinion of the Contracting Officer, the Contractor falls behind the approved schedule, the Contractor shall take steps necessary to improve its progress, including those that may be required by the Contracting Officer, without additional cost to the Government. In this circumstance, the Contracting Officer may require the Contractor to increase the number of shifts, overtime operations, days of work, and/or the amount of construction plant, and to submit for approval any supplementary schedule or schedules in chart form as the Contracting Officer deems necessary to demonstrate how the approved rate of progress will be regained.

(c) Failure of the Contractor to comply with the requirements of the Contracting Officer under this clause shall be grounds for a determination by the Contracting Officer that the Contractor is not prosecuting the work with sufficient diligence to ensure completion within the time specified in the contract. Upon making this determination, the Contracting Officer may terminate the Contractor's right to proceed with the work, or any separable part of it, in accordance with the default terms of this contract.

52.236-17 LAYOUT OF WORK (APR 1984)

The Contractor shall lay out its work from Government established base lines and bench marks indicated on the drawings, and shall be responsible for all measurements in connection with the layout. The Contractor shall furnish, at its own expense, all stakes, templates, platforms, equipment, tools, materials, and labor required to lay out any part of the work. The Contractor shall be responsible for executing the work to the lines and grades that may be established or indicated by the Contracting Officer. The Contractor shall also be responsible for maintaining and preserving all stakes and other marks established by the Contracting Officer until authorized to remove them. If such marks are destroyed by the Contractor or through its negligence before their removal is authorized, the Contracting Officer may replace them and deduct the expense of the replacement from any amounts due or to become due to the Contractor.

52.236-26 PRECONSTRUCTION CONFERENCE (FEB 1995)

If the Contracting Officer decides to conduct a preconstruction conference, the successful offeror will be notified and will be required to attend. The Contracting Officer's notification will include specific details regarding the date, time, and location of the conference, any need for attendance by subcontractors, and information regarding the items to be discussed.

52.242-13 BANKRUPTCY (JUL 1995)

In the event the Contractor enters into proceedings relating to bankruptcy, whether voluntary or involuntary, the Contractor agrees to furnish, by certified mail or electronic commerce method authorized by the contract, written notification of the bankruptcy to the Contracting Officer responsible for administering the contract. This notification shall be furnished within five days of the initiation of the proceedings relating to bankruptcy filing. This notification shall include the date on which the bankruptcy petition was filed, the identity of the court in which the bankruptcy petition was filed, and a listing of Government contract numbers and contracting offices for all Government contracts against which final payment has not been made. This obligation remains in effect until final payment under this contract.

(End of clause)

52.242-14 SUSPENSION OF WORK (APR 1984)

(a) The Contracting Officer may order the Contractor, in writing, to suspend, delay, or interrupt all or any part of the work of this contract for the period of time that the Contracting Officer determines appropriate for the convenience of the Government.

(b) If the performance of all or any part of the work is, for an unreasonable period of time, suspended, delayed, or interrupted (1) by an act of the Contracting Officer in the administration of this contract, or (2) by the Contracting Officer's failure to act within the time specified in this contract (or within a reasonable time if not specified), an adjustment shall be made for any increase in the cost of performance of this contract (excluding profit) necessarily caused by the unreasonable suspension, delay, or interruption, and the contract modified in writing accordingly. However, no adjustment shall be made under this clause for any suspension, delay, or interruption to the extent that performance would have been so suspended, delayed, or interrupted by any other cause, including the fault or negligence of the Contractor, or for which an equitable adjustment is provided for or excluded under any other term or condition of this contract. (c) A claim under this clause shall not be allowed (1) for any costs incurred more than 20 days before the Contractor shall have notified the Contracting Officer in writing of the act or failure to act involved (but this requirement shall not apply as to a claim resulting from a suspension order), and (2) unless the claim, in an amount stated, is asserted in writing as soon as practicable after the termination of the suspension, delay, or interruption, but not later than the date of final payment under the contract.

52.243-4 CHANGES (AUG 1987)

(a) The Contracting Officer may, at any time, without notice to the sureties, if any, by written order designated or indicated to be a change order, make changes in the work within the general scope of the contract, including changes--

- (1) In the specifications (including drawings and designs);
- (2) In the method or manner of performance of the work;
- (3) In the Government-furnished facilities, equipment, materials, services, or site; or
- (4) Directing acceleration in the performance of the work.

(b) Any other written or oral order (which, as used in this paragraph (b), includes direction, instruction, interpretation, or determination) from the Contracting Officer that causes a change shall be treated as a change order under this clause; provided, that the Contractor gives the Contracting Officer written notice stating

- (1) the date, circumstances, and source of the order and

(2) that the Contractor regards the order as a change order.

(c) Except as provided in this clause, no order, statement, or conduct of the Contracting Officer shall be treated as a change under this clause or entitle the Contractor to an equitable adjustment.

(d) If any change under this clause causes an increase or decrease in the Contractor's cost of, or the time required for, the performance of any part of the work under this contract, whether or not changed by any such order, the Contracting Officer shall make an equitable adjustment and modify the contract in writing. However, except for an adjustment based on defective specifications, no adjustment for any change under paragraph (b) of this clause shall be made for any costs incurred more than 20 days before the Contractor gives written notice as required. In the case of defective specifications for which the Government is responsible, the equitable adjustment shall include any increased cost reasonably incurred by the Contractor in attempting to comply with the defective specifications.

(e) The Contractor must assert its right to an adjustment under this clause within 30 days after

(1) receipt of a written change order under paragraph (a) of this clause or (2) the furnishing of a written notice under paragraph (b) of this clause, by submitting to the Contracting Officer a written statement describing the general nature and amount of the proposal, unless this period is extended by the Government. The statement of proposal for adjustment may be included in the notice under paragraph (b) above.

(f) No proposal by the Contractor for an equitable adjustment shall be allowed if asserted after final payment under this contract.

52.244-2 SUBCONTRACTS (AUG 1998)

(a) Definitions. As used in this clause--

Approved purchasing system means a Contractor's purchasing system that has been reviewed and approved in accordance with Part 44 of the Federal Acquisition Regulation (FAR).

Consent to subcontract means the Contracting Officer's written consent for the Contractor to enter into a particular subcontract.

Subcontract means any contract, as defined in FAR Subpart 2.1, entered into by a subcontractor to furnish supplies or services for performance of the prime contract or a subcontract. It includes, but is not limited to, purchase orders, and changes and modifications to purchase orders.

(b) This clause does not apply to subcontracts for special test equipment when the contract contains the clause at FAR 52.245-18, Special Test Equipment.

(c) When this clause is included in a fixed-price type contract, consent to subcontract is required only on unpriced contract actions (including unpriced modifications or unpriced delivery orders), and only if required in accordance with paragraph (d) or (e) of this clause.

(d) If the Contractor does not have an approved purchasing system, consent to subcontract is required for any subcontract that--

(1) Is of the cost-reimbursement, time-and-materials, or labor-hour type; or

(2) Is fixed-price and exceeds--

(i) For a contract awarded by the Department of Defense, the Coast Guard, or the National Aeronautics and Space Administration, the greater of the simplified acquisition threshold or 5 percent of the total estimated cost of the contract; or

(ii) For a contract awarded by a civilian agency other than the Coast Guard and the National Aeronautics and Space Administration, either the simplified acquisition threshold or 5 percent of the total estimated cost of the contract.

(e) If the Contractor has an approved purchasing system, the Contractor nevertheless shall obtain the Contracting Officer's written consent before placing the following subcontracts:

(f)(1) The Contractor shall notify the Contracting Officer reasonably in advance of placing any subcontract or modification thereof for which consent is required under paragraph (c), (d), or (e) of this clause, including the following information:

(i) A description of the supplies or services to be subcontracted.

(ii) Identification of the type of subcontract to be used.

(iii) Identification of the proposed subcontractor.

(iv) The proposed subcontract price.

(v) The subcontractor's current, complete, and accurate cost or pricing data and Certificate of Current Cost or Pricing Data, if required by other contract provisions.

(vi) The subcontractor's Disclosure Statement or Certificate relating to Cost Accounting Standards when such data are required by other provisions of this contract.

(vii) A negotiation memorandum reflecting--

(A) The principal elements of the subcontract price negotiations;

(B) The most significant considerations controlling establishment of initial or revised prices;

(C) The reason cost or pricing data were or were not required;

(D) The extent, if any, to which the Contractor did not rely on the subcontractor's cost or pricing data in determining the price objective and in negotiating the final price;

(E) The extent to which it was recognized in the negotiation that the subcontractor's cost or pricing data were not accurate, complete, or current; the action taken by the Contractor and the subcontractor; and the effect of any such defective data on the total price negotiated;

(F) The reasons for any significant difference between the Contractor's price objective and the price negotiated; and

(G) A complete explanation of the incentive fee or profit plan when incentives are used. The explanation shall identify each critical performance element, management decisions used to quantify each incentive element, reasons for the incentives, and a summary of all trade-off possibilities considered.

(2) The Contractor is not required to notify the Contracting Officer in advance of entering into any subcontract for which consent is not required under paragraph (c), (d), or (e) of this clause.

(g) Unless the consent or approval specifically provides otherwise, neither consent by the Contracting Officer to any subcontract nor approval of the Contractor's purchasing system shall constitute a determination--

(1) Of the acceptability of any subcontract terms or conditions;

(2) Of the allowability of any cost under this contract; or

(3) To relieve the Contractor of any responsibility for performing this contract.

(h) No subcontract or modification thereof placed under this contract shall provide for payment on a cost-plus-a-percentage-of-cost basis, and any fee payable under cost-reimbursement type subcontracts shall not exceed the fee limitations in FAR 15.404-4(c)(4)(i).

(i) The Contractor shall give the Contracting Officer immediate written notice of any action or suit filed and prompt notice of any claim made against the Contractor by any subcontractor or vendor that, in the opinion of the Contractor, may result in litigation related in any way to this contract, with respect to which the Contractor may be entitled to reimbursement from the Government.

(j) The Government reserves the right to review the Contractor's purchasing system as set forth in FAR Subpart 44.3.

(k) Paragraphs (d) and (f) of this clause do not apply to the following subcontracts, which were evaluated during negotiations:

(End of clause)

52.246-12 INSPECTION OF CONSTRUCTION (AUG 1996)

(a) Definition. "Work" includes, but is not limited to, materials, workmanship, and manufacture and fabrication of components.

(b) The Contractor shall maintain an adequate inspection system and perform such inspections as will ensure that the work performed under the contract conforms to contract requirements. The Contractor shall maintain complete inspection records and make them available to the Government. All work shall be conducted under the general direction of the Contracting Officer and is subject to Government inspection and test at all places and at all reasonable times before acceptance to ensure strict compliance with the terms of the contract.

(c) Government inspections and tests are for the sole benefit of the Government and do not--

(1) Relieve the Contractor of responsibility for providing adequate quality control measures;

(2) Relieve the Contractor of responsibility for damage to or loss of the material before acceptance;

(3) Constitute or imply acceptance; or

(4) Affect the continuing rights of the Government after acceptance of the completed work under paragraph (i) of this section.

(d) The presence or absence of a Government inspector does not relieve the Contractor from any contract requirement, nor is the inspector authorized to change any term or condition of the specification without the Contracting Officer's written authorization.

(e) The Contractor shall promptly furnish, at no increase in contract price, all facilities, labor, and material reasonably needed for performing such safe and convenient inspections and tests as may be required by the Contracting Officer. The Government may charge to the Contractor any additional cost of inspection or test when work is not ready at the time specified by the Contractor for inspection or test, or when prior rejection makes reinspection or retest necessary. The Government shall perform all inspections and tests in a manner that will not

unnecessarily delay the work. Special, full size, and performance tests shall be performed as described in the contract.

(f) The Contractor shall, without charge, replace or correct work found by the Government not to conform to contract requirements, unless in the public interest the Government consents to accept the work with an appropriate adjustment in contract price. The Contractor shall promptly segregate and remove rejected material from the premises.

(g) If the Contractor does not promptly replace or correct rejected work, the Government may (1) by contract or otherwise, replace or correct the work and charge the cost to the Contractor or (2) terminate for default the Contractor's right to proceed.

(h) If, before acceptance of the entire work, the Government decides to examine already completed work by removing it or tearing it out, the Contractor, on request, shall promptly furnish all necessary facilities, labor, and material. If the work is found to be defective or nonconforming in any material respect due to the fault of the Contractor or its subcontractors, the Contractor shall defray the expenses of the examination and of satisfactory reconstruction. However, if the work is found to meet contract requirements, the Contracting Officer shall make an equitable adjustment for the additional services involved in the examination and reconstruction, including, if completion of the work was thereby delayed, an extension of time.

(i) Unless otherwise specified in the contract, the Government shall accept, as promptly as practicable after completion and inspection, all work required by the contract or that portion of the work the Contracting Officer determines can be accepted separately. Acceptance shall be final and conclusive except for latent defects, fraud, gross mistakes amounting to fraud, or the Government's rights under any warranty or guarantee.

52.248-3 VALUE ENGINEERING--CONSTRUCTION (FEB 2000)

(a) General. The Contractor is encouraged to develop, prepare, and submit value engineering change proposals (VECP's) voluntarily. The Contractor shall share in any instant contract savings realized from accepted VECP's, in accordance with paragraph (f) below.

(b) Definitions. "Collateral costs," as used in this clause, means agency costs of operation, maintenance, logistic support, or Government-furnished property.

"Collateral savings," as used in this clause, means those measurable net reductions resulting from a VECP in the agency's overall projected collateral costs, exclusive of acquisition savings, whether or not the acquisition cost changes.

"Contractor's development and implementation costs," as used in this clause, means those costs the Contractor incurs on a VECP specifically in developing, testing, preparing, and submitting the VECP, as well as those costs the Contractor incurs to make the contractual changes required by Government acceptance of a VECP.

"Government costs," as used in this clause, means those agency costs that result directly from developing and implementing the VECP, such as any net increases in the cost of testing, operations, maintenance, and logistic support. The term does not include the normal administrative costs of processing the VECP.

"Instant contract savings," as used in this clause, means the estimated reduction in Contractor cost of performance resulting from acceptance of the VECP, minus allowable Contractor's development and implementation costs, including subcontractors' development and implementation costs (see paragraph (h) below).

"Value engineering change proposal (VECP)" means a proposal that--

(1) Requires a change to this, the instant contract, to implement; and

(2) Results in reducing the contract price or estimated cost without impairing essential functions or characteristics; provided, that it does not involve a change--

(i) In deliverable end item quantities only; or

(ii) To the contract type only.

(c) VECP preparation. As a minimum, the Contractor shall include in each VECP the information described in subparagraphs (1) through (7) below. If the proposed change is affected by contractually required configuration management or similar procedures, the instructions in those procedures relating to format, identification, and priority assignment shall govern VECP preparation. The VECP shall include the following:

(1) A description of the difference between the existing contract requirement and that proposed, the comparative advantages and disadvantages of each, a justification when an item's function or characteristics are being altered, and the effect of the change on the end item's performance.

(2) A list and analysis of the contract requirements that must be changed if the VECP is accepted, including any suggested specification revisions.

(3) A separate, detailed cost estimate for

(i) the affected portions of the existing contract requirement and

(ii) the VECP. The cost reduction associated with the VECP shall take into account the Contractor's allowable development and implementation costs, including any amount attributable to subcontracts under paragraph (h) below.

(4) A description and estimate of costs the Government may incur in implementing the VECP, such as test and evaluation and operating and support costs.

(5) A prediction of any effects the proposed change would have on collateral costs to the agency.

(6) A statement of the time by which a contract modification accepting the VECP must be issued in order to achieve the maximum cost reduction, noting any effect on the contract completion time or delivery schedule.

(7) Identification of any previous submissions of the VECP, including the dates submitted, the agencies and contract numbers involved, and previous Government actions, if known.

(d) Submission. The Contractor shall submit VECP's to the Resident Engineer at the worksite, with a copy to the Contracting Officer.

(e) Government action.

(1) The Contracting Officer will notify the Contractor of the status of the VECP within 45 calendar days after the contracting office receives it. If additional time is required, the Contracting Officer will notify the Contractor within the 45-day period and provide the reason for the delay and the expected date of the decision. The Government will process VECP's expeditiously; however, it shall not be liable for any delay in acting upon a VECP.

If the VECP is not accepted, the Contracting Officer will notify the Contractor in writing, explaining the reasons for rejection. The Contractor may withdraw any VECP, in whole or in part, at any time before it is accepted by the Government. The Contracting Officer may require that the Contractor provide written notification before undertaking significant expenditures for VECP effort.

Any VECP may be accepted, in whole or in part, by the Contracting Officer's award of a modification to this contract citing this clause. The Contracting Officer may accept the VECP, even though an agreement on price

reduction has not been reached, by issuing the Contractor a notice to proceed with the change. Until a notice to proceed is issued or a contract modification applies a VECP to this contract, the Contractor shall perform in accordance with the existing contract. The decision to accept or reject all or part of any VECP is a unilateral decision made solely at the discretion of the Contracting Officer.

(f) Sharing.

(1) Rates. The Government's share of savings is determined by subtracting Government costs from instant contract savings and multiplying the result by

(i) 45 percent for fixed-price contracts or

(ii) 75 percent for cost-reimbursement contracts.

(2) Payment. Payment of any share due the Contractor for use of a VECP on this contract shall be authorized by a modification to this contract to--

(i) Accept the VECP;

(ii) Reduce the contract price or estimated cost by the amount of instant contract savings; and

(iii) Provide the Contractor's share of savings by adding the amount calculated to the contract price or fee.

(g) Collateral savings. If a VECP is accepted, the Contracting Officer will increase the instant contract amount by 20 percent of any projected collateral savings determined to be realized in a typical year of use after subtracting any Government costs not previously offset. However, the Contractor's share of collateral savings will not exceed the contract's firm-fixed-price or estimated cost, at the time the VECP is accepted, or \$100,000, whichever is greater. The Contracting Officer is the sole determiner of the amount of collateral savings.

(h) Subcontracts. The Contractor shall include an appropriate value engineering clause in any subcontract of \$50,000 or more and may include one in subcontracts of lesser value. In computing any adjustment in this contract's price under paragraph (f) above, the Contractor's allowable development and implementation costs shall include any subcontractor's allowable development and implementation costs clearly resulting from a VECP accepted by the Government under this contract, but shall exclude any value engineering incentive payments to a subcontractor. The Contractor may choose any arrangement for subcontractor value engineering incentive payments; provided, that these payments shall not reduce the Government's share of the savings resulting from the VECP.

(i) Data. The Contractor may restrict the Government's right to use any part of a VECP or the supporting data by marking the following legend on the affected parts:

"These data, furnished under the Value Engineering-- Construction clause of contract , shall not be disclosed outside the Government or duplicated, used, or disclosed, in whole or in part, for any purpose other than to evaluate a value engineering change proposal submitted under the clause. This restriction does not limit the Government's right to use information contained in these data if it has been obtained or is otherwise available from the Contractor or from another source without limitations." If a VECP is accepted, the Contractor hereby grants the Government unlimited rights in the VECP and supporting data, except that, with respect to data qualifying and submitted as limited rights technical data, the Government shall have the rights specified in the contract modification implementing the VECP and shall appropriately mark the data. (The terms "unlimited rights" and "limited rights" are defined in Part 27 of the Federal Acquisition Regulation.)

(End of clause)

(a) The Government may terminate performance of work under this contract in whole or, from time to time, in part if the Contracting Officer determines that a termination is in the Government's interest. The Contracting Officer shall terminate by delivering to the Contractor a Notice of Termination specifying the extent of termination and the effective date.

(b) After receipt of a Notice of Termination, and except as directed by the Contracting Officer, the Contractor shall immediately proceed with the following obligations, regardless of any delay in determining or adjusting any amounts due under this clause:

(1) Stop work as specified in the notice.

(2) Place no further subcontracts or orders (referred to as subcontracts in this clause) for materials, services, or facilities, except as necessary to complete the continued portion of the contract.

(3) Terminate all subcontracts to the extent they relate to the work terminated.

(4) Assign to the Government, as directed by the Contracting Officer, all right, title, and interest of the Contractor under the subcontracts terminated, in which case the Government shall have the right to settle or to pay any termination settlement proposal arising out of those terminations.

(5) With approval or ratification to the extent required by the Contracting Officer, settle all outstanding liabilities and termination settlement proposals arising from the termination of subcontracts; the approval or ratification will be final for purposes of this clause.

(6) As directed by the Contracting Officer, transfer title and deliver to the Government (i) the fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced or acquired for the work terminated, and (ii) the completed or partially completed plans, drawings, information, and other property that, if the contract had been completed, would be required to be furnished to the Government.

(7) Complete performance of the work not terminated.

(8) Take any action that may be necessary, or that the Contracting Officer may direct, for the protection and preservation of the property related to this contract that is in the possession of the Contractor and in which the Government has or may acquire an interest.

(9) Use its best efforts to sell, as directed or authorized by the Contracting Officer, any property of the types referred to in subparagraph (b)(6) of this clause; provided, however, that the Contractor (i) is not required to extend credit to any purchaser and (ii) may acquire the property under the conditions prescribed by, and at prices approved by, the Contracting Officer. The proceeds of any transfer or disposition will be applied to reduce any payments to be made by the Government under this contract, credited to the price or cost of the work, or paid in any other manner directed by the Contracting Officer.

(c) The Contractor shall submit complete termination inventory schedules no later than 120 days from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 120-day period.

(d) After expiration of the plant clearance period as defined in Subpart 45.6 of the Federal Acquisition Regulation, the Contractor may submit to the Contracting Officer a list, certified as to quantity and quality, of termination inventory not previously disposed of, excluding items authorized for disposition by the Contracting Officer. The Contractor may request the Government to remove those items or enter into an agreement for their storage. Within 15 days, the Government will accept title to those items and remove them or enter into a storage agreement. The Contracting Officer may verify the list upon removal of the items, or if stored, within 45 days from submission of the list, and shall correct the list, as necessary, before final settlement.

(e) After termination, the Contractor shall submit a final termination settlement proposal to the Contracting Officer in the form and with the certification prescribed by the Contracting Officer. The Contractor shall submit the proposal promptly, but no later than 1 year from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 1-year period. However, if the Contracting Officer determines that the facts justify it, a termination settlement proposal may be received and acted on after 1 year or any extension. If the Contractor fails to submit the proposal within the time allowed, the Contracting Officer may determine, on the basis of information available, the amount, if any, due the Contractor because of the termination and shall pay the amount determined.

(f) Subject to paragraph (e) of this clause, the Contractor and the Contracting Officer may agree upon the whole or any part of the amount to be paid or remaining to be paid because of the termination. The amount may include a reasonable allowance for profit on work done. However, the agreed amount, whether under this paragraph (g) or paragraph (g) of this clause, exclusive of costs shown in subparagraph (g)(3) of this clause, may not exceed the total contract price as reduced by (1) the amount of payments previously made and (2) the contract price of work not terminated. The contract shall be modified, and the Contractor paid the agreed amount. Paragraph (g) of this clause shall not limit, restrict, or affect the amount that may be agreed upon to be paid under this paragraph.

(g) If the Contractor and Contracting Officer fail to agree on the whole amount to be paid the Contractor because of the termination of work, the Contracting Officer shall pay the Contractor the amounts determined as follows, but without duplication of any amounts agreed upon under paragraph (f) of this clause:

(1) For contract work performed before the effective date of termination, the total (without duplication of any items) of--

(i) The cost of this work;

(ii) The cost of settling and paying termination settlement proposals under terminated subcontracts that are properly chargeable to the terminated portion of the contract if not included in subdivision (g)(1)(i) of this clause; and

(iii) A sum, as profit on subdivision (g)(1)(i) of this clause, determined by the Contracting Officer under 49.202 of the Federal Acquisition Regulation, in effect on the date of this contract, to be fair and reasonable; however, if it appears that the Contractor would have sustained a loss on the entire contract had it been completed, the Contracting Officer shall allow no profit under this subdivision (iii) and shall reduce the settlement to reflect the indicated rate of loss.

(2) The reasonable costs of settlement of the work terminated, including--

(i) Accounting, legal, clerical, and other expenses reasonably necessary for the preparation of termination settlement proposals and supporting data;

(ii) The termination and settlement of subcontracts (excluding the amounts of such settlements); and

(iii) Storage, transportation, and other costs incurred, reasonably necessary for the preservation, protection, or disposition of the termination inventory.

(h) Except for normal spoilage, and except to the extent that the Government expressly assumed the risk of loss, the Contracting Officer shall exclude from the amounts payable to the Contractor under paragraph (g) of this clause, the fair value, as determined by the Contracting Officer, of property that is destroyed, lost, stolen, or damaged so as to become undeliverable to the Government or to a buyer.

(i) The cost principles and procedures of Part 31 of the Federal Acquisition Regulation, in effect on the date of this contract, shall govern all costs claimed, agreed to, or determined under this clause.

(j) The Contractor shall have the right of appeal, under the Disputes clause, from any determination made by the Contracting Officer under paragraph (e), (g), or (l) of this clause, except that if the Contractor failed to submit the

termination settlement proposal or request for equitable adjustment within the time provided in paragraph (e) or (l), respectively, and failed to request a time extension, there is no right of appeal.

(k) In arriving at the amount due the Contractor under this clause, there shall be deducted--

(1) All unliquidated advance or other payments to the Contractor under the terminated portion of this contract;

(2) Any claim which the Government has against the Contractor under this contract; and

(3) The agreed price for, or the proceeds of sale of, materials, supplies, or other things acquired by the Contractor or sold under the provisions of this clause and not recovered by or credited to the Government.

(l) If the termination is partial, the Contractor may file a proposal with the Contracting Officer for an equitable adjustment of the price(s) of the continued portion of the contract. The Contracting Officer shall make any equitable adjustment agreed upon. Any proposal by the Contractor for an equitable adjustment under this clause shall be requested within 90 days from the effective date of termination unless extended in writing by the Contracting Officer.

(m)(1) The Government may, under the terms and conditions it prescribes, make partial payments and payments against costs incurred by the Contractor for the terminated portion of the contract, if the Contracting Officer believes the total of these payments will not exceed the amount to which the Contractor will be entitled.

(2) If the total payments exceed the amount finally determined to be due, the Contractor shall repay the excess to the Government upon demand, together with interest computed at the rate established by the Secretary of the Treasury under 50 U.S.C. App. 1215(b)(2). Interest shall be computed for the period from the date the excess payment is received by the Contractor to the date the excess is repaid. Interest shall not be charged on any excess payment due to a reduction in the Contractor's termination settlement proposal because of retention or other disposition of termination inventory until 10 days after the date of the retention or disposition, or a later date determined by the Contracting Officer because of the circumstances.

(n) Unless otherwise provided in this contract or by statute, the Contractor shall maintain all records and documents relating to the terminated portion of this contract for 3 years after final settlement. This includes all books and other evidence bearing on the Contractor's costs and expenses under this contract. The Contractor shall make these records and documents available to the Government, at the Contractor's office, at all reasonable times, without any direct charge. If approved by the Contracting Officer, photographs, microphotographs, or other authentic reproductions may be maintained instead of original records and documents.

52.249-10 DEFAULT (FIXED-PRICE CONSTRUCTION) (APR 1984)

(a) If the Contractor refuses or fails to prosecute the work or any separable part, with the diligence that will insure its completion within the time specified in this contract including any extension, or fails to complete the work within this time, the Government may, by written notice to the Contractor, terminate the right to proceed with the work (or the separable part of the work) that has been delayed. In this event, the Government may take over the work and complete it by contract or otherwise, and may take possession of and use any materials, appliances, and plant on the work site necessary for completing the work. The Contractor and its sureties shall be liable for any damage to the Government resulting from the Contractor's refusal or failure to complete the work within the specified time, whether or not the Contractor's right to proceed with the work is terminated. This liability includes any increased costs incurred by the Government in completing the work.

(b) The Contractor's right to proceed shall not be terminated nor the Contractor charged with damages under this clause, if--

(1) The delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of the Contractor. Examples of such causes include

- (i) acts of God or of the public enemy,
- (ii) acts of the Government in either its sovereign or contractual capacity,
- (iii) acts of another Contractor in the performance of a contract with the Government,
- (iv) fires,
- (v) floods,
- (vi) epidemics,
- (vii) quarantine restrictions,
- (viii) strikes,
- (ix) freight embargoes,
- (x) unusually severe weather, or delays of subcontractors or suppliers at any tier arising from unforeseeable causes beyond the control and without the fault or negligence of both the Contractor and the subcontractors or suppliers; and

(2) The Contractor, within 10 days from the beginning of any delay (unless extended by the Contracting Officer), notifies the Contracting Officer in writing of the causes of delay. The Contracting Officer shall ascertain the facts and the extent of delay. If, in the judgment of the Contracting Officer, the findings of fact warrant such action, the time for completing the work shall be extended. The findings of the Contracting Officer shall be final and conclusive on the parties, but subject to appeal under the Disputes clause.

(c) If, after termination of the Contractor's right to proceed, it is determined that the Contractor was not in default, or that the delay was excusable, the rights and obligations of the parties will be the same as if the termination had been issued for the convenience of the Government.

The rights and remedies of the Government in this clause are in addition to any other rights and remedies provided by law or under this contract.

52.252-1 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FEB 1998)

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at this/these address(es):

<http://www.arnet.gov/far>

<http://farsite.hill.af.mil>

<http://www.dtic.mil/dfar>

52.252-2 CLAUSES INCORPORATED BY REFERENCE (FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

<http://www.arnet.gov/far>

<http://farsite.hill.af.mil>

<http://www.dtic.mil/dfars>

52.252-4 ALTERATIONS IN CONTRACT (APR 1984)

Portions of this contract are altered as follows:

(End of clause)

52.252-6 AUTHORIZED DEVIATIONS IN CLAUSES (APR 1984)

(a) The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the clause.

(b) The use in this solicitation or contract of any _____ (48 CFR _____) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

52.253-1 COMPUTER GENERATED FORMS (JAN 1991)

(a) Any data required to be submitted on a Standard or Optional Form prescribed by the Federal Acquisition Regulation (FAR) may be submitted on a computer generated version of the form, provided there is no change to the name, content, or sequence of the data elements on the form, and provided the form carries the Standard or Optional Form number and edition date.

(b) Unless prohibited by agency regulations, any data required to be submitted on an agency unique form prescribed by an agency supplement to the FAR may be submitted on a computer generated version of the form provided there is no change to the name, content, or sequence of the data elements on the form and provided the form carries the agency form number and edition date.

(c) If the Contractor submits a computer generated version of a form that is different than the required form, then the rights and obligations of the parties will be determined based on the content of the required form.

252.201-7000 CONTRACTING OFFICER'S REPRESENTATIVE (DEC 1991)

(a) "Definition. Contracting officer's representative" means an individual designated in accordance with subsection 201.602-2 of the Defense Federal Acquisition Regulation Supplement and authorized in writing by the contracting officer to perform specific technical or administrative functions.

(b) If the Contracting Officer designates a contracting officer's representative (COR), the Contractor will receive a copy of the written designation. It will specify the extent of the COR's authority to act on behalf of the contracting officer. The COR is not authorized to make any commitments or changes that will affect price, quality, quantity, delivery, or any other term or condition of the contract.

(End of clause)

252.203-7001 PROHIBITION ON PERSONS CONVICTED OF FRAUD OR OTHER DEFENSE-CONTRACT-RELATED FELONIES (MAR 1999)

(a) Definitions. As used in this clause—

(1) “Arising out of a contract with the DoD” means any act in connection with—

(i) Attempting to obtain;

(ii) Obtaining, or

(iii) Performing a contract or first-tier subcontract of any agency, department, or component of the Department of Defense (DoD).

(2) “Conviction of fraud or any other felony” means any conviction for fraud or a felony in violation of state or Federal criminal statutes, whether entered on a verdict or plea, including a plea of *nolo contendere*, for which sentence has been imposed.

(3) “Date of conviction” means the date judgment was entered against the individual.

(b) Any individual who is convicted after September 29, 1988, of fraud or any other felony arising out of a contract with the DoD is prohibited from serving--

(1) In a management or supervisory capacity on any DoD contract or first-tier subcontract;

(2) On the board of directors of any DoD contractor or first-tier subcontractor;

(3) As a consultant, agent, or representative for any DoD contractor or first-tier subcontractor; or

(4) In any other capacity with the authority to influence, advise, or control the decisions of any DoD contractor or subcontractor with regard to any DoD contract or first-tier subcontract.

(c) Unless waived, the prohibition in paragraph (b) of this clause applies for not less than 5 years from the date of conviction.

(d) 10 U.S.C. 2408 provides that a defense contractor or first-tier subcontractor shall be subject to a criminal penalty of not more than \$500,000 if convicted of knowingly—

(1) Employing a person under a prohibition specified in paragraph (b) of this clause; or

(2) Allowing such a person to serve on the board of directors of the contractor or first-tier subcontractor.

(e) In addition to the criminal penalties contained in 10 U.S.C. 2408, the Government may consider other available remedies, such as—

(1) Suspension or debarment;

(2) Cancellation of the contract at no cost to the Government; or

(3) Termination of the contract for default.

(f) The Contractor may submit written requests for waiver of the prohibition in paragraph (b) of this clause to the Contracting Officer. Requests shall clearly identify—

- (1) The person involved;
- (2) The nature of the conviction and resultant sentence or punishment imposed;
- (3) The reasons for the requested waiver; and
- (4) An explanation of why a waiver is in the interest of national security.

(g) The Contractor agrees to include the substance of this clause, appropriately modified to reflect the identity and relationship of the parties, in all first-tier subcontracts exceeding the simplified acquisition threshold in Part 2 of the Federal Acquisition Regulation, except those for commercial items or components.

(h) Pursuant to 10 U.S.C. 2408(c), defense contractors and subcontractors may obtain information as to whether a particular person has been convicted of fraud or any other felony arising out of a contract with the DoD by contacting The Office of Justice Programs, The Denial of Federal Benefits Office, U.S. Department of Justice, telephone (202) 616-3507.

(End of clause)

252.204-7001 COMMERCIAL AND GOVERNMENT ENTITY (CAGE) CODE REPORTING (AUG 1999)

(a) The offeror is requested to enter its CAGE code on its offer in the block with its name and address. The CAGE code entered must be for that name and address. Enter "CAGE" before the number.

(b) If the offeror does not have a CAGE code, it may ask the Contracting Officer to request one from the Defense Logistics Information Service (DLIS). The Contracting Officer will--

- (1) Ask the Contractor to complete section B of a DD Form 2051, Request for Assignment of a Commercial and Government Entity (CAGE) Code;
 - (2) Complete section A and forward the form to DLIS; and
 - (3) Notify the Contractor of its assigned CAGE code.
- (c) Do not delay submission of the offer pending receipt of a CAGE code.

(End of provision)

252.204-7003 CONTROL OF GOVERNMENT PERSONNEL WORK PRODUCT (APR 1992)

The Contractor's procedures for protecting against unauthorized disclosure of information shall not require Department of Defense employees or members of the Armed Forces to relinquish control of their work products, whether classified or not, to the contractor.

(End of clause)

252.209-7004 SUBCONTRACTING WITH FIRMS THAT ARE OWNED OR CONTROLLED BY THE GOVERNMENT OF A TERRORIST COUNTRY (MAR 1998)

(a) Unless the Government determines that there is a compelling reason to do so, the Contractor shall not enter into any subcontract in excess of \$25,000 with a firm, or subsidiary of a firm, that is identified, on the List of Parties

Excluded from Federal Procurement and Nonprocurement Programs, as being ineligible for the award of Defense contracts or subcontracts because it is owned or controlled by the government of a terrorist country.

(b) A corporate officer or a designee of the Contractor shall notify the Contracting Officer, in writing, before entering into a subcontract with a party that is identified, on the List of Parties Excluded from Federal Procurement and Nonprocurement Programs, as being ineligible for the award of Defense contracts or subcontracts because it is owned or controlled by the government of a terrorist country. The notice must include the name of the proposed subcontractor notwithstanding its inclusion on the List of Parties Excluded From Federal Procurement and Nonprocurement Programs.

252.215-7000 PRICING ADJUSTMENTS (DEC 1991)

The term "pricing adjustment," as used in paragraph (a) of the clauses entitled "Price Reduction for Defective Cost or Pricing Data - Modifications," "Subcontractor Cost or Pricing Data," and "Subcontractor Cost or Pricing Data - Modifications," means the aggregate increases and/or decreases in cost plus applicable profits.

252.215-7002 COST ESTIMATING SYSTEM REQUIREMENTS (OCT 1998)

(a) "Definition."

"Estimating system" means the Contractor's policies, procedures, and practices for generating estimates of costs and other data included in proposals submitted to customers in the expectation of receiving contract awards. Estimating system includes the Contractor's --

- (1) Organizational structure;
- (2) Established lines of authority, duties, and responsibilities;
- (3) Internal controls and managerial reviews;
- (4) Flow of work, coordination, and communication; and
- (5) Estimating methods, techniques, accumulation of historical costs, and other analyses used to generate cost estimates.1997

(b) "General."

(1) The Contractor shall establish, maintain, and comply with an estimating system that is consistently applied and produces reliable, verifiable, supportable, and documented cost estimates that are an acceptable basis for negotiation of fair and reasonable prices.

(2) The system should be --

- (i) Consistent and integrated with the Contractor's related management systems; and
- (ii) Subject to applicable financial control systems.

(c) "Applicability". Paragraphs (d) and (e) of this clause apply if the Contractor is a large business and either --

(1) In its fiscal year preceding award of this contract, received Department of Defense (DoD) prime contracts or subcontracts, totaling \$50 million or more for which certified cost or pricing data were required; or

(2) In its fiscal year preceding award of this contract --

(i) Received DoD prime contracts or subcontracts totaling \$10 million or more (but less than \$50 million) for which certified cost or pricing data were required; and

(ii) Was notified in writing by the Contracting Officer that paragraphs (d) and (e) of this clause apply.

(d) "System requirements."

(1) The Contractor shall disclose its estimating system to the Administrative Contracting Officer (ACO) in writing. If the Contractor wishes the Government to protect the information as privileged or confidential, the Contractor must mark the documents with the appropriate legends before submission.

(2) An estimating system disclosure is adequate when the Contractor has provided the ACO with documentation that--

(i) Accurately describes those policies, procedures, and practices that the Contractor currently uses in preparing cost proposals; and

(ii) Provides sufficient detail for the Government to reasonably make an informed judgment regarding the acceptability of the Contractor's estimating practices.

(3) The Contractor shall --

(i) Comply with its disclosed estimating system; and

(ii) Disclose significant changes to the cost estimating system to the ACO on a timely basis.

(e) "Estimating system deficiencies."

(1) The Contractor shall respond to a written report from the Government that identifies deficiencies in the Contractor's estimating system as follows:

(i) If the Contractor agrees with the report findings and recommendations, the Contractor shall --

(A) Within 30 days, state its agreement in writing; and

(B) Within 60 days, correct the deficiencies or submit a corrective action plan showing proposed milestones and actions leading to elimination of the deficiencies.

(ii) If the Contractor disagrees with the report, the Contractor shall, within 30 days, state its rationale for disagreeing.

(2) The ACO will evaluate the Contractor's response and notify the Contractor of the determination concerning remaining deficiencies and/or the adequacy of any proposed or completed corrective action.

252.219-7003 SMALL, SMALL DISADVANTAGED AND WOMEN-OWNED SMALL BUSINESS SUBCONTRACTING PLAN (DOD CONTRACTS) (APR. 1996)

This clause supplements the Federal Acquisition Regulation 52.219-9, Small, Small Disadvantaged and Women-Owned Small Business Subcontracting Plan, clause of this contract.

(a) *Definitions. Historically black colleges and universities*, as used in this clause, means institutions determined by the Secretary of Education to meet the requirements of 34 CFR 608.2. The term also means any nonprofit research institution that was an integral part of such a college or university before November 14, 1986.

Minority institutions, as used in this clause, means institutions meeting the requirements of section 1046(3) of the Higher Education Act of 1965 (20 U.S.C. 1135d-5(3)). The term also includes Hispanic-serving institutions as defined in section 316(b)(1) of such Act (20 U.S.C. 1059c(b)(1)).

(b) Except for company or division-wide commercial items subcontracting plans, the term *small disadvantaged business*, when used in the FAR 52.219-9 clause, includes historically black colleges and universities and minority institutions, in addition to small disadvantaged business concerns.

(c) Work under the contract or its subcontracts shall be credited toward meeting the small disadvantaged business concern goal required by paragraph (d) of the FAR 52.219-9 clause when:

(1) It is performed on Indian lands or in joint venture with an Indian tribe or a tribally-owned corporation, and

(2) It meets the requirements of 10 U.S.C. 2323a.

(d) Subcontracts awarded to workshops approved by the Committee for Purchase from People Who are Blind or Severely Disabled (41 U.S.C. 46-48), may be counted toward the Contractor's small business subcontracting goal.

(e) A mentor firm, under the Pilot Mentor-Protege Program established under Section 831 of Pub. L. 101-510, as amended, may count toward its small disadvantaged business goal, subcontracts awarded--

(f) The master plan approval referred to in paragraph (f) of the FAR 52.219-9 clause is approval by the Contractor's cognizant contract administration activity.

(g) In those subcontracting plans which specifically identify small, small disadvantaged, and women-owned small businesses, the Contractor shall notify the Administrative Contracting Officer of any substitutions of firms that are not small, small disadvantaged, or women-owned small businesses for the firms listed in the subcontracting plan. Notifications shall be in writing and shall occur within a reasonable period of time after award of the subcontract. Contractor-specified formats shall be acceptable.

(End of clause)

252.219-7009 SECTION 8(A) DIRECT AWARD (JUN 1998)

(a) This contract is issued as a direct award between the contracting office and the 8(a) Contractor pursuant to the Memorandum of Understanding dated May 6, 1998, between the Small Business Administration (SBA) and the Department of Defense. Accordingly, the SBA is not a party to this contract. SBA does retain responsibility for 8(a) certification, for 8(a) eligibility determinations and related issues, and for providing counseling and assistance to the 8(a) Contractor under the 8(a) Program. The cognizant SBA district office is:

[To be completed by the Contracting Officer at the time of award]

(b) The contracting office is responsible for administering the contract and for taking any action on behalf of the Government under the terms and conditions of the contract; provided that the contracting office shall give advance notice to the SBA before it issues a final notice terminating performance, either in whole or in part, under the contract. The contracting office also shall coordinate with the SBA prior to processing any novation agreement. The contracting office may assign contract administration functions to a contract administration office.

(c) The Contractor agrees that--

(1) It will notify the Contracting Officer, simultaneous with its notification to the SBA (as required by SBA's 8(a) regulations at 13 CFR 124.308), when the owner or owners upon whom 8(a) eligibility is based plan to relinquish

ownership or control of the concern. Consistent with Section 407 of Pub. L. 100-656, transfer of ownership or control shall result in termination of the contract for convenience, unless the SBA waives the requirement for termination prior to the actual relinquishing of ownership and control; and

(2) It will not subcontract the performance of any of the requirements of this contract without the prior written approval of the SBA and the Contracting Officer.

(End of Clause)

252.223-7004 DRUG-FREE WORK FORCE (SEP 1988)

(a) Definitions.

(1) "Employee in a sensitive position," as used in this clause, means an employee who has been granted access to classified information; or employees in other positions that the Contractor determines involve national security; health or safety, or functions other than the foregoing requiring a high degree of trust and confidence.

(2) "Illegal drugs," as used in this clause, means controlled substances included in Schedules I and II, as defined by section 802(6) of title 21 of the United States Code, the possession of which is unlawful under chapter 13 of that Title. The term "illegal drugs" does not mean the use of a controlled substance pursuant to a valid prescription or other uses authorized by law.

(b) The Contractor agrees to institute and maintain a program for achieving the objective of a drug-free work force. While this clause defines criteria for such a program, contractors are encouraged to implement alternative approaches comparable to the criteria in paragraph (c) that are designed to achieve the objectives of this clause.

(c) Contractor programs shall include the following, or appropriate alternatives:

(1) Employee assistance programs emphasizing high level direction, education, counseling, rehabilitation, and coordination with available community resources;

(2) Supervisory training to assist in identifying and addressing illegal drug use by Contractor employees;

(3) Provision for self-referrals as well as supervisory referrals to treatment with maximum respect for individual confidentiality consistent with safety and security issues;

(4) Provision for identifying illegal drug users, including testing on a controlled and carefully monitored basis. Employee drug testing programs shall be established taking account of the following:

(i) The Contractor shall establish a program that provides for testing for the use of illegal drugs by employees in sensitive positions. The extent of and criteria for such testing shall be determined by the Contractor based on considerations that include the nature of the work being performed under the contract, the employee's duties, and efficient use of Contractor resources, and the risks to health, safety, or national security that could result from the failure of an employee adequately to discharge his or her position.

(ii) In addition, the Contractor may establish a program for employee drug testing--

(A) When there is a reasonable suspicion that an employee uses illegal drugs; or

(B) When an employees has been involved in an accident or unsafe practice;

(C) As part of or as a follow-up to counseling or rehabilitation for illegal drug use;

(D) As part of a voluntary employee drug testing program.

(iii) The Contractor may establish a program to test applicants for employment for illegal drug use.

(iv) For the purpose of administering this clause, testing for illegal drugs may be limited to those substances for which testing is prescribed by section 2..1 of subpart B of the "Mandatory Guidelines for Federal Workplace Drug Testing Programs" (53 FR 11980 (April 11, 1988), issued by the Department of Health and Human Services.

(d) Contractors shall adopt appropriate personnel procedures to deal with employees who are found to be using drugs illegally. Contractors shall not allow any employee to remain on duty or perform in a sensitive position who is found to use illegal drugs until such times as the Contractor, in accordance with procedures established by the Contractor, determines that the employee may perform in such a position.

(e) The provisions of this clause pertaining to drug testing program shall not apply to the extent that are inconsistent with state or local law, or with an existing collective bargaining agreement; provided that with respect to the latter, the Contractor agrees those issues that are in conflict will be a subject of negotiation at the next collective bargaining session.

(End of clause)

252.227-7022 GOVERNMENT RIGHTS (UNLIMITED) (MAR 1979)

The Government shall have unlimited rights, in all drawings, designs, specifications, notes and other works developed in the performance of this contract, including the right to use same on any other Government design or construction without additional compensation to the Contractor. The Contractor hereby grants to the Government a paid-up license throughout the world to all such works to which he may assert or establish any claim under design patent or copyright laws. The Contractor for a period of three (3) years after completion of the project agrees to furnish the original or copies of all such works on the request of the Contracting Officer.

252.227-7023 DRAWINGS AND OTHER DATA TO BECOME PROPERTY OF GOVERNMENT. (MAR 1979)

All designs, drawings, specifications, notes and other works developed in the performance of this contract shall become the sole property of the Government and may be used on any other design or construction without additional compensation to the Contractor. The Government shall be considered the "person for whom the work was prepared" for the purpose of authorship in any copyrightable work under 17 U.S.C. 201(b). With respect thereto, the Contractor agrees not to assert or authorize others to assert any rights nor establish any claim under the design patent or copyright laws. The Contractor for a period of three (3) years after completion of the project agrees to furnish all retained works on the request of the Contracting Officer. Unless otherwise provided in this contract, the Contractor shall have the right to retain copies of all works beyond such period.

252.227-7033 RIGHTS IN SHOP DRAWINGS (APR 1966)

(a) Shop drawings for construction means drawings, submitted to the Government by the Construction Contractor, subcontractor or any lower-tier subcontractor pursuant to a construction contract, showing in detail (i) the proposed fabrication and assembly of structural elements and (ii) the installation (i.e., form, fit, and attachment details) of materials or equipment. The Government may duplicate, use, and disclose in any manner and for any purpose shop drawings delivered under this contract.

(b) This clause, including this paragraph (b), shall be included in all subcontracts hereunder at any tier.

252.228-7004 BONDS OR OTHER SECURITY (DEC 1991)

(a) Offerors shall furnish a bid guarantee in the amount of 10% with their bids. The Offeror receiving notice of award shall furnish--

(1) A performance bond in the penal amount of 100% of award amount.; and

(2) Payment in full of any sum due the Government.

(b) The Contractor shall furnish the performance bond to the Contracting Officer within 10 days after receipt of the notice of award. The Contracting Officer will not issue the notice to proceed until receipt of an acceptable performance bond and payment of any sum due the Government.

(c) Bonds supported by sureties whose names appear on the list contained in Treasury Department Circular 570 are acceptable. Performance bonds from individual sureties are acceptable if each person acting as a surety provides a SF 28, Affidavit of Individual Surety, and a pledge of assets acceptable to the Contracting Officer.

(End of clause)

252.231-7000 SUPPLEMENTAL COST PRINCIPLES (DEC 1991)

When the allowability of costs under this contract is determined in accordance with part 31 of the Federal Acquisition Regulation (FAR), allowability shall also be determined in accordance with part 231 of the Defense FAR Supplement, in effect on the date of this contract.

252.236-7000 MODIFICATION PROPOSALS - PRICE BREAKDOWN. (DEC 1991)

(a) The Contractor shall furnish a price breakdown, itemized as required and within the time specified by the Contracting Officer, with any proposal for a contract modification.

(b) The price breakdown --

(1) Must include sufficient detail to permit an analysis of profit, and of all costs for --

(i) Material;

(ii) Labor;

(iii) Equipment;

(iv) Subcontracts; and

(v) Overhead; and

(2) Must cover all work involved in the modification, whether the work was deleted, added, or changed.

(c) The Contractor shall provide similar price breakdowns to support any amounts claimed for subcontracts.

(d) The Contractor's proposal shall include a justification for any time extension proposed.

252.242-7000 POSTAWARD CONFERENCE (DEC 1991)

The Contractor agrees to attend any postaward conference convened by the contracting activity or contract administration office in accordance with Federal Acquisition Regulation subpart 42.5.

(End of clause)

252.243-7001 PRICING OF CONTRACT MODIFICATIONS (DEC 1991)

When costs are a factor in any price adjustment under this contract, the contract cost principles and procedures in FAR part 31 and DFARS part 231, in effect on the date of this contract, apply.

252.243-7002 REQUESTS FOR EQUITABLE ADJUSTMENT (MAR 1998)

(a) The amount of any request for equitable adjustment to contract terms shall accurately reflect the contract adjustment for which the Contractor believes the Government is liable. The request shall include only costs for performing the change, and shall not include any costs that already have been reimbursed or that have been separately claimed. All indirect costs included in the request shall be properly allocable to the change in accordance with applicable acquisition regulations.

(b) In accordance with 10 U.S.C. 2410(a), any request for equitable adjustment to contract terms that exceeds the simplified acquisition threshold shall bear, at the time of submission, the following certificate executed by an individual authorized to certify the request on behalf of the Contractor:

I certify that the request is made in good faith, and that the supporting data are accurate and complete to the best of my knowledge and belief.

(Official's Name)

(Title)

(c) The certification in paragraph (b) of this clause requires full disclosure of all relevant facts, including--

(1) Cost or pricing data if required in accordance with subsection 15.403-4 of the Federal Acquisition Regulation (FAR); and

(2) Information other than cost or pricing data, in accordance with subsection 15.403-3 of the FAR, including actual cost data and data to support any estimated costs, even if cost or pricing data are not required.

(d) The certification requirement in paragraph (b) of this clause does not apply to---

(1) Requests for routine contract payments; for example, requests for payment for accepted supplies and services, routine vouchers under a cost-reimbursement type contract, or progress payment invoices; or

(2) Final adjustment under an incentive provision of the contract.

This page intentionally blank

TABLE OF CONTENTS

SPECIAL CLAUSES

| PARAGRAPH NO. | PARAGRAPH TITLE |
|---------------|---|
| SC-1. | PURPOSE AND SCOPE |
| SC-2. | PERIOD OF SERVICE |
| SC-3. | ORDERING PROCEDURES |
| SC-4. | PROPOSAL SUBMISSION REQUIREMENTS - COMPETATIVE RFP'S |
| SC-5. | PROPOSAL SUBMISSION REQUIREMENTS - SOLE SOURCE |
| SC-6. | EVALUATION METHODS AND PROCEEDURES |
| SC-7. | OPTION FOR INCREASED QUANTITY |
| SC-8. | GENERAL WAGE DECISIONS |
| SC-9. | PERFORMANCE AND PAYMENT BONDS AND ALTERNATIVE PAYMENT FOR CONSTRUCTION CONTRACTS |
| SC-10. | COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK |
| SC-11. | LIQUIDATED DAMAGES - CONSTRUCTION |
| SC-12. | INSURANCE - WORK ON A GOVERNMENT INSTALLATION |
| SC-13. | TIME EXTENSIONS |
| SC-14. | PERFORMANCE OF WORK BY THE CONTRACTOR |
| SC-15. | SHOP DRAWINGS |
| SC-16. | PHYSICAL DATA |
| SC-17. | LAYOUT OF WORK |
| SC-18. | EVALUATION OF CONTRACTOR PERFORMANCE |
| SC-19. | PLANS AND SPECIFICATIONS |
| SC-20. | OPTION TO EXTEND THE TERM OF CONTRACT |

- SC-21. CONTRACTORS COEFFICIENT
- SC-22. AVAILABILITY OF SPECIFICATIONS LISTED IN THE DOD INDEX OF SPECIFICATIONS AND STANDARDS
- SC-23. NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY
PHYSICAL DATA

SPECIAL CLAUSES

SC-1. PURPOSE AND SCOPE

This purpose of this Multiple Award Task Order Contract (MATOC) is primarily to provide demolition of wooden buildings on an indefinite delivery, indefinite quantity basis for Ft. Lewis and sub-installations including Yakima, Vancouver Barracks and Camp Bonneville as well as locations in Western Washington. One contract is anticipated as a result of this solicitation. As requirements develop, Requests for Proposals (RFPs) for Task orders will be issued on a competitive or sole source basis, at the Government's option. Awardee may also compete with other sources (e.g., contractor existing MATOCs). Award of competitive Task Orders will be based on the lowest overall price, technically acceptable offer. Sole source orders will be based on the price guide attached at the end of this section and the Contractor's coefficient. Most Task Orders will vary in size from \$100,000 and \$2 million and will be issued by the Seattle District Contracting Officer. Work will be primarily located on Fort Lewis, but may also cover sub-installations for Fort Lewis, Washington and other locations in Western Washington. The work will primarily be accomplished in the Puget Sound Area.

SC-2. PERIOD OF SERVICE

Day one of each contract is the date of signature by the Contracting Officer. The ordering period for each contract shall automatically end upon the completion of the base period absent an extension.

Both (two) contracts will include a base period, not-to-exceed (NTE) one year and two option periods, for a total contract performance period NTE three years. If capacity is fully utilized for any period before the one year time limit, the Government may decide to exercise the next option early. Maximum value of all work under the two contracts will be limited to \$2 million per contract period shared by both awardees or \$6 million over the life of the contracts. Task Order minimum and maximum limits are \$100,000 and \$2 million, respectively. The minimum guarantee amount for the base period is \$20,000 per contract award. The minimum guarantee amount for each option period exercised is \$10,000 per contract award. The expiration or termination of the ordering period shall not affect any order issued during the effective period of these contracts. Only the Contracting Officer executing these contracts and the Successor Contracting Officer have the authority to modify the term and conditions of these contracts.

SC-3. ORDERING PROCEDURES FOR TASK ORDERS

SC-3.1 When the government requires work under the contract, an RFP shall be issued. The RFP shall include information concerning the statement of work, guide specifications, drawings, attachments information pertaining to a site visit, evaluation criteria, and any other requirements for submission (e.g. proposal requirements, bid schedule, etc.). Performance and Payment shall be required for Task Orders, as described in paragraph 9 in accordance with PERFORMANCE AND PAYMENT BONDS AND ALTERNATIVE PAYMENT PROTECTIONS FOR CONSTRUCTION CONTRACTS, of this Section.

SC-3.2 It is anticipated that the majority of the Task Orders will be awarded based on competition.

Awardees may compete for projects among themselves and with other MATOCs already awarded. The Government reserves the right to issue additional solicitations and award additional contracts within the

region covered by this solicitation. In this event, new MATOC contractors, in accordance with the terms of their contracts, may compete for Task Orders with the Contractors selected under this solicitation.

SC-3.3 Competing for a Task Order. In determining eligibility to compete, the Contracting Officer will consider such factors as past performance on earlier Task orders under the contract, quality, timeliness, or other factors the Contracting Officer determines are relevant to award of a particular Task order. In the event a Contractor is unable to submit an offer in response to an RFP, the Contractor shall notify the Contracting Officer in writing.

SC-3.4 All MATOC Contractors will be given fair opportunity to bid on projects unless the Contracting Officer determines:

- (a) an urgent need exists and seeking competition would result in acceptable delay.
- (b) only one Contractor is capable at the level of quality required because the requirement is unique or highly specialized.
- (c) a sole source is in the interest of economy as a logical follow on to an order already completed.
- (d) to satisfy contract minimum award obligations.

SC-3.5 Offeror's attendance at walkthroughs is considered vital to preparation of competitive and cost effective offers, and to understanding the total results desired by the government. Failure to attend walkthroughs may not be used to as an excuse for omission or miscalculation in offers, and may be taken into consideration in determining a Contractors eligibility to participate in future task orders. The Contractor will not be reimbursed for attendance during negotiations, site visits, or other pre-Task Order costs.

SC-3.6 AWARD DECISION. Whenever possible, award for competitive Task Orders will be made without discussions. If discussions are held, at the conclusion, each contractor will be requested to provide final proposal revision. The awarded task order will be firm fixed-price with a specific completion date. The government will notify contractors when any Task Order (competed or sole source) is awarded.

SC-3.7 Task orders will be issued on DD Form 1155. Orders may be placed via mail, telephone, facsimile, or electronic commerce. The Task Order becomes binding when the Contracting Officer signs the order. Notice to Proceed (NTP) will be issued separately after receipt of acceptable performance and payment bonds. The appropriate Issuing and Payment Offices will be cited on each Task order.

SC-3.8 In accordance with FAR 16.505(a)(7), no protest under subpart 33.1 is authorized in connection with the issuance or proposed issuance of an order under a Task Order Contract except for a protest on the grounds that the order increases the scope, period, or maximum value of the contract.

SC-3.9 OMBUDSMAN. If the Contractor feels it was not fairly considered for a particular Task Order, the Contractor may present the matter to the Contracting Officer. The Contractor may appeal the explanation or decision of the Contracting Officer to the US Army Corps of Engineers (USACE)

Ombudsman, Mr. Clyde Wayne Hardin who is the USACE Principal Assistant Responsible for Contracting (PARC), at the following address: Headquarters, U.S. Army Corps of Engineers, Attention: CEPR-P (USACE Ombudsman), 20 Massachusetts Avenue N.W., Washington, DC 20314-1000. The ombudsman will review the Contractors complaint, and in coordination with the Contracting Officer, ensure that the Contractor was afforded a fair opportunity to be considered for the Task Order.

SC-3.10 ORDERING (FAR 52.216-18)(OCT 1995)

- (a) Any supplies and services to be furnished under this contract shall be ordered by issuance of Task Orders by the individuals or activities designated in this contract.
- (b) All Task Orders are subject to the terms and conditions of this contract, the contract shall control.
- (c) If mailed, a Task Order is considered “issued” when the government deposits the order in the mail. Orders may be issued orally, by facsimile, or by electronic commerce methods only if authorized by this contract.

SC-3.11 TASK ORDER LIMITATIONS

SC-3.1 Minimum Order. When the government requires supplies or services covered by this contract in an amount less than \$100,000 the government is not obligated to purchase, nor is the Contractor obligated to furnish, those supplies or services under the contract.

SC-3.2 Maximum Order. The maximum Task Order limitation is \$2 million, including subsequent modifications. The government may combine several projects, as indicated by separate statements of work and individual line items, in one Task order, as required. The Contractor is not obligated to honor-

- (a) Any order for a single task order less than \$100,000
- (b) Any order for a single task order in excess of \$2 million;
- (c) A series of orders from the same ordering office totaling more than \$2 million within a seven(7) day period.

SC-4. PROPOSAL SUBMISSION REQUIREMENTS - COMPETATIVE TASK ORDERS

SC-4.1 Depending upon the requirements of each Task Order, the Contractor will for each item in the schedule.

SC-4.2 Contractors shall respond within the number of calendar days stated in the RFP by submitting a proposal to the Contracting Officer in accordance with the requirements stated in the RFP. Responses shall be written and presented in hard copy unless the direction of the Task Order specifically asks for faxed proposals.

SC-4.3 Proposals will either be accepted as is or negotiated to the mutual agreement of both the government and the Contractor. Upon conclusion of satisfactory discussions or negotiations (if required),

a Task Order will be issued by the Contracting Officer reflecting the negotiated order price and payment terms as outlined in the statement of work or specifications. In any instance where there is failure to reach an agreement on price, the government reserves the right to withdraw the project and have it completed by other means.

SC-5. PROPOSAL SUBMISSION REQUIREMENTS - SOLE SOURCE TASK ORDERS

SC-5.1 When it is necessary to negotiate with one firm on a sole source basis, the Price Guide and the Contractors coefficient shall be utilized in establishing the price. For any items not covered by Price Guide, the Contractor shall provide three competitive quotes to establish a fair and reasonable price. The Contractors coefficient will be applied to the overall Price Guide's price to establish the total value of the Task Order. There may be circumstances where proposals will be negotiated without the Price Guide, such as follow on work.

SC-5.2 Coefficient for Modifications to Sole Source Task Orders. When it is determined that a Task Order requires a modification, the Contractor shall calculate his proposal utilizing the same coefficient that was used in calculating the Task Order price, regardless of the date of the modification.

SC-5.3 Refer to s SC-23 of this Section for further explanation of the coefficient.

SC-6. EVALUATION METHOD AND PROCEDURES

SC-6.1 The Contracting Officer, in making decisions in award of any individual Task Order will always consider factors such as past performance on earlier Task Orders under the contract. Task Orders may be issued for price only or ask for a technical proposal evaluating quality or schedule or as determined by the Contracting Officer.

SC-6.2 When an RFP for a Task Order is issued, the Government intends to select the most advantageous, responsive, and responsible proposal resulting in the best value to the government. Each Task Orders will set out the criteria.

SC-6.4 ARITHMETIC DISCREPANCIES IN THE EVALUATION OF OFFERERS SUBMITTED IN RESPONSE TO RFP'S FOR INDIVIDUAL TASK ORDERS.(MAR 1995) - EFARS

- (a) For the purpose of initial evaluations of offers proposed for individual Task orders, the following will be utilized in resolving arithmetic discrepancies found on the face of the pricing schedule as submitted by the offerer: (1) Obviously misplaced decimal points will be corrected; (2) Discrepancy between unit price and extended price, the unit price will govern; (3) Apparent errors in extension of unit prices will be corrected; (4) Apparent errors in addition of lump sum and extended prices will be corrected.
- (b) For purposes of price evaluation, the government will proceed on the assumption that the Offeror intends the proposed price to be evaluated on basis of the unit prices, the totals arrived at by resolution of arithmetic discrepancies as provided above.
- (c) These correction procedures shall not be used to resolve any ambiguity concerning which price is low.

SC-6.5 Contract Prices - Pricing Schedules. The Government's payment for the items listed in the Pricing Schedules of individual Task Orders shall constitute full compensation to the Contractor for - (1) Furnishing all plant, labor, equipment, appliances, and materials; and (2) Performing all operations required to complete the work in conformity with the drawings and specifications. The Contractor shall include in the prices for the items listed in the Pricing Schedule all costs for work in the specification, whether or not specifically listed in the Pricing Schedule.

SC-6.6 Evaluation of Options (FAR 52.217-5)(JUL 1990). Except when it is determined in accordance with FAR 17.206(b) not to be in the Government's best interests, the Government will evaluate offers for the purpose of awarding Task Orders by adding the total price for all options to the total price for the basic requirement. Evaluation of options will not obligate the Government to exercise the option(s).

SC-7. OPTION FOR INCREASED QUANTITY.

If specified in individual Task Orders:

SC-7.1 The Government may increase the quantity of work awarded by exercising (one or more of the)(the) Optional Item(s) at any time, or not at all, but no later than as specified in the Task Order after receipt by Contractor. Notice to Proceed on work Item(s) added by exercise of the option(s) will be effective upon execution of the Task Order modification exercising the option.

SC-7.2 The parties hereto further agree that any option herein shall be considered to have been exercised at the time the Government deposits written notification to the Contractor in the mails.

SC-7.3 The time allowed for completion of any optional items awarded under this contract will be specified in individual Task Orders.

SC-8. General Wage General Decisions. Davis Bacon wage rates shall be utilized for all Task Orders under this contract.

SC-8.1 The wage decisions in place at time of award shall be utilized for the first 365 consecutive days of the contract.

SC-8.2 With exercise of an option at a one year interval after the preceding contract period, current Davis -Bacon general wage decisions will be incorporated into the contract via modification.

SC-8.3 In the case of an option being exercised early (i.e., less than 365 consecutive days after the preceding contract period), Davis-Bacon general wage rates currently in the contract shall be utilized until the 365 consecutive days have elapsed.

SC-8.4 When it is necessary to add a Davis-Bacon general wage decision that is not included in this contract, the applicable wage decision may be added by modification to either the Contractor or, if not anticipated to be utilized on a regular basis, to the individual Task Order.

SC-9 PERFORMANCE AND PAYMENT BONDS AND ALTERNATIVE PAYMENT FOR CONSTRUCTION CONTRACTS (FAR 28.102-1)

SC-9.1 Performance and payment bonds and alternative payment protections shall be provided for Task Orders awarded under this contract when required. Bonds and other payment protections shall be provided within 5 calendar days of award of a Task Order. Notice to Proceed will not be issued until the Contractor provides sufficient bonding to cover the work being performed.

SC-9.2 For Task Orders awarded at between \$100,000 and \$1,000,000, payment protection shall be provided in accordance with FAR Clause 52.228-13, Alternative Payment Protections in Section 00700.

SC-9.3 For all other Task Orders, performance and payment bonds shall be required, and the penal sum established, by each Task order.

SC-9.4 **Performance Bond:** The penal sum of each performance bond shall equal one hundred percent (100%) of the contract price of each Task Order placed hereunder.

SC-9.5 **Payment Bond:** The penal sum of each performance bond shall equal one hundred percent (100%) of the contract price of each Task Order placed hereunder

SC-9.6 Additional Bonding: Additional shall only be required to the extent that the amount of construction being accomplished exceeds the value of the performance and payment bonds. Notice to Proceed will not be issued until the Contractor provides sufficient bonding to cover the work to be performed. Such additional bonding shall be provided within 5 days of request by the Contracting Officer. Further information is provided in FAR clause 52.228-2, Additional Bond Security.

SC-10 COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK (FAR 52.211-10)

The Contractor shall be required to commence work within the timeframe specified in individual Task Orders, prosecute the work diligently, and complete the entire work ready for use not later than the number of calendar days specified in the Task Order. The time stated for completion shall include final cleanup of the premises. The Contractor shall ensure that all Task order work under this contract is completed and that submittals are made in accordance with the time allowances and progress schedules set forth in individual Task Orders. The schedule is subject to adjustment by the Contracting Officer or a duly authorized representative, in writing, for material delays on the part of the government and for conditions beyond the control of the parties hereto. The order completion schedule shall be based on receipt of either written or verbal Notice Proceed(NTP), whichever is sooner.

SC-11 LIQUIDATED DAMAGES – CONSTRUCTION (SEPT 2000) (FAR 52.211-12)

SC-11.1 Unless separate or additional liquidated damages are specified in Individual Task Orders, if the Contractor fails to complete the work within the time specified in a Task Order, or any extension, the Contractor shall pay to the Government as liquidated damages for each day of delay as follows:

| | |
|---|--------|
| All work on Ft. Lewis, Washington and all other work in Western Washington and subinstallations of Fort Lewis | \$919. |
|---|--------|

SC-11.2 For any number of Task Orders accomplished at one site for which delay costs are applicable at the same time, the total daily liquidated damages will be limited to the damages for each calendar day of delay. For any number of Task Orders accomplished at separate sites for which delay costs are applicable at the same time, the total daily liquidated damages shall be no greater than \$987 rate above unless a higher rate is justified by the Contracting Officer.

SC-11.3 If the Government terminates the Contractor's right to proceed, the resulting damage will consist of liquidated damages until such reasonable time as may be required for final completion of the work together with any increased costs occasioned the Government in completing the work.

SC-11.4 If the Government does not terminate the Contractor's right to proceed, the resulting damage will consist of liquidated damages until the work is completed or accepted.

SC-11.5 Exception to Liquidated Damage: In case the Contracting Officer determined that completion of work is not feasible during the completion period(s) stated in the Task Order, such work will be exempted from liquidated damages.

SC-12. INSURANCE – WORK ON A GOVERNMENT INSTALLATION (FAR 52.228-5) (Jan 1997)

SC-12.1 The Contractor shall, at its own expense, provide and maintain during the entire performance of this contract, at least the kinds and minimum amounts of insurance required in the Insurance Liability Schedule or elsewhere in the contract.

SC-12.1 Before commencing work under this contract, the Contractor shall notify the Contracting Officer in writing that the required insurance has been obtained. The policies evidencing required insurance shall contain the endorsement to the effect that any cancellation or any material change adversely affecting the Government's interest shall not be effective:

- (a) for such period as the laws of the State in which this contract is to be performed prescribe; or
- (b) until 30 days after the insurer or the Contractor gives written notice to the Contracting Officer, whichever period is longer.
- (c) The Contractor shall insert the substance of this clause, including this paragraph (c), in subcontracts under this contract that require work on a Government installation and shall require subContractors to provide and maintain the insurance required in the Schedule or elsewhere in the contract. The Contractor shall maintain a copy of all subcontractor's proofs of required insurance, and shall make copies available to the Contracting Officer upon request.
- (d) Insurance Liability Schedule (FAR 28.307-2)
 - (1) Workers' compensation and employer's liability. Contractors are required to comply with applicable Federal and State workers' compensation and occupational disease statutes. If occupational diseases are not compensable under those statutes, they shall be

covered under the employer's liability section of the insurance policy, except when contract operations are so commingled with a Contractor's commercial operation that it would not be practical to require this coverage. Employer's liability coverage of at least \$100,000 shall be required, except in states with exclusive or monopolistic funds that do not permit workers' compensation to be written by private carriers.

(2) General Liability.

(a) The Contracting Officer shall require bodily injury liability insurance coverage written on the comprehensive form of policy of at least \$500,000 per occurrence.

(b) Property damage liability insurance shall be required only in special circumstances as determined by the agency.

(3) Automobile liability. The Contracting Officer shall require automobile liability insurance written on the comprehensive form of policy. The policy shall provide for bodily injury and property damage liability covering the operation of all automobiles used in connection with performing the contract. Policies covering automobiles operated in the United States shall provide coverage of at least \$200,000 per person and \$500,000 per occurrence for bodily injury and \$20,000 per occurrence for property damage. The amount of liability coverage on other policies shall be commensurate with any legal requirements of the locality and sufficient to meet normal and customary claims.

(4) Aircraft public and passenger liability. When aircraft are used in connection with performing the contract, the Contracting Officer shall require aircraft public and passenger liability insurance. Coverage shall be at least \$200,000 per person and \$500,000 per occurrence for bodily injury, other than passenger liability, and \$200,000 per occurrence for property damage. Coverage for passenger liability bodily injury shall be at least \$200,000 multiplied by the number of seats or passengers, whichever is greater.

(5) Vessel liability. When contract performance involves use of vessels, the Contracting Officer shall require, as determined by the agency, vessel collision liability and protection and indemnity liability insurance.

(6) Environmental Liability. If this contract includes the transport, treatment, storage, or disposal of hazardous material waste the following coverage is required. The Contractor shall ensure the transporter and disposal facility have liability insurance in effect for claims arising out of the death or bodily injury and property damage from hazardous material/waste transport; treatment, storage and disposal, including vehicle liability and legal defense costs in the amount of \$1,000,000 as evidenced by a certificate of insurance for General, Automobile, and Environmental Liability Coverage. Proof of this insurance shall be provided to the Contracting Officer.

SC-13. TIME EXTENSIONS (SEPT 2000) (FAR 52.211-13)

Notwithstanding any other provisions of this contract, it is mutually understood that the time extension for changes in the work will depend upon the extent, if any, by which the changes cause delay in the completion of the various elements of demolition. The change order granting the time extension may provide that the Task Order completion date will be extended only for those specific elements so delayed and that the remaining Task Order completion dates for all other portions of the work will not be altered and may further provide for an equitable readjustment of liquidated damages, under the new completion schedule.

SC-14. PERFORMANCE OF WORK BY THE CONTRACTOR (APR 1984) (FAR 52.236-1)

The Contractor shall perform on the site, and with its own organization, work equivalent to at least fifteen percent (15%) of the total amount of work to be performed under the Contract. The percentage may be reduced by a supplemental agreement to this Contract if, during performing the work, the Contractor requests a reduction and the Contracting Officer determines that the reduction would be to the advantage of the Government.

SC-15 SHOP DRAWINGS AND SUBMITTALS

The Contractor is responsible for the preparation of all shop drawings, submittals, and as-built for each Task Order in accordance with the requirements contained therein.

SC-16 PHYSICAL DATA (FAR 52.236-4) (APR 1994)

Data and information furnished or referred to below is for the Contractor's information. The Government will not be responsible for any interpretation of or conclusion drawn from the data or information by the Contractor.

SC-16.1 Physical Conditions: The indications of physical conditions on the drawings and in the specifications are the result of site investigations involving surveys and/or by test holes as shown on the drawings or attached to the specifications, as applicable for the work to be performed under the task order.

SC-16.2 Weather Conditions: Each bidder shall be satisfied before submitting his bid as to the hazards likely to arise from weather conditions. Complete weather records and reports may be obtained from any National Weather Service Office.

SC-16.3 Transportation Facilities: Each bidder, before submitting his bid, shall make an investigation of the conditions of existing public and private roads and of clearances, restrictions, bridge load limits, and other limitations affecting transportation and ingress and egress at the jobsite. The unavailability of transportation facilities or limitations thereon shall not become a basis for claims for damages or extension of time for completion of the work.

SC-16.4 Right of Way: The right of way for the work covered by these specifications will be furnished by the Government, except that the Contractor shall provide right of way for ingress and egress across private property where necessary to gain access to the job site. The Contractor may use such portions of the land within the right of way not otherwise occupied as may be designated by the Contracting Officer. The Contractor shall, without expense to the Government, and at any time during the progress of the work

when space is needed within the right of way for any other purposes, promptly vacate and clean up any part of the grounds that have been allotted to, or have been in use by him when directed to do so by the Contracting Officer. The Contractor shall keep the buildings and grounds in use by him at the site of the work in an orderly and sanitary condition. Should the Contractor require additional working space or lands for materials yards, job offices, or other purposes, he shall obtain such additional lands or easements at his expense.

SC-17. LAYOUT OF WORK (FAR 52.236-17) (APR 1984)

The Contractor shall lay out its work from Government –established base lines, bench marks or the described existing physical features as indicated on the drawings, and shall be responsible for all measurements in connection with the layout. The Contractor shall furnish, at its own expense, all stakes, templates, platforms, equipment, tools, materials, and labor required to lay out any part of the work.. The Contractor shall be responsible for executing the work to the lines and grades that may be established or indicated by the Contracting Officer. The Contractor shall also be responsible for maintaining and preserving all stakes and other marks established by the Contracting Officer until authorized to remove them. If such marks are destroyed by the Contractor or through its negligence before their removal is authorized, the Contracting Officer may replace them and deduct the expense of the replacement from any amounts due, or to become due, to the Contractor.

SC-18 EVALUATION OF CONTRACTOR PERFORMANCE.

In accordance with FAR 36.201(a)(1)(i), the Contractor's performance will be evaluated upon completion of each Task Order of \$500,000 or more. As an alternative, the Contractor's performance may be evaluated upon completion of work on several small Task Orders with a total dollar value of \$500,000 or more. Interim evaluations may be prepared at any time during the contract performance when determined to be in the best interest of the government. At a minimum an evaluation will be performed for each contract year.

SC-19 PLANS AND SPECIFICATIONS

The Contractor will be provided one copy of the construction drawings (if any) and Statement of Work (with pertinent supplemental specifications) upon issue of each Task Order. All further reproduction shall be at Contractors expense. The government may provide these as hard copy or as electronic media, such as e-mail or CD-ROM, at its option.

SC-20 OPTION TO EXTEND THE TERM OF THE CONTRACT (FAR 52.217-9) (MAR 1989)

SC-20.1 The Government may extend the term of this contract by written notice to the Contractor before expiration of the current contract period; provided, that the Government shall give the Contractor a preliminary written notice of its intent to extend at least 60 days before the contract expires. The preliminary notice does not commit the Government to an extension.

SC-20.2 If the Government exercises this option, the extended contract shall be considered to include this option provision.

SC-20.3 The total duration of this contract including the exercise of any options under this clause, shall not exceed 3 years.

SC-21. CONTRACTOR'S COEFFICIENT

SC-21.1 The Contractor coefficient shall contain all costs other than the pre-priced unit prices contained in the Price Guide. The coefficient is a numerical factor that represents Contractor costs(indirect and direct costs, sales tax, etc.) and profit not to be included in the Price Guide. The Contractors shall contain all Contractor's costs inclusive of profit, all overhead (to include home office and field office overhead) labor burden, insurance, adjustments to listed prices, general and administrative expenses, Hazardous Materials Surveys, Waste Stream Analysis, subcontractor mark-up, contingencies,(such as changes in wage rates, geographical location of work), mobilization and demobilization, and all other costs including , but not limited to, compliance with environmental laws, permits, preparation of reports, correspondence and documentation required by law or these specifications, tax laws, protection and/or moving of government property and engineering services. (Engineering services include those that are not incidental to construction, completing submittals for construction work, or simple design designs to complement Government provide abbreviated designs. The Price Guide and the Contractors coefficient will not be utilized to price engineering services for complex demolition). The coefficient shall also include costs described as costs to provide submittals, interface with the Government representatives, coordination with occupants and other Contractors. The coefficient shall also include costs for:

- All waste and excess material
- Mobilization and close out for the total contract and each Task order.
- Clean up
- Safety (e.g., Safety Rails, Safety Nets, tethers, face/clothing protection,etc.)
- Traffic and work-site signs and barriers
- Project Management and equipment
- Quality Control
- Office Management and equipment
- Depreciation of Mobile office(s)
- Subcontractor profit
- As-built drawing, submittals, permits, license and other risks of doing business
- Site security

21.2 The coefficient is proposed by offerors as a percentage increase,(e.g. 1.10) or decrease (e.g., 0.95) to the Price Guide book prices, in association with performance of a Task Order. The coefficient proposed and accepted is incorporated in the contract and used in establishing the price for sole-source Task Orders.

SC-22 AVAILABILITY OF SPECIFICATIONS LISTED IN THE DOD INDEX OF SPECIFICATIONS AND STANDARDS (DODISS) (FAR 52.211-2) (JUN 1997)

Single copies of specifications cited in Task Orders may be obtained by written request to the address listed below or by telephone (215-697-2179). In case of urgency, telegraphic requests are acceptable. Voluntary standards which are not available to offerors and Contractors from government sources, may be obtained from the organization responsible for their preparation, maintenance, or publication.

Standardization Document Order Desk, Building 4, Section D, 700 Robbins Avenue, Philadelphia, PA 1911-5094, facsimile No. 215-697-2978.

SC-23. NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (FAR 52.222-23) (APR 1984)

SC-23.1 The offeror's attention is called to the Equal Employment Opportunity clause and the Affirmative Action Compliance Requirements for construction clause of this solicitation.

SC-23.2 The goals for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

| Goals for minority participation for each trade | | Goals for female participation for each trade. |
|---|---------------------------------|--|
| <u>State</u> | <u>County</u> | |
| Washington | | 6.9% for all counties covered under this solicitation. |
| 7.2% | Douglas, Grant, King, Snohomish | |
| 6.1% | Kitsap, Thurston, Whatcom | |
| 4.5% | Clark | |
| 5.4% | Franklin | |
| 6.2% | Pierce | |
| 9.7% | Yakima | |

These goals are applicable to all the Contractor's construction work performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, the Contractor shall apply the goals established for the geographical area where such work is actually performed. Goals are published periodically in the Federal Register in notice form, and these notices may be obtained from any office in Federal Contract Compliance Program Office.

SC-23.3 The Contractor's compliance with Executive Order 11246, as amended, and the regulations in 41 CFR Part 60-4 shall be based on (1) its implementation of the Equal Opportunity clause, (2) specific affirmative action obligations required by the clause entitled, "Affirmative Action Compliance Requirements for Construction," and (3) its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade. The Contractor shall make a good faith offer to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor, or from project to project, for sole purpose of meeting the Contractor's goals shall be a violation of the contract, Executive Order 11246, as amended, and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

SC-23.1 The Contractor shall provide written notification to the Director, Office of Federal Contract Compliance Programs. Within 10 working days following award of any construction subcontract in excess of \$10,000 at any solicitation. The notification shall list the:

- (a) Name, address and telephone number of the subcontractor;
- (b) Employer identification Number of the subcontractor
- (c) Estimated dollar amount of the subcontract;
- (d) Estimated starting and completion dates of the subcontract; &
- (e) Geographical area in which the subcontract is to be performed.

SC-23-2 As used in this Notice, and in any contract resulting from this solicitation, the “covered area” is: Douglas, Pierce, Grant, Kitsap, Whatcom, Thurston, Clark, Snohomish, Franklin, King, and Yakima counties.

END OF SECTION
SPECIAL CLAUSES

This page intentionally blank

GENERAL DECISION **WA010001** 08/31/2001 WA1

Date: August 31, 2001

General Decision Number **WA010001**

Superseded General Decision No. WA000001

State: Washington

Construction Type:

DREDGING

HEAVY

HIGHWAY

County(ies):

STATEWIDE

HEAVY AND HIGHWAY AND DREDGING CONSTRUCTION PROJECTS

(Excludes D.O.E. Hanford Site in Benton and Franklin Counties)

| Modification Number | Publication Date |
|---------------------|------------------|
| 0 | 03/02/2001 |
| 1 | 03/09/2001 |
| 2 | 03/16/2001 |
| 3 | 03/30/2001 |
| 4 | 04/06/2001 |
| 5 | 05/11/2001 |
| 6 | 06/01/2001 |
| 7 | 06/08/2001 |
| 8 | 06/15/2001 |
| 9 | 06/22/2001 |
| 10 | 06/29/2001 |
| 11 | 07/06/2001 |
| 12 | 07/13/2001 |
| 13 | 08/03/2001 |
| 14 | 08/31/2001 |

COUNTY(ies):

STATEWIDE

CARP0001W 06/01/2001

| | Rates | Fringes |
|---|-------|---------|
| COLUMBIA RIVER AREA - ADAMS, BENTON, COLUMBIA, DOUGLAS (EAST OF THE 120TH MERIDIAN), FERRY, FRANKLIN, GRANT, OKANOGAN (EAST OF THE 120TH MERIDIAN) AND WALLA WALLA COUNTIES | | |

CARPENTERS:

| | | |
|----------|-------|------|
| GROUP 1: | 23.18 | 6.00 |
| GROUP 2: | 24.29 | 6.00 |
| GROUP 3: | 23.45 | 6.00 |
| GROUP 4: | 23.18 | 6.00 |
| GROUP 5: | 57.45 | 6.00 |
| GROUP 6: | 25.56 | 6.00 |

SPOKANE AREA: ASOTIN, GARFIELD, LINCOLN, PEND OREILLE, SPOKANE,
STEVENS AND WHITMAN COUNTIES

CARPENTERS:

| | | |
|----------|-------|------|
| GROUP 1: | 22.51 | 6.00 |
| GROUP 2: | 23.61 | 6.00 |
| GROUP 3: | 22.77 | 6.00 |
| GROUP 4: | 22.51 | 6.00 |
| GROUP 5: | 55.78 | 6.00 |
| GROUP 6: | 24.82 | 6.00 |

CARPENTERS CLASSIFICATIONS

GROUP 1: Carpenter; Burner-Welder; Rigger and Signaler;
Insulators (all types), Acoustical, Drywall and Metal Studs,
Metal Panels and Partitions; Floor Layer, Sander, Finisher and
Astro Turf; Layout Carpenters; Form Builder; Rough Framers;
Outside or Inside Finisher, including doors, windows, and jams;
Sawfiler; Shingler (wood, composition) Solar, Fiberglass,
Aluminum or Metal; Scaffold Erecting and Dismantling; Stationary
Saw-Off Bearer; Wire, Wood and Metal Lather Applicator

GROUP 2: Millwright, machine erector

GROUP 3: Piledriver - includes driving, pulling, cutting,
placing collars, setting, welding, or creosote treated material,
on all piling

GROUP 4: Bridge, dock and wharf carpenters

GROUP 5: Divers

GROUP 6: Divers Tender

DEPTH PAYY FOR DIVERS:

| | |
|-----------------------------|--------|
| Each foot over 50-100 feet | \$1.00 |
| Each foot over 100-175 feet | 2.25 |
| Each foot over 175-250 feet | 5.50 |

HAZMAT PROJECTS

Anyone working on a HAZMAT job (task), where HAZMAT certification
is required, shall be compensated at a premium, in addition to
the classification working in as follows:

LEVEL D + \$.25 per hour - This is the lowest level of protection.
No respirator is used and skin protection is minimal.

LEVEL C + \$.50 per hour - This level uses an air purifying
respirator or additional protective clothing.

LEVEL B + \$.75 per hour - Uses same respirator protection as
Level A. Supplied air line is provided in conjunction with a
chemical "splash suit".

LEVEL A +\$1.00 per hour - This level utilizes a fully
encapsulated suit with a self-contained breathing apparatus or a
supplied air line.

CARP00030 06/01/2001

Rates Fringes

SOUTHWEST WASHINGTON: CLARK, COWLITZ, KLUCKITAT, LEWIS
(Piledriver only), PACIFIC (South of a straight line made by
extending the north boundary line of Wahkiakum County west to
Willapa Bay to the Pacific Ocean), SKAMANIA AND WAHAKIAKUM
COUNTIES and INCLUDES THE ENTIRE PENINSULA WEST OF WILLAPA BAY

SEE ZONE DESCRIPTION FOR CITIES BASE POINTS

ZONE 1:

| | | |
|---|-------|------|
| CARPENTERS; ACOUSTICAL | 26.43 | 7.89 |
| DRYWALL | 26.43 | 7.89 |
| FLOOR LAYERS & FLOOR FINISHERS | | |
| (the laying of all hardwood floors nailed and mastic set, parquet and wood-type tiles, and block floors, the sanding and finishing of floors, the preparation of old and new floors when the materials mentioned above are to be installed); INSULATORS (fiberglass and similar irritating materils | | |
| | 26.58 | 7.89 |
| MILLWRIGHTS | 26.93 | 7.89 |
| PILEDRIVERS | 26.93 | 7.89 |
| DIVERS | 62.78 | 7.89 |
| DIVERS TENDERS | 28.90 | 7.89 |

DEPTH PAY

| | |
|-----------------|------------------------------|
| 50 TO 100 FEET | \$1.00 PER FOOT OVER 50 FEET |
| 100 TO 150 FEET | 1.50 PER FOOT OVER 100 FEET |
| 150 TO 200 FEET | 2.00 PER FOOT OVER 150 FEET |

Zone Differential (Add up Zone 1 rates):

Zone 2 - \$0.85

Zone 3 - 1.25

Zone 4 - 1.70

Zone 5 - 2.00

Zone 6 - 3.00

BASEPOINTS: ASTORIA, LONGVIEW, PORTLAND, THE DALLES,
AND VANCOUVER, (NOTE: All dispatches for Washington State
Counties: Cowlitz, Wahkiakum and Pacific shall be from Longview
Local #1707 and mileage shall be computed from that point.)

ZONE 1: Projects located within 30 miles of the respective
city hall of the above mentioned cities

ZONE 2: Projects located more than 30 miles and less than 40
miles of the respective city of the above mentioned
cities

ZONE 3: Projects located more than 40 miles and less than 50
miles of the respective city of the above mentioned
cities

ZONE 4: Projects located more than 50 miles and less than 60
miles of the respective city of the above mentioned
cities.

ZONE 5: Projects located more than 60 miles and less than 70

miles of the respective city of the above mentioned cities
 ZONE 6: Projects located more than 70 miles of the respected city of the above mentioned cities

CARP0770D 06/01/2001

Rates Fringes

WESTERN WASHINGTON: CLALLAM, GRAYS HARBOR, ISLAND, JEFFERSON, KING, KITSAP, LEWIS (excludes piledrivers only), MASON, PACIFIC (North of a straight line made by extending the north boundary line of Wahkiakum County west to the Pacific Ocean), PIERCE, SAN JUAN, SKAGIT, SNOHOMISH, THURSTON AND WHATCOM COUNTIES

| | | |
|--|-------|------|
| CARPENTERS AND DRYWALL APPLICATORS | 27.22 | 7.12 |
| CARPENTERS ON CREOSOTE MATERIAL | 27.32 | 7.12 |
| SAWFILERS, STATIONARY POWER SAW OPERATORS, FLOOR FINISHER, FLOOR LAYER, SHINGLER, FLOOR SANDER OPERATOR AND OPERATORS OF OTHER STATIONARY WOOD WORKING TOOLS | 27.35 | 7.12 |
| MILLWRIGHT AND MACHINE ERECTORS | 28.22 | 7.12 |
| ACOUSTICAL WOKRERS | 27.38 | 7.12 |
| PILEDRIVER, DRIVING, PULLING, CUTTING, PLACING COLLARS, SETTING, WELDING OR CRESOTE TREATED MATERIAL, ALL PILING | 27.42 | 7.12 |
| PILEDRIVER, BRIDGE DOCK & WHARF CARPENTERS | 27.22 | 7.12 |
| DIVERS | 67.18 | 7.12 |
| DIVERS TENDER | 29.89 | 7.12 |

(HOURLY ZONE PAY APPLICABLE TO ALL CLASSIFICATIONS EXCEPT

MILLWRIGHT AND PILEDRIVER)

Hourly Zone Pay shall be paid on jobs located outside of the free zone computed from the city center of the following listed cities:

| | | |
|------------------|--------------|--------------|
| Seattle | Olympia | Bellingham |
| Auburn | Bremerton | Anacortes |
| Renton | Shelton | Yakima |
| Aberdeen-Hoquiam | Tacoma | Wenatchee |
| Ellensburg | Everett | Port Angeles |
| Centralia | Mount Vernon | Sunnyside |
| Chelan | Pt. Townsend | |

| Zone Pay | |
|----------------------|-------------|
| 0 -25 radius miles | Free |
| 25-35 radius miles | \$1.00/hour |
| 35-45 radius miles | \$1.15/hour |
| 45-55 radius miles | \$1.35/hour |
| Over 55 radius miles | \$1.55/hour |

(HOURLY ZONE PAY - MILLWRIGHT AND PILEDRIVER ONLY)

Hourly Zone Pay shall be computed from Seattle Union Hall, Tacoma City center, and Everett City center

| Zone Pay | |
|----------------------|-------------|
| 0 -25 radius miles | Free |
| 25-45 radius miles | \$.70/hour |
| Over 45 radius miles | \$1.50/hour |

CENTRAL WASHINGTON: CHELAN, DOUGLAS (WEST OF THE 120TH MERIDIAN), KITTITAS, OKANOGAN (WEST OF THE 120TH MERIDIAN) AND YAKIMA COUNTIES

| | | |
|--|-------|------|
| CARPENTERS AND DRYWALL APPLICATORS | 20.72 | 7.12 |
| CARPENTERS ON CREOSOTED MATERIAL | 20.72 | 7.12 |
| SAWFILERS, STATIONARY POWER S37 OPERATORS, FLOOR FINISHER, FLOOR LAYER, SHINGLERS, FLOOR SANDER OPERATORS | 20.85 | 7.12 |
| MILLWRIGHT AND MACHINE ERECTORS | 27.13 | 7.12 |
| PILEDRIVER, DRIVING, PULLING, CUTTING, PLACING COLLARS, SETTING, WELDING OR CRESOTE TREATED MATERIAL, ALL PILING | 27.42 | 7.12 |
| PILEDRIVER, BRIDGE DOCK AND WHARF CARPENTERS | 27.22 | 7.12 |
| DIVERS | 67.18 | 7.22 |
| DIVERS TENDER | 29.89 | 7.12 |

(HOURLY ZONE PAY APPLICABLE TO ALL CLASSIFICATIONS EXCEPT MILLWRIGHT AND PILEDRIVER)

Hourly Zone Pay shall be paid on jobs located outside of the free zone computed from the city center of the following listed cities:

| | | |
|------------------|--------------|--------------|
| Seattle | Olympia | Bellingham |
| Auburn | Bremerton | Anacortes |
| Renton | Shelton | Yakima |
| Aberdeen-Hoquiam | Tacoma | Wenatchee |
| Ellensburg | Everett | Port Angeles |
| Centralia | Mount Vernon | Sunnyside |
| Chelan | Pt. Townsend | |

| Zone Pay | |
|----------------------|-------------|
| 0 -25 radius miles | Free |
| 25-35 radius miles | \$1.00/hour |
| 35-45 radius miles | \$1.15/hour |
| 45-55 radius miles | \$1.35/hour |
| Over 55 radius miles | \$1.55/hour |

(HOURLY ZONE PAY - MILLWRIGHT AND PILEDRIVER ONLY)

Hourly Zone Pay shall be computed from Seattle Union Hall, Tacoma City center, and Everett City center

| | |
|----------------------|-------------|
| Zone Pay | |
| 0 -25 radius miles | Free |
| 25-45 radius miles | \$.70/hour |
| Over 45 radius miles | \$1.50/hour |

| | | |
|---|-------|---------|
| ELEC0046A 06/05/2000 | | |
| | Rates | Fringes |
| CALLAM, JEFFERSON, KING AND KITSAP COUNTIES | | |
| ELECTRICIANS | 30.50 | 3%+8.41 |
| CABLE SPLICERS | 33.55 | 3%+8.41 |

| | | |
|--|-------|----------|
| ELEC0048C 07/01/2001 | | |
| | Rates | Fringes |
| CLARK, KLICKITAT AND SKAMANIA COUNTIES | | |
| ELECTRICIANS | 30.20 | 3%+10.25 |
| CABLE SPLICERS | 30.45 | 3%+10.25 |

| | | |
|---|-------|---------|
| ELEC0073A 07/01/2001 | | |
| | Rates | Fringes |
| ADAMS, FERRY, LINCOLN, PEND OREILLE, SPOKANE, STEVENS, WHITMAN COUNTIES | | |
| ELECTRICIANS | 23.67 | 3%+9.13 |
| CABLE SPLICERS | 24.07 | 3%+9.13 |

| | | |
|--|-------|---------|
| ELEC0076B 01/01/2000 | | |
| | Rates | Fringes |
| GRAYS HARBOR, LEWIS, MASON, PACIFIC, PIERCE, AND THURSTON COUNTIES | | |
| ELECTRICIANS | 26.20 | 8.47+3% |
| CABLE SPLICERS | 28.82 | 8.47+3% |

| | | |
|---|-------|-------------|
| ELEC0077C 02/01/2001 | | |
| | Rates | Fringes |
| LINE CONSTRUCTION: | | |
| CABLE SPLICERS | 33.89 | 3.875%+6.95 |
| LINEMEN, POLE SPRAYERS, HEAVY LINE EQUIPMENT MAN | 30.58 | 3.875%+6.95 |
| LINE EQUIPMENT MEN | 26.72 | 3.875%+5.20 |
| POWDERMEN, JACKHAMMERMEN | 23.69 | 3.875%+5.20 |
| GROUNDMEN | 22.31 | 3.875%+5.20 |
| TREE TRIMMER | 21.39 | 3.875%+5.20 |

| | | |
|--|-------|---------|
| ELEC0112E 12/01/2000 | | |
| | Rates | Fringes |
| ASOTIN, BENTON, COLUMBIA, FRANKLIN, GARFIELD, KITTITAS, WALLA WALLA, YAKIMA COUNTIES | | |

| | | |
|----------------|-------|---------|
| ELECTRICIANS | 27.75 | 3%+6.93 |
| CABLE SPLICERS | 29.14 | 3%+6.93 |

* ELEC0191C 08/31/2001

| | Rates | Fringes |
|--|-------|---------|
| ISLAND, SAN JUAN, SNOHOMISH, SKAGIT AND WHATCOM COUNTIES | | |
| ELECTRICIANS | 30.21 | 3%+7.78 |
| CABLE SPLICERS | 33.23 | 3%+7.78 |

* ELEC0191D 08/31/2001

| | Rates | Fringes |
|--|-------|---------|
| CHELAN, DOUGLAS, GRANT AND OKANOGAN COUNTIES | | |
| ELECTRICIANS | 26.66 | 3%+8.03 |
| CABLE SPLICERS | 29.33 | 3%+8.03 |

ELEC0970A 12/01/2000

| | Rates | Fringes |
|----------------------------------|-------|---------|
| COWLITZ AND WAHAKIYAKUM COUNTIES | | |
| ELECTRICIANS | 26.80 | 3%+7.50 |
| CABLE SPLICERS | 29.48 | 3%+7.50 |

ENGI0302E 06/01/2001

| | Rates | Fringes |
|--|-------|---------|
| CHELAN (WEST OF THE 120TH MERIDIAN), CLALLAM, DOUGLAS (WEST OF THE 120TH MERIDIAN), GRAYS HARBOR, ISLAND, JEFFERSON, KING, KITSAP, KITTITAS, MASON, OKANOGAN (WEST OF THE 120TH MERIDIAN), SAN JUAN, SKAGIT, SNOHOMISH, WHATCOM AND YAKIMA (WEST OF THE 120TH MERIDIAN) COUNTIES | | |

PROJECTS

CATEGORY A PROJECTS (excludes Category B projects, as show below)

POWER EQUIPMENT OPERATORS:

Zone 1 (0-25 radius miles):

| | | |
|------------|-------|------|
| GROUP 1AAA | 29.61 | 8.38 |
| GROUP 1AA | 29.11 | 8.38 |
| GROUP 1A | 28.61 | 8.38 |
| GROUP 1 | 28.11 | 8.38 |
| GROUP 2 | 27.67 | 8.38 |
| GROUP 3 | 27.31 | 8.38 |
| GROUP 4 | 25.21 | 8.38 |

Zone 2 (26-45 radius miles) - Add \$.70 to Zone 1 rates

Zone 3 (Over 45 radius miles) - Add \$1.00 to Zone 1 rates

BASEPOINTS: Bellingham, Mount Vernon, Kent, Port Angeles, Port Townsend, Aberdeen, Shelton, Bremerton, Wenatchee, Yakima, Seattle, Everett

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1AAA - Cranes-over 300 tons or 300 ft. of boom (including job with attachments)

GROUP 1AA - Cranes - 200 tons to 300 tons or 250 ft. of boom (including jib and attachments); Tower crane over 175 ft. in height, base to boom

GROUP 1A - Cranes - 100 tons thru 199 tons or 150' of boom (including jib with attachments); Crane-overhead, bridge type, 100 tons and over; Tower crane up to 175 ft. in height base to boom; Loader-overhead, 8 yards and over; Shovel, excavator, backhoes-6 yards and over with attachments

GROUP 1 - Cableway; Cranes-45 tons thru 99 tons, under 150 ft. of boom (including jib with attachments); Crane-overhead, bridge type, 45 tons thru 99 tons; Shovel, excavator, backhoes over 3 yards and under 6 yards; Hard tail end dump articulating off-road equipment 45 yards and over; Loader-overhead, 6 yards to, but not including 8 yards; Mucking machine, mole, tunnel, drill and/or shield; Quad 9, HD 41, d-10; Remote control operator on rubber tired earth moving equipment; Rollagon; Scrapers-self-propelled-45 yards and over; Slipform pavers; Transporters, all track or truck type

GROUP 2 - Barrier machine (zipper); Barch Plant operator-concrete; Bump cutter; Cranes-20 tons thru 44 tons with attachments; Cranes-overheads, bridge type-20 tons through 44 tons; Chipper; Concrete pump-truck mount with boom attachment;

Crusher; Deck Engineer/Deck Winches (power); Drilling machine; Excavator, shovel backhoe-3 yards and under; Finishing machine Bidwell, Gamaco and similar equipment; Guardrail punch; Horizontal/directional drill operator; Loaders, overhead under 6 yds.; Loaders-plant feed; Locomotives-all; Mechanics-all; Mixers-asphalt plant; Motor patrol graders-finishing; Pildriver (other than crane mount); Roto-mill, roto-grinder; Screedman, Spreader, Topside Operator-Blaw Knox, Cedar Rapids, Jaeger, Caterpillar, Barbar Green; Scraper-self-propelled, hard tail end dump, articulating off-road equipment-under 45 yards; Subgrader trimmer; Tractors, backhoes-over 75 hp; Transfer material service machine-shuttle buggy, blow knox, roadtec; Truck crane oiler/driver-100 tons and over; Truck mount portable conveyor;Yo Yo Pay Dozer

GROUP 3 - Conveyors; Cranes-thru 19 tons with attachments; Cranes-A-frame over 10 tons; Drill oilers-auger type, truck or crane mount; Dozers D9 and under; Forklifts-3000 lbs and over with attachments; horizontal/directional drill locator; Outside hoists-(elevators and manlifts), air tuggers, strao tower bucket elevators; Hydralifts/boom truck-over 10 tons; Loader-elevating type belt; Motor Patrol Grader-non-finishing; Plant Oiler-asphalt, crusher; Pumps-concrete; Roller, plant mix or multi-lift materials; Saws-concrete; Scrapers-concrete and carryall; Service engineers-equipment; Trenching machines; Truck crane oiler/

driver-under 100 tons Tractors, backhoes-under 75 hp

GROUP 4 - Assistant Engineer; Bobcat; Brooms; Compressor; Concrete Finish Machine-laser screed; Cranes-A-frame-10 tons and under; Elevator and manlift-permanent and shaft type; Forklifts-under 3000 lbs. with attachments; Gradechecker, stakehop; Hydralifts, boom trucks-10 tons and under; Oil distributors, blower distribution and mulch seeding operator; Pavement breaker; Post Hole Digger-mechanical; Power Plant; Pumps-water; Rigger and Bellman; Roller-other than plant mix; Wheel Tractors, farmall type; Shot crete/gunite equipment operator

CATEGORY B PROJECTS - 95% of the basic hourly rate for each group plus full fringe benefits applicable to Category A projects shall apply to the following projects. Reduced rates may be paid on the following:

1. Projects involving work on structures such as buildings and structures whose total value is less than \$1.5 million excluding mechanical, electrical, and utility portions of the contract.
2. Projects of less than \$1 million where no building is involved. Surfacing and paving included, but utilities excluded.
3. Marine projects (docks, wharfs, etc.) less than \$150,000.

WORK PERFORMED ON HYDRAULIC DREDGES:

Total Project Cost \$300,000 and over

| | | |
|---------|-------|------|
| GROUP 1 | 26.85 | 8.38 |
| GROUP 2 | 26.95 | 8.38 |
| GROUP 3 | 27.29 | 8.38 |
| GROUP 4 | 27.34 | 8.38 |
| GROUP 5 | 28.73 | 8.38 |
| GROUP 6 | 26.85 | 8.38 |

GROUP 1: Assistant Mate (Deckhand)
GROUP 2: Oiler
GROUP 3: Assistant Engineer (Electric, Diesel, Steam or Booster Pump); Mates and Boatmen
GROUP 4: Craneman, Engineer Welder
GROUP 5: Leverman, Hydraulic
GROUP 6: Maintenance

Total Project cost under \$300,000

| | | |
|---------|-------|------|
| GROUP 1 | 25.51 | 8.38 |
| GROUP 2 | 25.60 | 8.38 |
| GROUP 3 | 25.93 | 8.38 |
| GROUP 4 | 25.97 | 8.38 |
| GROUP 5 | 27.29 | 8.38 |
| GROUP 6 | 25.51 | 8.38 |

GROUP 1: Assistant Mate (Deckhand)
GROUP 2: Oiler
GROUP 3: Assistant Engineer (Electric, Diesel, Steam, or Booster Pump); Mates and Boatmen
GROUP 4: Craneman, Engineer Welder
GROUP 5: Leverman, Hydraulic

GROUP 6: Maintenance

HEAVY WAGE RATES (CATEGORY A) APPLIES TO CLAM SHELL DREDGE, HOE AND DIPPER, SHOVELS AND SHOVEL ATTACHMENTS, CRANES AND BULLDOZERS.

HANDLING OF HAZARDOUS WASTE MATERIALS: Personnel in all craft classifications subject to working inside a federally designated hazardous perimeter shall be eligible for compensation in accordance with the following group schedule relative to the level of hazardous waste as outlined in the specific hazardous waste project site safety plan.

- H-1 Base wage rate when on a hazardous waste site when not outfitted with protective clothing
- H-2 Class "C" Suit - Base wage rate plus \$.25 per hour.
- H-3 Class "B" Suit - Base wage rate plus \$.50 per hour.
- H-4 Class "A" Suit - Base wage rate plus \$.75 per hour.

* ENGI0370C 06/01/2001

| | Rates | Fringes |
|---|-------|---------|
| ADAMS, ASOTIN, BENTON, CHELAN (EAST OF THE 120TH MERIDIAN), COLUMBIA, DOUGLAS (EAST OF THE 120TH MERIDIAN), FERRY, FRANKLIN, GARFIELD, GRANT, LINCOLN, OKANOGAN (EAST OF THE 120TH MERIDIAN), PEND OREILLE, SPOKANE, STEVENS, WALLA WALLA, WHITMAN AND YAKIMA (EAST OF THE 120TH MERIDIAN) COUNTIES | | |

ZONE 1:

POWER EQUIPMENT OPERATORS:

| | | |
|----------|-------|------|
| GROUP 1A | 20.94 | 6.02 |
| GROUP 1 | 21.49 | 6.02 |
| GROUP 2 | 21.81 | 6.02 |
| GROUP 3 | 22.42 | 6.02 |
| GROUP 4 | 22.58 | 6.02 |
| GROUP 5 | 22.74 | 6.02 |
| GROUP 6 | 23.02 | 6.02 |
| GROUP 7 | 23.29 | 6.02 |
| GROUP 8 | 24.39 | 6.02 |

ZONE DIFFERENTIAL (Add to Zone 1 rate): Zone 2 - \$2.00

Zone 1: Within 45 mile radius of Spokane, Moses Lake, Pasco, Washington; Lewiston, Idaho

Zone 2: Outside 45 mile radius of Spokane, Moses Lake, Pasco, Washington; Lewiston, Idaho

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1A: Boat Operator; Crush Feeder; Oiler; Steam Cleaner

GROUP 1: Bit Grinders; Bolt Threading Machine; Compressors (under 2000 CFM, gas, diesel, or electric power); Deck Hand; Drillers Helper (Assist driller in making drill rod connections, service drill engine and air compressor, repair drill rig and

drill tools, drive drill support truck to and on the job site, remove drill cuttings from around bore hole and inspect drill rig while in operation); Fireman & Heater Tender; Grade Checker; Hydro-seeder, Mulcher, Nozzleman; Oiler Driver, & Cable Tender, Mucking Machine; Pumpman; Rollers, all types on subgrade, including seal and chip coatings (farm type, Case, John Deere & similar, or Compacting Vibrator), except when pulled by Dozer with operable blade; Welding Machine

GROUP 2: A-frame Truck (single drum); Assistant Refrigeration Plant (under 1000 ton); Assistant Plant Operator, Fireman or Pugmixer (asphalt); Bagley or Stationary Scraper; Belt Finishing Machine; Blower Operator (cement); Cement Hog; Compressor (2000 CFM or over, 2 or more, gas diesel or electric power); Concrete Saw (multiple cut); Distributor Leverman; Ditch Witch or similar; Elevator Hoisting Materials; Dope Pots (power agitated); Fork Lift or Lumber Stacker, hydra-lift & similar; Gin Trucks (pipeline); Hoist, single drum; Loaders (bucket elevators and conveyors); Longitudinal Float; Mixer (portable-concrete); Pavement Breaker, Hydra-Hammer & similar; Power Broom; Railroad Ballast Regulation Operator (self-propelled); Railroad Power Tamper Operator (self-propelled); Railroad Tamper Jack Operator (self-propelled); Spray Curing Machine (concrete); Spreader Box (self-propelled); Straddle Buggy (Ross & similar on construction job only); Tractor (Farm type R/T with attachment, except Backhoe); Tugger Operator

GROUP 3: A-frame Truck (2 or more drums); Assistant Refrigeration Plant & Chiller Operator (over 1000 ton); Backfillers (Cleveland & similar); Batch Plant & Wet Mix Operator, single unit (concrete); Belt-Crete Conveyors with

power pack or similar; Belt Loader (Kocal or similar); Bending Machine; Bob Cat; Boring Machine (earth); Boring Machine (rock under 8" bit) (Quarry Master, Joy or similar); Bump Cutter (Wayne, Saginaw or similar); Canal Lining Machine (concrete); Chipper (without crane); Cleaning & Doping Machine (pipeline); Deck Engineer; Elevating Belt-type Loader (Euclid, Barber Green & similar); Elevating Grader-type Loader (Dumor, Adams or similar); Generator Plant Engineers (diesel or electric); Gunnite Combination Mixer & Compressor; Locomotive Engineer; Mixermobile; Mucking Machine; Posthole Auger or Punch; Pump (grout or jet); Soil Stabilizer (P & H or similar); Spreader Machine; Tractor (to D-6 or equivalent) and Traxcavator; Traverse Finish Machine; Turnhead Operator

GROUP 4: Concrete Pumps (squeeze-crete, flow-crete, pump-crete, Whitman & similar); Curb Extruder (asphalt or concrete); Drills (churn, core, calyx or diamond) (operate drilling machine, drive or transport drill rig to and on job site and weld well casing); Equipment Serviceman; Greaser & Oiler; Hoist (2 or more drums or Tower Hoist); Loaders (overhead & front-end, under 4 yds. R/T); Refrigeration Plant Engineer (under 1000 ton); Rubber-tired Skidders (R/T with or without attachments); Surface Heater & Plant Machine; Trenching Machines (under 7 ft. depth capacity); Turnhead (with re-screening); Vacuum Drill (reverse circulation drill under 8" bit)

GROUP 5: Backhoe (under 45,000 gw); Backhoe & Hoe Ram (under 3/4 yd.); Carrydeck & Boom Truck (under 25 tons); Cranes (25 tons & under), all attachments including clamshell, dragline; Derricks & Stifflegs (under 65 tons); Drilling Equipment(8" bit & over) (Robbins, reverse circulation & similar)(operates drilling machine, drive or transport drill rig to and on job site and weld well casing); Hoe Ram; Piledriving Engineers; Paving (dual drum); Railroad Track Liner Operaoatr (self-propelled); Refrigeration Plant Engineer (1000 tons & over); Signalman (Whirleys, Highline Hammerheads or similar)

GROUP 6: Asphalt Plant Operator; Automatic Subgrader (Ditches & Trimmers)(Autograde, ABC, R.A. Hansen & similar on grade wire); Backhoe (45,000 gw and over to 110,000 gw); Backhoes & Hoe Ram (3/4 yd. to 3 yd.); Batch Plant (over 4 units); Batch & Wet Mix Operator (multiple units, 2 & incl. 4); Blade Operator (motor patrol & attachments, Athey & Huber); Boom Cats (side); Cable Controller (dispatcher); Clamshell Operator (under 3 yds.); Compactor (self-propelled with blade); Concrete Pump Boom Truck; Concrete Slip Form Paver; Cranes (over 25 tons, to and including 45 tons), all attachments including clamshell, dragline; Crusher, Grizzle & Screening Plant Operator; Dozer, 834 R/T & similar; Draglines (under 3 yds.); Drill Doctor; H.D. Mechanic; H.D. Welder; Loader Operator (front-end & overhead, 4 yds. incl. 8 yds.); Multiple Dozer Units with single blade; Paving Machine (asphalt and concrete); Quad-Track or similar equipment; Rolleraman (finishing asphalt pavement); Roto Mill (pavement grinder); Scrapers, all, rubber-tired; Screed Operator; Shovel(under 3 yds.); Tractors (D-6 & equivalent & over); Trenching Machines (7 ft. depth & over); Tug Boat Operator

Vactor guzzler, super sucker

GROUP 7: Backhoe (over 110,000 gw); Backhoes & Hoe Ram (3 yds & over); Blade (finish & bluetop) Automatic, CMI, ABC, Finish Athey & Huber & similar when used as automatic; Cableway Operators; Concrete Cleaning/Decontamination machine operator; Cranes (over 45 tons to but not including 85 tons), all attachments including clamshell and dragline; Derricks & Stiffleys (65 tons & over); Elevating Belt (Holland type); Heavy equipment robotics operator; Loader (360 degrees revolving Koehring Scooper or similar); Loaders (overhead & front-end, over 8 yds. to 10 yds.); Rubber-tired Scrapers (multiple engine with three or more scrapers); Shovels (3 yds. & over); Whirleys & Hammerheads, ALL

GROUP 8: Cranes (85 tons and over, and all climbing, overhead,rail and tower), all attachments including clamshell, dragline; Loaders (overhead and front-end, 10 yards and over); Helicopter Pilot

BOOM PAY: (All Cranes, Including Tower)
180' to 250' \$.30 over scale
Over 250' \$.60 over scale

NOTE: In computing the length of the boom on Tower Cranes, they shall be measured from the base of the Tower to the point

of the boom.

HAZMAT: Anyone working on HAZMAT jobs, working with supplied air shall receive \$1.00 an hour above classification.

ENGI0370G 06/01/2000

| | Rates | Fringes |
|---|-------|---------|
| ADAMS, ASOTIN, BENTON, CHELAN (EAST OF THE 120TH MERIDIAN), COLUMBIA, DOUGLAS (EAST OF THE 120TH MERIDIAN), FERRY, FRANKLIN, GARFIELD, GRANT, LINCOLN, OKANOGAN (EAST OF THE 120TH MERIDIAN), PEND OREILLE, SPOKANE, STEVENS, WALLA WALLA, WHITMAN AND YAKIMA (EAST OF THE 120TH MERIDIAN) COUNTIES | | |

WORK PERFORMED ON HYDRAULIC DREDGES

| | | |
|----------|-------|------|
| GROUP 1: | 24.23 | 5.77 |
| GROUP 2: | 24.60 | 5.77 |
| GROUP 3: | 24.63 | 5.77 |
| GROUP 4: | 25.02 | 5.77 |
| GROUP 5: | 24.13 | 5.77 |

GROUP 1: Assistant Mate (Deckhand) and Oiler
GROUP 2: Assistant Engineer (Electric, Diesel, Steam, or Booster Pump); Mates and Boatmen
GROUP 3: Engineer Welder
GROUP 4: Leverman, Hydraulic
GROUP 5: Maintenance

HEAVY WAGE RATES APPLIES TO CLAM SHELL DREDGE, HOE AND DIPPER, SHOVELS AND SHOVEL ATTACHMENTS, CRANES AND BULLDOZERS.

ENGI0612A 06/01/2001

| | Rates | Fringes |
|--|-------|---------|
| LEWIS, PIERCE, PACIFIC (THAT PORTION WHICH LIES NORTH OF A PARALLEL LINE EXTENDED WEST FROM THE NORTHERN BOUNDARY OF WAHKAIKUM COUNTY TO THE SEA IN THE STATE OF WASHINGTON) AND THURSTON COUNTIES | | |

PROJECTS:

CATEGORY A PROJECTS (excludes Category B projects, as shown below)

POWER EQUIPMENT OPERATORS:

ZONE 1 (0-25 radius miles):

| | | |
|------------|-------|------|
| GROUP 1AAA | 29.61 | 8.38 |
| GROUP 1AA | 29.11 | 8.38 |
| GROUP 1A | 28.61 | 8.38 |
| GROUP 1 | 28.11 | 8.38 |
| GROUP 2 | 27.67 | 8.38 |
| GROUP 3 | 27.31 | 8.38 |
| GROUP 4 | 25.21 | 8.38 |

ZONE 2 (26-45 radius miles) - Add \$.70 to Zone 1 rates

ZONE 3 (Over 45 radius miles) - Add \$1.00 to Zone 1 rates

BASEPOINTS: Tacoma, Olympia, and Centralia

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1AAA - Cranes-300 tons, or 300 ft of boom (including jib with attachments)

GROUP 1AA - Cranes 200 tons to 300 tons, or 250 ft of boom (including jib with attachments); Tower crane over 175 ft in height, base to boom

GROUP 1A - Crane 100 tons thru 199 tons, or 150 of boom (including jib with attachments); Crane-overhead, bridge type, 100 tons and over; Shovel, excavator, backhoes-6 yds and over with attachments

GROUP 1 - Cableways; Cranes-45 tons thru 99 tons, under 150 ft of boom (including jib with attachments); Crane-overhead, bridge type - 45 tons thru 99 tons; Excavator, shovel, backhoes over 3 yards and under 6 yards; hard tail end dump articulating off-road equipment 45 yards and over; loader-overhead 6 yards to, but not including 8 yards; Mucking machine, mole, tunnel, drill and/or shield; Quad 9, HD 41, D-10; Remote control operator on rubber tired earth moving equipment; Rollagon; Scrapers-self-propelled-45 yds and over; Slipform pavers; Transporters-all track or truck type

GROUP 2 - Barrier machine (zipper); Batch Plant Operator-concrete; Bump cutter; Cranes-20 tons through 44 tons with attachments; Crane-overhead, bridge type-20 tons thru 44 tons; Chipper, Concrete Pump-truck mounted with boom attachment;

Crushers; Deck Engineer/Deck Winches (power); Drilling machine; Excavator, shovel, backhoe-3yards and under; Finishing machine, Bidwell, Gamaco and similar equipment; Guardrail punch; Horizontal/directional drill operator; Loaders, overhead under 6 yds.; Loaders, plant feed; Locomotive-all; Mechanics-all; Mixers, asphalt plant; Motor patrol graders-finishing; Piledriver (other than crane mount); Roto-mill, roto grinder; screedman, spreader, topside operator-Blaw Knox, Cedar Rapids, Jaeger, Caterpillar, Barbar Green; Scraper-self propelled, hard tail end dump, articulating off-road equipment under 45 yds.; Subgrader trimmer; Tractors, backhoes over 75 hp.; Transfer material service machine-shuttle buggy, Blaw Knox-Roadtec; Truck Crane Oiler/driver-100 tons and over, Truck Mount Portable Conveyor; Yo Yo Pay dozer.

GROUP 3 - Conveyors; Cranes-thru 19 tons with attachments; Cranes-A-frame over 10 tons; Drill Oilers-Auger type, truck or crane mount; Dozers-D-9 and under; Forklifts-3000 lbs. and over with attachments; Horizontal/directional drill locator; Outside hoists-(elevators and manlifts), air tuggers, strato tower bucket elevators; Hydralifts/Boom Trucks-over 10 tons; Loaders-elevating type, belt; Motor patrol grader-nonfinishing; Plant Oiler-Asphalt, Crusher; Pumps, Concrete; Roller, plant mix or multi-lift materials; Saws-concrete; Scrapers-Concrete and Carry all; Trenching machines; Truck Crane Oiler/Driver-under 100

tons; Tractor, backhoe-under 75 hp

GROUP 4 - Assistant Engineer; Bobcat; Brooms; Compressor; Concrete Finish Machine-laser screed; Crane-A-Frame, 10 tons and under; Elevator and manlift-permanent and shaft type; Forklifts-under 3000 lbs. with attachments; Graderchecker, stakehop; Hydralifts, boom trucks, 10 tons and under; Oil distributors, blower distribution and mulch seeding operator; Pavement breaker; Posthole Digger-mechanical; Power plant; Pumps-Water; Roller-other than Plant Mix; Wheel Tractors, Farmall type; Shotcrete/Gunite Equipment Operator

CATEGORY B PROJECTS - 95% of the basic hourly rate for each group plus full fringe benefits applicable to Category A projects shall apply to the following projects: Reduced rates may be paid on the following:

1. Projects involving work on structures such as buildings and structures whose total value is less than \$1.5 million excluding mechanical, electrical, and utility portions of the contract.
2. Projects of less than \$1 million where no building is involved. Surfacing and paving included, but utilities excluded.
3. Marine projects (docts, wharfs, etc.) less than \$150,000

WORK PERFORMED ON HYDRAULIC DREDGES:

Total Project cost \$300,000 and over

| | | |
|---------|-------|------|
| GROUP 1 | 26.85 | 8.38 |
| GROUP 2 | 26.95 | 8.38 |
| GROUP 3 | 27.29 | 8.38 |
| GROUP 4 | 27.34 | 8.38 |
| GROUP 5 | 28.73 | 8.38 |
| GROUP 6 | 26.85 | 8.38 |

GROUP 1: Assistant Mate (Deckhand)
GROUP 2: Oiler
GROUP 3: Assistant Engineer (Electric, Diesel, Steam or Booster Pump); Mates and Boatmen
GROUP 4: Craneman, Engineer Welder
GROUP 5: Leverman, Hydraulic
GROUP 6: Maintenance

Total Project Cost under \$300,000

| | | |
|---------|-------|------|
| GROUP 1 | 25.51 | 8.38 |
| GROUP 2 | 25.60 | 8.38 |
| GROUP 3 | 25.93 | 8.38 |
| GROUP 4 | 25.97 | 8.38 |
| GROUP 5 | 27.29 | 8.38 |
| GROUP 6 | 25.51 | 8.38 |

GROUP 1: Assistant Mate (Deckhand)
GROUP 2: Oiler
GROUP 3: Assistant Engineer (Electric, Diesel, Steam or Booster Pump); Mates and Boatmen
GROUP 4: Craneman, Engineer Welder
GROUP 5: Leverman, Hydraulic
GROUP 6: Maintenance

HEAVY WAGE RATES APPLIES TO CLAM SHEEL DREDGE, HOE AND DIPPER,
SHOVELS AND SHOVEL ATTACHMENTS, CRANES AND BULLDOZERS

HANDLING OF HAZARDOUS WASTE MATERIALS

H-1 - When not outfitted with protective clothing of
level D equipment - Base wage rate
H-2 - Class "C" Suit - Base wage rate + \$.25 per hour
H-3 - Class "B" Suit - Base wage rate + \$.50 per hour
H-4 - Class "A" Suit - Base wage rate +\$.75 per hour

ENGI0701D 01/01/2001

CLARK, COWLITZ, KLICKITAT, PACIFIC (SOUTH), SKAMANIA, AND
WAHKIAKUM COUNTIES

POWER EQUIPMENT OPERATORS (See Footnote A)

ZONE 1:

| | Rates | Fringes |
|----------|-------|---------|
| GROUP 1 | 28.21 | 8.20 |
| GROUP 1A | 29.62 | 8.20 |
| GROUP 1B | 31.03 | 8.20 |
| GROUP 2 | 27.03 | 8.20 |
| GROUP 3 | 26.31 | 8.20 |
| GROUP 4 | 25.82 | 8.20 |
| GROUP 5 | 25.25 | 8.20 |
| GROUP 6 | 23.01 | 8.20 |

Zone Differential (add to Zone 1 rates):

Zone 2 - \$1.50

Zone 3 - 3.00

For the following metropolitan counties: MULTNOMAH; CLACKAMAS;
MARION; WASHINGTON; YAMHILL; AND COLUMBIA; CLARK; AND COWLITZ
COUNTY, WASHINGTON WITH MODIFICATIONS AS INDICATED:

All jobs or projects located in Multnomah, Clackamas and Marion
Counties, West of the western boundary of Mt. Hood National
Forest and West of Mile Post 30 on Interstate 84 and West of Mile
Post 30 on State Highway 26 and West of Mile Post 30 on Highway
22 and all jobs or projects located in Yamhill County, Washington
County and Columbia County and all jobs or projects located in
Clark & Cowlitz County, Washington except that portion of Cowlitz
County in the Mt. St. Helens "Blast Zone" shall receive Zone I
pay for all classifications.

All jobs or projects located in the area outside the identified
boundary above, but less than 50 miles from the Portland City
Hall shall receive Zone II pay for all classifications.

All jobs or projects located more than 50 miles from the Portland
City Hall, but outside the identified border above, shall receive
Zone III pay for all classifications.

For the following cities: ALBANY; BEND; COOS BAY; EUGENE; GRANTS

PASS; KLAMATH FALLS; MEDFORD; ROSEBURG

All jobs or projects located within 30 miles of the respective city hall of the above mentioned cities shall receive Zone I pay for all classifications.

All jobs or projects located more than 30 miles and less than 50 miles from the respective city hall of the above mentioned cities shall receive Zone II pay for all classifications.

All jobs or projects located more than 50 miles from the respective city hall of the above mentioned cities shall receive Zone III pay for all classifications.

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: CONCRETE: Batch Plant and/or Wet Mix Operator, three units or more; CRANE: Helicopter Operator, when used in erecting work; Whirley Operator, 90 ton and over; LATTICE BOOM CRANE: Operator 200 tons through 299 tons, and/or over 200 feet boom; HYDRAULIC CRANE: Hydraulic Crane Operator 90 tons through 199 tons with luffing or tower attachments; FLOATING EQUIPMENT: Floating Crane, 150 ton but less than 250 ton

GROUP 1A: CRANE: Hydraulic Operator, 200 tons and over (with luffing or tower attachment); LATTICE BOOM CRANE: Operator, 200 tons through 299 tons, with over 200 feet boom; FLOATING EQUIPMENT: Floating Crane 250 ton and over

GROUP 1B: LATTICE BOOM CRANE: Operator, 300 tons through 399 tons with over 200 feet boom; Operator 400 tons and over; FLOATING EQUIPMENT: Floating Crane 350 ton and over

GROUP 2: ASPHALT: Asphalt Plant Operator (any type); Roto Mill, pavement profiler, operator, 6 foot lateral cut and over; BLADE: Auto Grader or "Trimmer" (Grade Checker required); Blade Operator, Robotic; BULLDOZERS: Bulldozer operator over 120,000 lbs and above; Bulldozer operator, twin engine; Bulldozer Operator, tandem, quadnine, D10, D11, and similar type); Bulldozere Robotic Equipment (any type; CONCRETE: Batch Plant and/or Wet Mix Operator, one and two drum; Automatic Concrete Slip Form Paver Operator; Concrete Canal Line Operator; Concrete Profiler, Diamond Head; CRANE: Cableway Operator, 25 tons and over; HYDRAULIC CRANE: Hydraulic crane Operator 50 tons through 89 tons (with luffing or tower attachment); hydraulic crane operator 90 tons through 199 tons (with luffing or tower attachment); TOWER/WHIRLEY OPERATOR: Tower Crane Operator; Whirley Operator, under 90 tons; LATTICE BOOM CRANE: 90 through 199 tons and/or 150 to 200 feet boom; CRUSHER: Crusher Plant Operator; FLOATING EQUIPMENT: Floating Clamshell, etc.operator, 3 cu. yds. and over; Floating Crane (derrick barge) Operator, 30 tons but less than 150 tons; LOADERS: Loader Operator, 6 cu. yds. but less than 12 cu. yds.; Loader Operator, 12 cu. yds. and over; Loader 120,000 lbs. and above; REMOTE CONTROL: Remote controlled earth-moving equipment (no one operator shall operate more than two pieces of earth-moving

equipment at one time); RUBBER-TIRED SCRAPERS: Rubber-tired Scraper Operator, with tandem scrapers, multi-engine; SHOVEL, DRAGLINE, CLAMSHELL, BACKHOE, SKOOPER OPERATOR: Shovel, etc., 3 cu. yds., but less than 5 cu. yds.; Shovel, etc., 5 cu. yds. and over; TRENCH MACHINE: Wheel Excavator, under 750 cu. yds. per hour (Grade Oiler required); Canal Trimmer (Grade Oiler required); Wheel Excavator, over 750 cu. yds. per hour (two Operators and at least one Grade Oiler required); Band Wagon (in conjunction with wheel excavator); UNDERWATER EQUIPMENT: Underwater Equipment Operator, remote or otherwise; HYDRAULIC HOES EXCAVATOR: Excavator over 130,000 lbs.

GROUP 3: LATTICE BOOM CRANES: Lattice Boom Crane-50 through 89 tons (and less than 150 feet boom); FORKLIFT: Rock Hound Operator; HYDRAULIC HOES EXCAVATOR: excavator over 80,000 lbs. through 130,000 lbs.; LOADERS: Loader operator 60,000 and less than 120,000; RUBBER-TIRED SCRAPERS: Scraper Operator, with tandem scrapers; SHOVEL, DRAGLINE, CLAMSHELL, SKOOPER OPERATOR: Shovel, Dragline, Clamshell operators 3 cu. yds. but less than 5 cu yds.; Self Loading, paddle wheel, auger type, finish and/or 2 or more units; BULLDOZERS: Bulldozer operator over 70,000 lbs. up to and including 120,000

GROUP 4: ASPHALT: Blade Operator; Blade Operator, finish; Screed Operator; Asphalt Paver Operator (Screed man required); Diesel-Electric engineer, Plant; Roto-Mill, pavement profiler, operator, under six foot lateral cut; BLADE: Blade Operator, externally controlled by electronic, mechanical hydraulic means; Blade operator, multi-engine; BULLDOZERS: Bulldozer Operator over 20,000 lbs and more than 100 horse up to 70,000 lbs;

Drill Cat Operator; Side-boom Operator; Cable-Plow Operator (any type); CLEARING: Log Skidders; Chippers; Incinerator; Stump Splitter (loader mounted or similar type); Stump Grinder (loader mounted or similar type); Tub Grinder; Land Clearing Machine (Track mounted forestry mowing & Grinding machine); Hydro Axe (loader mounted or similar type); COMPACTORS SELF PROPELLED: Compactor Operator, with blade; Compactor Operator, multi-engine; Compactor Operator, robotic; CONCRETE: Mixer Mobile Operator; Screed Operator; Concrete Cooling Machine Operator; Concrete Paving Road Mixer; Concrete Breaker; Reinforced Tank Banding Machine (K-17 or similar types); Laser Screed; CRANE: Chicago boom and similar types; Lift Slab Machine Operator; Boom type lifting device, 5 ton capacity or less; Hoist Operator, two (2) drum; Hoist Operator, three (3) or more drums; Derrick Operator, under 100 ton; Hoist Operator, stiff leg, guy derrick or similar type, 50 ton and over; Cableway Operator up to twenty (25) ton; Bridge Crane Operator, Locomotive, Gantry, Overhead; Cherry Picker or similar type crane hoist five (5) ton capacity or less; Hydraulic Crane Operator, under 50 tons; LATTICE BOOM CRANE OPERATOR: Lattice Boom Crane Operator, under 50 tons; CRUSHER: Generator Operator; Diesel-Electric Engineer; Grizzley Operator; DRILLING: Drill Doctor; Boring Machine Operator; Driller-Per percussion, Diamond, Core, Cable, Rotary and similar type; Cat Drill (John Henry); Directional Drill Operator over 20,000 lbs pullback; FLOATING EQUIPMENT: Diesel-electric Engineer; Jack Operator, elevating barges, Barge Operator, self-

unloading; Piledriver Operator (not crane type) (Deckhand required); Floating Clamshell, etc. Operator, under 3 cu. yds. (Fireman or Diesel-Electric Engineer required); Floating Crane (derrick barge) Operator, less than 30 tons; GENERATORS: Generator Operator; Diesel-electric Engineer; GUARDRAIL EQUIPMENT: Guardrail Punch Operator (all types); Guardrail Auger Operator (all types); Combination Guardrail machines, i.e., punch auger, etc.; HEATING PLANT: Surface Heater and Planer Operator; HYDRAULIC HOES EXCAVATOR: Robotic Hydraulic backhoe operator, track and wheel type to up to including 20,000 lbs. with any or all attachments; Excavator Operator over 20,000 lbs through 80,000 lbs.; LOADERS: Belt Loaders, Kolman and Ko Cal types; Loaders Operator, front end and overhead, 25,000 lbs and less than 60,000 lbs; Elevating Grader Operator by Tractor operator, Sierra, Euclid or similar types; PILEDRIVERS: Hammer Operator; Piledriver Operator (not crane type); PIPELINE, SEWER WATER: Pipe Cleaning Machine Operator; Pipe Doping Machine Operator; Pipe Bending Machine Operator; Pipe Wrapping Machine Operator; Boring Machine Operator; Back Filling Machine Operator; REMOTE CONTROL: Concrete Cleaning Decontamination Machine Operator; Ultra High Pressure Water Jet Cutting Tool System Operator/Mechanic; Vacuum Blasting Machine Operator/mechanic; REPAIRMEN, HEAVY DUTY: Diesel Electric Engineer (Plant or Floating); Bolt Threading Machine operator; Drill Doctor (Bit Grinder); H.D. Mechanic; H.D. Welder; Machine Tool Operator; Combination H.D. Mechanic-Welder, when dispatched and/or when required to do both; Welder-Certified, when dispatched and/or required; RUBBER-TIRED SCRAPERS: Rubber-tired Scraper Operator, single engine, single scraper; Self-loading, paddle wheel, auger type under 15 cu. yds.; Rubber-tired Scraper Operator, twin

engine; Rubber-tired Scraper Operator, with push-pull attachments; Self Loading, paddle wheel, auger type 15 cu. yds. and over, single engine; Water pulls, water wagons; SHOVEL, DRAGLINE, CLAMSHELL, BACKHOE, SKOOPER OPERATOR: Diesel Electric Engineer; Stationary Drag Scraper Operator; Shovel, Dragline, Clamshell, Operator under 3 cu yds.; Grade-all Operator; Shovel, Dragline, Clamshell, Operator 3 cu yds, but less than 5 cu yds.

GROUP 5: ASPHALT: Extrusion Machine Operator; Roller Operator (any asphalt mix); Asphalt Burner and Reconditioner Operator (any type), 84; Roto-Mill, pavement profiler, ground man BULLDOZERS: Bulldozer operator, 20,000 lbs. or less or 100 horse or less; COMPRESSORS: Compressor Operator any power), over 1,250 cu. ft. total capacity; COMPACTORS: Compactor Operator, including vibratory; Wagner Pactor Operator or similar type (without blade); CONCRETE: Combination mixer and Compressor Operator, gunite work; Concrete Batch Plant Quality Control Operator; Beltcrete Operator; Pumpcrete Operator (any type); Pavement Grinder and/or Grooving Machine Operator (riding type); Cement Pump Operator, Fuller-Kenyon and similar; Concrete Pump Operator; Grouting Machine Operator; Concrete mixer operator, single drum, under five (5) bag capacity; Concrete Mixer Operator, single drum, under 5 bag capacity and over; Cast place pipe laying machine; Maginnis Internal Full Slab Vibrator Operator; Concrete Finishing machine Operator, Clary, Johnson, Bidwell, Burgess bridge deck or similar type; Curb Machine Operator, mechanical

Berm, Curb and/or Curb and Gutter; Concrete Joint Machine Operator; Concrete Planer Operator; Tower Mobile Operator; Power Jumbo Operator setting slip forms; Slip Form Pumps, power driven hydraulic lighting device for concrete forms; Concrete Paving Machine Operator; Concrete Finishing Machine Operator; Concrete Spreader Operator; CRANE: Helicopter Hoist Operator; Hoist Operator, single drum; Elevator Operator; A-frame Truck Operator, Double drum; Boom Truck Operator; HYDRAULIC CRANE OPERATOR: Hydraulic Boom Truck, Pittman; DRILLING: Churn Drill and Earth Boring Machine Operator; Directional Drill Operator over 20,000 lbs pullback; FLOATING EQUIPMENT: Fireman; FORKLIFT: Lull Hi-Lift Operator or similar type; Fork Lift, over 5 ton and/or robotic; HYDRAULIC HOES EXCAVATORS: Hydraulic Backhoe Operator, wheel type (Ford, John Deere, Case type); Hydraulic Backhoe Operator track type up to and including WHEEL 20,000 lbs.; LOADERS: Loaders, rubber-tired type, less than 25,000 lbs; Elevating Grader Operator, Tractor Towed requiring Operator or Grader; OILERS: Service Oiler (Greaser); PIPELINE, SEWER WATER: Hydraulic Pipe Press Operator; Hydra Hammer or similar types; Pavement Breaker Operator; PUMPS: Pump Operator, more than 5 (any size); Pot Rammer Operator; RAILROAD EQUIPMENT: Locomotive Operator, under 40 tons; Ballast Regulator Operator; Ballast Tamper Multi-Purpose Operator; Track Liner Operator; Tie Spacer Operator; Shuttle Car Operator; Locomotive Operator, 40 tons and over

GROUP 6: ASPHALT: Plant Oiler; Plant Fireman; Pugmill Operator (any type); Truck mounted asphalt spreader, with screed; COMPRESSORS: Compressor Operator (any power), under 1,250 cu. ft. total capacity; CONCRETE: Plant Oiler, Assistant Conveyor

Operator; Conveyor Operator; Mixer Box Operator (C.T.B., dry batch, etc.); Cement Hog Operator; Concrete Saw Operator; Concrete Curing Machine Operator (riding type); Wire Mat or Brooming Machine Operator; CRANE: Oiler; Fireman, all equipment; Truck Crane Oiler Driver; A-frame Truck Operator, single drum; Tugger or Coffin Type Hoist Operator; CRUSHER: Crusher Oiler; Crusher Feeder; DRILLING: Drill Tender; Auger Oiler; FLOATING EQUIPMENT: Deckhand; Boatman; FORKLIFT: Self-propelled Scaffolding Operator, construction job site (excluding working platform); Fork Lift or Lumber Stacker Operator, construction job site; Ross Carrier Operator, construction job site; GUARDRAIL EQUIPMENT: Oiler; Auger Oiler; Oiler, combination guardrail machines; Guardrail Punch Oiler; HEATING PLANT: Temporary Heating Plant Operator; LOADERS: Bobcat, skid steer (less than 1 cu yd.); Bucket Elevator Loader Operator, BarberGreene and similar types; OILERS: Oiler; Guardrail Punch Oiler; Truck Crane Oiler-Driver; Auger Oiler; Grade Oiler, required to check grade; Grade Checker; PIPELINE SEWER WATER: Tar Pot Fireman; Tar Pot Fireman (power agitated); PUMPS: Pump Operator (any power); Hydrostatic Pump Operator; RAILROAD EQUIPMENT: Brakeman; Oiler; Switchman; Motorman; Ballast Jack Tamper Operator; SHOVEL, DRAGLINE, CLAMSHELL, SKOOPER, ETC. OPERATOR: Oiler, Grade Oiler (required to check grade); Grade Checker; Fireman

ENGI0701E 06/01/2001

LABO0001D 06/01/2001

Rates Fringes
CHELAN, DOUGLAS (WEST OF THE 120TH MERIDIAN), KITTITAS AND
YAKIMA COUNTIES

LABORERS:

ZONE 1:

| | | |
|---------|-------|------|
| GROUP 1 | 14.46 | 5.80 |
| GROUP 2 | 16.78 | 5.80 |
| GROUP 3 | 18.50 | 5.80 |
| GROUP 4 | 18.98 | 5.80 |
| GROUP 5 | 19.34 | 5.80 |

ZONE DIFFERENTIAL (ADD TO ZONE 1 RATES):

ZONE 2 - \$.70
ZONE 3 - \$1.00

BASE POINTS: CHELAN, SUNNYSIDE, WENATCHEE,
AND YAKIMA

ZONE 1 - Projects within 25 radius miles of the respective city
hall
ZONE 2 - More than 25 but less than 45 radius miles from the
respective city hall
ZONE 3 - More than 45 radius miles from the respective city hall

CALLAM, GRAYS HARBOR, ISLAND, JEFFERSON, KING, KITSAP, LEWIS,
MASON, PACIFIC (NORTH OF STRAIGHT LINE MADE BY EXTENDING THE
NORTH BOUNDARY WAHAKIACUM COUNTY WEST TO THE PACIFIC OCEAN),
PIERCE, SAN JUAN, SKAGIT, SNOHOMISH, THURSTON AND WHATCOM
COUNTIES

LABORERS:

ZONE 1:

| | | |
|---------|-------|------|
| GROUP 1 | 16.92 | 5.80 |
| GROUP 2 | 19.24 | 5.80 |
| GROUP 3 | 23.92 | 5.80 |
| GROUP 4 | 24.40 | 5.80 |
| GROUP 5 | 24.76 | 5.80 |

ZONE DIFFERENTIAL (ADD TO ZONE 1 RATES):

ZONE 2 - \$.70
ZONE 3 - \$1.00

BASE POINTS: BELLINGHAM, MT. VERNON, EVERETT,
SEATTLE, KENT, TACOMA, OLYMPIA,
CENTRALIA, ABERDEEN, SHELTON, PT.
TOWNSEND, PT. ANGELES, AND BREMERTON

ZONE 1 - Projects within 25 radius miles of the respective city
hall
ZONE 2 - More than 25 but less than 45 radius miles from the
respective city hall
ZONE 3 - More than 45 radius miles from the respective city hall

LABORERS CLASSIFICATIONS

GROUP 1: Landscaping and Planting; Watchman; Window Washer/Cleaner (detail clean-up, such as but not limited to cleaning floors, ceilings, walls, windows, etc., prior to final acceptance by the owner)

GROUP 2: Batch Weighman; Crusher Feeder; Fence Laborer; Flagman; Pilot Car

GROUP 3: General Laborer; Air, Gas, or Electric Vibrating Screed; Asbestos Abatement Laborer; Ballast Regulator Machine; Brush Cutter; Brush Hog Feeder; Burner; Carpenter Tender; Cement Finisher Tender; Change House or Dry Shack; Chipping Gun (under 30 lbs.); Choker Setter; Chuck Tender; Clean-up Laborer; Concrete Form Stripper; Curing Laborer; Demolition (wrecking and moving including charred material); Ditch Digger; Dump Person; Fine Graders; Firewatch; Form Setter; Gabian Basket Builders; Grout Machine Tender; Grinders; Guardrail Erector; Hazardous Waste Worker (Level C); Maintenance Person; Material Yard Person; Pot Tender; Rip Rap Person; Riggers; Scale Person; Sloper Sprayer; Signal Person; Stock Piler; Stake Hopper; Toolroom Man (at job site); Topper-Tailer; Track Laborer; Truck Spotter; Vinyl Seamer

GROUP 4: Cement Dumper-Paving; Chipping Gun (over 30 lbs.); Clary Power Spreader; Concrete Dumper/Chute Operator; Concrete

Saw Operator; Drill Operator (hydraulic, diamond, aiartrac); Faller and Bucker Chain Saw; Grade Checker and Transit Person; Groutmen (pressure) including post tension beams; Hazardous Waste Worker (Level B); High Scaler; Jackhammer; Laserbeam Operator; Manhole Builder-Mudman; Mortarman and Hodcarrier; Nozzleman (concrete pump, green cutter when using combination of high pressure air and water on concrete and rock, sandblast, gunite, shotcrete, water blaster, vacuum blaster); Pavement Breaker; Pipe Layer and Caulker; Pipe Pot Tender; Pipe Reliner (not insert type); Pipe Wrapper; Power Jacks; Railroad Spike Puller-Power; Raker-Asphalt; Rivet Buster; Rodder; Sloper (over 20'); Spreader (concrete); Tamper and Similar electric, air and glas operated tool; Timber Person-sewer (lagger shorer and cribber); Track Liner Power; Tugger Operator; Vibrator; Well Point Laborer

GROUP 5: Caisson Worker; Miner; Powderman; Re-Timberman; Hazardous Waste Worker (Level A).

LABO0238E 06/01/2001

| | Rates | Fringes |
|--|-------|---------|
| ADAMS, ASOTIN, BENTON, COLUMBIA, DOUGLAS (EAST OF THE 120TH MERIDIAN), FERRY, FRANKLIN, GARFIELD, GRANT, LINCOLN, OKANOGAN, PEND OREILLE, STEVENS, SPOKANE, WALLA WALLA AND WHITMAN COUNTIES | | |

LABORERS:

ZONE 1:

| | | |
|---------|-------|------|
| GROUP 1 | 17.66 | 5.00 |
| GROUP 2 | 19.76 | 5.00 |

| | | |
|---------|-------|------|
| GROUP 3 | 20.03 | 5.00 |
| GROUP 4 | 20.30 | 5.00 |
| GROUP 5 | 20.58 | 5.00 |
| GROUP 6 | 21.95 | 5.00 |

Zone Differential (Add to Zone 1 rate): \$2.00

BASE POINTS: Spokane, Moses Lake, Pasco, Lewiston

Zone 1: 0-45 radius miles from the main post office.

Zone 2: 45 radius miles and over from the main post office.

LABORERS CLASSIFICATIONS

GROUP 1: Flagman; Landscape Laborer; Scaleman; Traffic Control Maintenance Laborer (to include erection and maintenance of barricades, signs and relief of flagperson); Window Washer/Cleaner (detail cleanup, such as, but not limited to cleaning floors, ceilings, walls, windows, etc. prior to final acceptance by the owner)

GROUP 2: Asbestos Abatement Worker; Brush Hog Feeder; Carpenter Tender; Cement Handler; Clean-up Laborer; Concrete Crewman (to include stripping of forms, hand operating jacks on slip form construction, application of concrete curing compounds, pumpcrete

machine, signaling, handling the nozzle of squeezecrete or similar machine, 6 inches and smaller); Confined Space Attendant; Concrete Signalman; Crusher Feeder; Demolition (to include clean-up, burning, loading, wrecking and salvage of all material); Dumpman; Fence Erector; Firewatch; Form Cleaning Machine Feeder, Stacker; General Laborer; Grout Machine Header Tender; Guard Rail (to include guard rails, guide and reference posts, sign posts, and right-of-way markers); Hazardous Waste Worker, Level D (no respirator is used and skin protection is minimal); Miner, Class "A" (to include all bull gang, concrete crewman, dumpman and pumpcrete crewman, including distributing pipe, assembly & dismantle, and nipper); Nipper; Riprap Man; Sandblast Tailhoseman; Scaffold Erector (wood or steel); Stake Jumper; Structural Mover (to include separating foundation, preparation, cribbing, shoring, jacking and unloading of structures); Tailhoseman (water nozzle); Timber Bucker and Faller (by hand); Track Laborer (RR); Truck Loader; Well-Point Man; All Other Work Classifications Not Specially Listed Shall Be Classified As General Laborer

GROUP 3: Asphalt Raker; Asphalt Roller, walking; Cement Finisher Tender; Concrete Saw, walking; Demolition Torch; Dope Pot Firemen, non-mechanical; Driller Tender (when required to move and position machine); Form Setter, Paving; Grade Checker using level; Hazardous Waste Worker, Level C (uses a chemical "splash suit" and air purifying respirator); Jackhammer Operator; Miner, Class "B" (to include brakeman, finisher, vibrator, form setter); Nozzleman (to include squeeze and flo-crete nozzle); Nozzleman, water, air or steam; Pavement Breaker (under 90 lbs.); Pipelayer, corrugated metal culvert; Pipelayer, multi-

plate; Pot Tender; Power Buggy Operator; Power Tool Operator, gas, electric, pneumatic; Railroad Equipment, power driven, except dual mobile power spiker or puller; Railroad Power Spiker or Puller, dual mobile; Rodder and Spreader; Tamper (to include operation of Barco, Essex and similar tampers); Trencher, Shawnee; Tugger Operator; Wagon Drills; Water Pipe Liner; Wheelbarrow (power driven)

GROUP 4: Air and Hydraulic Track Drill; Brush Machine (to include horizontal construction joint cleanup brush machine, power propelled); Caisson Worker, free air; Chain Saw Operator and Faller; Concrete Stack (to include laborers when laborers working on free standing concrete stacks for smoke or fume control above 40 feet high); Guniting (to include operation of machine and nozzle); Hazardous Waste Worker, Level B (uses same respirator protection as Level A. A supplied air line is provided in conjunction with a chemical "splash suit"); High Scaler; Laser Beam Operator (to include grade checker and elevation control); Miner, Class C (to include miner, nozzleman for concrete, laser beam operator and rigger on tunnels); Monitor Operator (air track or similar mounting); Mortar Mixer; Nozzleman (to include jet blasting nozzleman, over 1,200 lbs., jet blast machine power propelled, sandblast nozzle); Pavement Breaker (90 lbs. and over); Pipelayer (to include working topman, caulker, collarman, jointer, mortarman, rigger, jacker, shorer, valve or meter installer); Pipewrapper; Plasterer Tender; Vibrators (all)

GROUP 5 - Drills with Dual Masts; Hazardous Waste Worker, Level A (utilizes a fully encapsulated suit with a self-contained breathing apparatus or a supplied air line); Miner Class "D", (to include raise and shaft miner, laser beam operator on riases and shafts)

GROUP 6 - Powderman

LABO0238G 06/01/2000

| | Rates | Fringes |
|--|-------|---------|
| COUNTIES EAST OF THE 120TH MERIDIAN: ADAMS, ASOTIN, BENTON, COLUMBIA, DOUGLAS, FERRY, FRANKLIN, GARFIELD, GRANT, LINCOLN, OKANOGAN, PEND OREILLE, STEVENS, SPOKANE, WALLA WALLA, WHITMAN | | |
| HOD CARRIERS | 20.79 | 4.76 |

LABO0335A 06/01/2001

| | Rates | Fringes |
|--|-------|---------|
| CLARK, COWLITZ, KLUCKITAT, PACIFIC (SOUTH OF A STRAIGHT LINE MADE BY EXTENDING THE NORTH BOUNDARY LINE OF WAHKIAKUM COUNTY WEST TO THE PACIFIC OCEAN), SKAMANIA AND WAHKIAKUM COUNTIES | | |

ZONE 1:

LABORERS:

| | | |
|---------|-------|------|
| GROUP 1 | 22.27 | 6.75 |
| GROUP 2 | 22.77 | 6.75 |
| GROUP 3 | 23.15 | 6.75 |

| | | |
|---------|-------|------|
| GROUP 4 | 23.47 | 6.75 |
| GROUP 5 | 20.12 | 6.75 |
| GROUP 6 | 18.06 | 6.75 |
| GROUP 7 | 15.36 | 6.75 |

Zone Differential (Add to Zone 1 rates):

Zone 2 \$ 0.65
 Zone 3 - 1.15
 Zone 4 - 1.70
 Zone 5 - 2.75

BASE POINTS: GOLDENDALE, LONGVIEW, AND VANCOUVER

ZONE 1: Projects within 30 miles of the respective city all.
 ZONE 2: More than 30 miles but less than 40 miles from the
 respective city hall.
 ZONE 3: More than 40 miles but less than 50 miles from the
 respective city hall.
 ZONE 4: More than 50 miles but less than 80 miles from the
 respective city hall.
 ZONE 5: More than 80 miles from the respective city hall.

LABORERS CLASSIFICATIONS

GROUP 1: Asphalt Plant Laborers; Asphalt Spreaders; Batch
 Weighman; Broomers; Brush Burners and Cutters; Car and Truck

Loaders; Carpenter Tender; Change-House Man or Dry Shack Man;
 Choker Setter; Clean-up Laborers; Curing, Concrete; Demolition,
 Wrecking and Moving Laborers; Dumpers, road oiling crew; Dumpmen
 (for grading crew); Elevator Feeders; Guard Rail, Median Rail
 Reference Post, Guide Post, Right of Way Marker; Fine Graders;
 Fire Watch; Form Strippers (not swinging stages); General
 Laborers; Hazardous Waste Worker; Leverman or Aggregate Spreader
 (Flaherty and similar types); Loading Spotters; Material Yard Man
 (including electrical); Pittsburgh Chipper Operator or Similar
 Types; Railroad Track Laborers; Ribbon Setters (including steel
 forms); Rip Rap Man (hand placed); Road Pump Tender; Sewer Labor;
 Signalman; Skipman; Slopers; Spraymen; Stake Chaser; Stockpiler;
 Tie Back Shoring; Timber Faller and Bucker (hand labor); Toolroom
 Man (at job site); Tunnel Bullgang (above ground); Weight-Man-
 Crusher (aggregate when used)

GROUP 2: Applicator (including pot power tender for same),
 applying protective material by hand or nozzle on utility lines
 or storage tanks on project; Brush Cutters (power saw); Burners;
 Choker Splicer; Clary Power Spreader and similar types; Clean-
 up Nozzleman-Green Cutter (concrete, rock, etc.); Concrete
 Power Buggyman; Concrete Laborer; Crusher Feeder; Demolition and
 Wrecking Charred Materials; Gunite Nozzleman Tender; Gunite or
 Sand Blasting Pot Tender; Handlers or Mixers of all Materials of
 an irritating nature (including cement and lime); Tool Operators
 (includes but not limited to: Dry Pack Machine; Jackhammer;
 Chipping Guns; Paving Breakers); Pipe Doping and Wrapping; Post
 Hole Digger, air, gas or electric; Vibrating Screed; Tampers;
 Sand Blasting (Wet); Stake-Setter; Tunnel-Muckers, Brakemen,
 Concrete Crew, Bullgang (underground)

GROUP 3: Asbestos Removal; Bit Grinder; Drill Doctor; Drill Operators, air tracks, cat drills, wagon drills, rubber-mounted drills, and other similar types including at crusher plants; Gunite Nozzelman; High Scalers, Strippers and Drillers (covers work in swinging stages, chairs or belts, under extreme conditions unusual to normal drilling, blasting, barring-down, or sloping and stripping); Manhole Builder; Powdermen; Concrete Saw Operator; Powdermen; Power Saw Operators (Bucking and Falling); Pumpcrete Nozzlemen; Sand Blasting (Dry); Sewer Timberman; Track Liners, Anchor Machines, Ballast Regulators, Multiple Tampers, Power Jacks, Tugger Operator; Tunnel-Chuck Tenders, Nippers and Timberman; Vibrator; Water Blaster

GROUP 4: Asphalt Raker; Concrete Saw Operator (walls); Concrete Nozzelman; Grade Checker; Pipelayer; Laser Beam (pipelaying)-applicable when employee assigned to move, set up, align; Laser Beam; Tunnel Miners; Motorman-Dinky Locomotive-Tunnel; Powderman-Tunnel; Shield Operator-Tunnel

GROUP 5: Traffic Flaggers

GROUP 6: Fence Builders

GROUP 7: Landscaping or Planting Laborers

PAIN0005B 06/01/2000

STATEWIDE EXCEPT CLARK, COWLITZ, KLICKITAT, PACIFIC (SOUTH), SKAMANIA, AND WAHKIAKUM COUNTIES

| | Rates | Fringes |
|----------|-------|---------|
| STRIPERS | 20.65 | 5.85 |

PAIN0005D 03/01/2000

CLALLAM, GRAYS HARBOR, ISLAND, JEFFERSON, KING, KITSAP, LEWIS, MASON, PIERCE, SKAGIT, SNOHOMISH, THURSTON AND WHATCOM COUNTIES

| | Rates | Fringes |
|----------|-------|---------|
| PAINTERS | 22.94 | 3.73 |

* PAIN0005G 07/01/2001

ADAMS, ASOTIN; BENTON AND FRANKLIN (EXCEPT HANFORD SITE); CHELAN, COLUMBIA, DOUGLAS, FERRY, GARFIELD, GRANT, KITTITAS, LINCOLN, OKANOGAN, PEND OREILLE, SPOKANE, STEVENS, WALLA WALLA, WHITMAN AND YAKIMA COUNTIES

PAINTERS*:

| | Rates | Fringes |
|---|-------|---------|
| Brush, Roller, Striping, Steam-cleaning and Spray Application of Cold Tar Products, Epoxies, Polyure thanes, Acids, Radiation | 19.17 | 4.24 |

| | | |
|--|-------|------|
| Resistant Material, Water and Sandblasting, Bridges, Towers, Tanks, Stacks, Steeples | 20.17 | 4.24 |
| TV Radio, Electrical Transmission Towers | 20.92 | 4.24 |
| Lead Abatement, Asbestos Abatement | 20.17 | 4.24 |

*\$.70 shall be paid over and above the basic wage rates listed for work on swing stages and high work of over 30 feet.

PAIN0055C 11/01/1999

| | Rates | Fringes |
|---|-------|---------|
| CLARK, COWLITZ, KLUCKITAT, PACIFIC, SKAMANIA, AND WAHAKIAKUM COUNTIES | | |

PAINTERS:

| | | |
|---------------------------------------|-------|------|
| Brush & Roller | 17.10 | 3.48 |
| Spray and Sandblasting | 17.70 | 3.48 |
| High work - All work 60 ft. or higher | 17.60 | 3.48 |

PAIN0055L 06/01/2000

| | Rates | Fringes |
|---|-------|---------|
| CLARK, COWLITZ, KLUCKITAT, SKAMANIA and WAHAKIAKUM COUNTIES | | |

PAINTERS:

| | | |
|---------------------------------|-------|------|
| HIGHWAY AND PARKING LOT STRIPER | 21.88 | 4.76 |
|---------------------------------|-------|------|

PLAS0072E 06/01/1999

| | Rates | Fringes |
|--|-------|---------|
| ADAMS, ASOTIN, BENTON, CHELAN, COLUMBIA, DOUGLAS, FERRY, FRANKLIN, GARFIELD, GRANT, KITTITAS, LINCOLN, OKANOGAN, PEND OREILLE, SPOKANE, STEVENS, WALLA WALLA, WHITMAN, AND YAKIMA COUNTIES | | |

ZONE 1:

| | | |
|---------------|-------|------|
| CEMENT MASONS | 21.57 | 5.24 |
|---------------|-------|------|

Zone Differential (Add to Zone 1 rate): Zone 2 - \$2.00

BASE POINTS: Spokane, Pasco, Moses Lake, Lewiston

Zone 1: 0 - 45 radius miles from the main post office
 Zone 2: Over 45 radius miles from the main post office

PLAS0528A

PLAS0528A 06/01/2001

| | Rates | Fringes |
|--|-------|---------|
|--|-------|---------|

CLALLAM, GRAYS HARBOR, ISLAND, JEFFERSON, KING, KITSAP, LEWIS,
MASON, PACIFIC (NORTH), PIERCE, SAN JUAN, SKAGIT, SNOHOMISH,
THURSTON, AND WHATCOM COUNTIES

| | | |
|---|-------|------|
| CEMENT MASON | 26.34 | 8.99 |
| COMPOSITION, COLOR MASTIC, TROWEL MACHINE, GRINDER, POWER TOOLS, GUNNITE NOZZLE | 26.59 | 8.99 |

PLAS0555B 06/01/2001

| | Rates | Fringes |
|---|-------|---------|
| CLARK, COWLITZ, KLUCKITAT, PACIFIC (SOUTH), SKAMANIA, AND WAHKIAKUM COUNTIES | | |

ZONE 1:

| | | |
|--|-------|------|
| CEMENT MASONS | 24.04 | 9.00 |
| COMPOSITION WORKERS AND POWER MACHINERY OPERATORS | 24.48 | 9.00 |
| CEMENT MASONS ON SUSPENDED, SWINGING AND/OR HANGING SCAFFOLD | 24.48 | 9.00 |
| CEMENT MASONS DOING BOTH COMPOSITION/POWER MACHINERY AND SUSPENDED/HANGING SCAFFOLD | 24.93 | 9.00 |

Zone Differential (Add To Zone 1 Rates):

Zone 2 - \$0.65
Zone 3 - 1.15
Zone 4 - 1.70
Zone 5 - 2.75

BASE POINTS: BEND, CORVALLIS, EUGENE, LONGVIEW, MEDFORD,
PORTLAND, SALEM, THE DALLES, VANCOUVER

ZONE 1: Projects within 30 miles of the respective city hall
ZONE 2: More than 30 miles but less than 40 miles from the
respective city hall.
ZONE 3: More than 40 miles but less than 50 miles from the
respective city hall.
ZONE 4: More than 50 miles but less than 80 miles from the
respective city hall.
ZONE 5: More than 80 miles from the respective city hall

PLUM0032B 06/01/2001

| | Rates | Fringes |
|--------------------------------------|-------|---------|
| CLALLAM, KING AND JEFFERSON COUNTIES | | |
| PLUMBERS AND PIPEFITTERS | 31.38 | 11.23 |

PLUM0032D 06/01/1999

| | Rates | Fringes |
|--|-------|---------|
| CHELAN, KITTITAS (NORTHERN TIP), DOUGLAS (NORTH), AND OKANOGAN | | |

(NORTH) COUNTIES

| | | |
|--------------------------|-------|------|
| PLUMBERS AND PIPEFITTERS | 23.47 | 8.67 |
|--------------------------|-------|------|

PLUM0044C 06/01/2001

| | Rates | Fringes |
|--|-------|---------|
| ADAMS (NORTHERN PART), ASOTIN (CLARKSTON ONLY), FERRY (EASTERN PART), LINCOLN (EASTERN PART), PEND ORIELLE, STEVENS, SPOKANE, AND WHITMAN COUNTIES | | |

| | | |
|--------------------------|-------|------|
| PLUMBERS AND PIPEFITTERS | 26.21 | 9.14 |
|--------------------------|-------|------|

PLUM0082A 06/01/2001

| | Rates | Fringes |
|--|-------|---------|
| CLARK (NORTHERN TIP INCLUDING WOODLAND), COWLITZ, GRAYS HARBOR, LEWIS, MASON (EXCLUDING NE SECTION), PACIFIC, PIERCE SKAMANIA, THURSTON AND WAHKIAKUM COUNTIES | | |

| | | |
|--------------------------|-------|-------|
| PLUMBERS AND PIPEFITTERS | 24.57 | 14.72 |
|--------------------------|-------|-------|

PLUM0265C 06/01/2001

| | Rates | Fringes |
|--|-------|---------|
| ISLAND, SKAGIT, SNOHOMISH, SAN JUAN AND WHATCOM COUNTIES | | |

| | | |
|--------------------------|-------|-------|
| PLUMBERS AND PIPEFITTERS | 28.37 | 10.24 |
|--------------------------|-------|-------|

PLUM0290K 04/01/2001

| | Rates | Fringes |
|---|-------|---------|
| CLARK (ALL EXCLUDING NORTHERN TIP INCLUDING CITY OF WOODLAND) | | |

| | | |
|--------------------------|-------|-------|
| PLUMBERS AND PIPEFITTERS | 30.85 | 10.56 |
|--------------------------|-------|-------|

PLUM0598E 06/01/2001

| | Rates | Fringes |
|---|-------|---------|
| ADAMS (SOUTHERN PART), ASOTIN (EXCLUDING THE CITY OF CLARKSTON), BENTON, COLUMBIA, DOUGLAS (EASTERN HALF), FERRY (WESTERN PART), FRANKLIN, GARFIELD, GRANT, KITTITAS (ALL BUT NORTHERN TIP), KLICKITAT, LINCOLN (WESTERN PART), OKANOGAN (EASTERN), WALLA WALLA AND YAKIMA COUNTIES | | |

| | | |
|----------|-------|-------|
| PLUMBERS | 28.85 | 11.55 |
|----------|-------|-------|

PLUM0631A 06/01/2001

| | Rates | Fringes |
|---|-------|---------|
| MASON (NE SECTION), AND KITSAP COUNTIES | | |

PLUMBERS/PIPEFITTERS:
All new construction, additions,
and remodeling of commercial

building projects such as:
cocktail lounges and taverns,
professional buildings, medical
clinics, retail stores, hotels
and motels, restaurants and fast
food types, gasoline service
stations, and car washes where
the plumbing and mechanical cost
of the project is less than
\$100,000

14.55 7.98

All other work where the plumbing
and mechanical cost of the project
is \$100,000 and over

24.65 13.41

TEAM0037C 06/01/2001

Rates Fringes

CLARK, COWLITZ, KLUCKITAT, PACIFIC (South of a straight line made
by extending the north boundary line of Wahkiakum County west to
the Pacific Ocean), SKAMANIA, AND WAHAKIAKUM COUNTIES

TRUCK DRIVERS

ZONE 1:

| | | |
|---------|-------|------|
| GROUP 1 | 23.40 | 8.30 |
| GROUP 2 | 23.52 | 8.30 |
| GROUP 3 | 23.65 | 8.30 |
| GROUP 4 | 23.91 | 8.30 |
| GROUP 5 | 24.13 | 8.30 |
| GROUP 6 | 24.29 | 8.30 |
| GROUP 7 | 24.49 | 8.30 |

Zone Differential (Add to Zone 1 Rates):

- Zone 2 - \$0.65
- Zone 3 - 1.15
- Zone 4 - 1.70
- Zone 5 - 2.75

BASE POINTS: ASTORIA, THE DALLEs, LONGVIEW AND VANCOUVER

- ZONE 1: Projects within 30 miles of the respective city hall.
- ZONE 2: More than 30 miles but less than 40 miles from the
respective city hall.
- ZONE 3: More than 40 miles but less than 50 miles from the
respective city hall.
- ZONE 4: More than 50 miles but less than 80 miles from the
respective city hall.
- ZONE 5: More than 80 miles from the respective city hall.

TRUCK DRIVERS CLASSIFICATIONS

GROUP 1: A Frame or Hydra lift truck w/load bearing surface;
Articulated dump truck; Battery Rebuilders; Bus or Manhaul
Driver; Concrete Buggies (power operated); Concrete pump truck;
Dump Trucks, side, end and bottom dumps, including Semi Trucks
and Trains or combinations there of: up to and including 10 cu.

yds.; Lift Jitneys, Fork Lifts (all sizes in loading, unloading and transporting material on job site); Loader and/or Leverman on Concrete Dry Batch Plant (manually operated); Pilot Car; Pickup truck; Solo Flat Bed and misc. Body Trucks, 0-10 tons; Truck Tender; Truck Mechanic Tender; Water Wagons (rated capacity) up to 3,000 gallons; Transit Mix and Wet or Dry Mix - 5 cu. yds. and under; Lubrication Man, Fuel Truck Driver, Tireman, Wash Rack, Steam Cleaner or combinations; Team Driver; Slurry Truck Driver or Leverman; Tireman

GROUP 2: Boom truck/hydra lift or retracting crane; Challenger; Dumpsters or similar equipment all sizes; Dump Trucks/articulated dumps 6 cu to 10 cu.; Flaherty Spreader Driver or Leverman; Lowbed Equipment, Flat Bed Semi-trailer or doubles transporting equipment or wet or dry materials; Lumber Carrier, Driver-Straddle Carrier (used in loading, unloading and transporting of materials on job site); Oil Distributor Driver or Leverman; Transit mix and wet or dry mix trucks: over 5 cu. yds. and including 7 cu. yds.; Vacuum trucks; Water truck/Wagons (rated capacity) over 3,000 to 5,000 gallons

GROUP 3: Ammonia nitrate distributor driver; Dump trucks, side, end and bottom dumps, including Semi Trucks and Trains or combinations thereof: over 10 cu. yds. and including 30 cu. yds. includes Articulated dump trucks; Selfpropelled street sweeper;

Transit mix and wet or dry mix truck: over 7 cu yds. and including 11 cu yds.; Truck Mechanic Welder Body Repairman; Utility and cleanup truck; Water Wagons (rated capacity) over 5,000 to 10,000 gallons

GROUP 4: Asphalt burner; Dump Trucks, side, end and bottom cumps, including Semi-Trucks and Trains or combinations thereof: over 30 cu. yds. and including 50 cu. yds. includes articulated dump trucks; Fire guard; Transit Mix and Wet or Dry Mix Trucks, over 11 cu. yds. and including 15 cu. yds.; Water Wagon (rated capacity) over 10,000 gallons to 15,000 gallons

GROUP 5: Dump Trucks, side, end and bottom dumps, including Semi Trucks and Trains or combinations thereof: over 50 cu. yds. and including 60 cu. yds. includes articulated dump trucks

GROUP 6: Bulk cement spreader w/o auger; Dry prebatch concrete mix trucks; Dump trucks, side, end and bottom dumps, including Semi Trucks and Trains of combinations thereof: over 60 cu. yds. and including 80 cu. yds., and includes articulated dump trucks; Skid truck

GROUP 7: Dump Trucks, side, end and bottom dumps, including Semi Trucks and Trains or combinations thereof: over 80 cu. yds. and including 100 cu. yds., includes articulated dump trucks; Industrial lift truck (mechanical tailgate)

TEAM0174A 06/01/2001
Rates Fringes
CLALLAM, GRAYS HARBOR, ISLAND, JEFFERSON, KING, KITSAP, LEWIS,

MASON, PACIFIC (North of a straight line made by extending the north boundary line of Wahkiakum County west to the Pacific Ocean), PIERCE, SAN JUAN, SKAGIT, SNOHOMISH, THURSTON AND WHATCOM COUNTIES

TRUCK DRIVERS;

| | | |
|----------|-------|------|
| GROUP 1: | 24.94 | 9.12 |
| GROUP 2: | 24.36 | 9.12 |
| GROUP 3: | 22.08 | 9.12 |
| GROUP 4: | 18.00 | 9.12 |
| GROUP 5: | 24.70 | 9.12 |

TRUCK DRIVERS CLASSIFICATIONS

GROUP 1 -"A-frame or Hydralift" trucks and Boom trucks or similar equipment when "A" frame or "Hydralift" and Boom truck or similar equipment is used; Buggymobile; Bulk Cement Tanker; Dumpsters and similar equipment, Tournorockers, Tournowagon, Turnotrailer, Cat DW series, Terra Cobra, Le Tourneau, Westinghouse, Athye Wagon, Euclid Two and Four-Wheeled power tractor with trailer and similar top-loaded equipment transporting material: Dump Trucks, side, end and bottom dump, including semi-trucks and trains or combinations thereof with 16 yards to 30 yards capacity: Over 30 yards \$.15 per hour additional for each 10 yard increment; Explosive Truck (field

mix) and similar equipment; Hyster Operators (handling bulk loose aggregates); Lowbed and Heavy Duty Trailer; Road Oil Distributor Driver; Spreader, Flaherty Transit mix used exclusively in heavy construction; Water Wagon and Tank Truck-3,000 gallons and over capacity

GROUP 2 - Bulllifts, or similar equipment used in loading or unloading trucks, transporting materials on job site; Dumpsters, and similar equipment, Tournorockers, Tournowagon, Turnotrailer, Cat. D.W. Series, Terra Cobra, Le Tourneau, Westinghouse, Athye wagon, Euclid two and four-wheeled power tractor with trailer and similar top-loaded equipment transporting material: Dump trucks, side, end and bottom dump, including semi-trucks and trains or combinations thereof with less than 16 yards capacity; Flatbed (Dual Rear Axle); Grease Truck, Fuel Truck, Greaser, Battery Service Man and/or Tire Service Man; Leverman and loader at bunkers and batch plants; Oil tank transport; Scissor truck; Slurry Truck; Sno-Go and similar equipment; Swampers; Straddler Carrier (Ross, Hyster) and similar equipment; Team Driver; Tractor (small, rubber-tired) (when used within Teamster jurisdiction); Vacuum truck; Water Wagon and Tank trucks-less than 3,000 gallons capacity; Winch Truck; Wrecker, Tow truck and similar equipment

GROUP 3 - Flatbed (single rear axle); Pickup Sweeper; Pickup Truck. (Adjust Group 3 upward by \$2.00 per hour for onsite work only)

GROUP 4 - Escort or Pilot Car

GROUP 5 - Mechanic

HAZMAT PROJECTS

Anyone working on a HAZMAT job, where HAZMAT certification is required, shall be compensated as a premium, in addition to the classification working in as follows:

LEVEL C: +\$.25 per hour - This level uses an air purifying respirator or additional protective clothing.

LEVEL B: +\$.50 per hour - Uses same respirator protection as Level A. Supplied air line is provided in conjunction with a chemical "splash suit."

LEVEL A: +\$.75 per hour - This level utilizes a fully-encapsulated suit with a self-contained breathing apparatus or a supplied air line.

ZONE DIFFERENTIALS

Zone pay will be calculated from the city center of the following listed cities:

| | | | |
|------------|---------------|------------|-----------|
| BELLINGHAM | CENTRALIA | RAYMOND | OLYMPIA |
| EVERETT | SHELTON | ANACORTES | BELLEVUE |
| SEATTLE | PORT ANGELES | MT. VERNON | KENT |
| TACOMA | PORT TOWNSEND | ABERDEEN | BREMERTON |

TRAVEL - Zone A - 0 - 25 miles - Free Zone
 Zone B - 25 - 45 miles - \$.70 per hour.
 Zone C - Over 45 miles - \$1.00 per hour.

TEAM0760C 06/01/1999

| | | |
|---|-------|---------|
| | Rates | Fringes |
| ADAMS, ASOTIN, BENTON, CHELAN, COLUMBIA, DOUGLAS, FERRY, FRANKLIN, GARFIELD, GRANT KITTITAS, LINCOLN, OKANOGAN, PEND OREILLE, SPOKANE, STEVENS, WALLA WALLA, AND WHITMAN COUNTIES | | |

TRUCK DRIVERS

(ANYONE WORKING ON HAZMAT JOBS SEE FOOTNOTE A BELOW)

ZONE 1: (INCLUDES ALL OF YAKIMA COUNTY)

| | | |
|---------|-------|------|
| GROUP 1 | 17.42 | 7.31 |
| GROUP 2 | 19.69 | 7.31 |
| GROUP 3 | 20.19 | 7.31 |
| GROUP 4 | 20.52 | 7.31 |
| GROUP 5 | 20.63 | 7.31 |
| GROUP 6 | 20.80 | 7.31 |
| GROUP 7 | 21.33 | 7.31 |
| GROUP 8 | 21.66 | 7.31 |

Zone Differential (Add to Zone 1 rate: Zone 2 - \$2.00)

BASE POINTS: Spokane, Moses Lake, Pasco, Lewiston

Zone 1: 0-45 radius miles from the main post office.

Zone 2: 45 radius miles and over from the main post office

TRUCK DRIVERS CLASSIFICATIONS

GROUP 1: Escort Driver or Pilot Car; Employee Haul; Power Boat Hauling Employees or Material

GROUP 2: Fish Truck; Flat Bed Truck; Fork Lift (3000 lbs. and under); Leverperson (loading trucks at bunkers); Trailer Mounted Hydro Seeder and Mulcher; Seeder & Mulcher; Stationary Fuel Operator; Tractor (small, rubber-tired, pulling trailer or similar equipment)

GROUP 3: Auto Crane (2000 lbs. capacity); Buggy Mobile & Similar; Bulk Cement Tanks & Spreader; Dumptor (6 yds. & under); Flat Bed Truck with Hydraulic System; Fork Lift (3001-16,000 lbs.); Fuel Truck Driver, Steamcleaner & Washer; Power Operated Sweeper; Rubber-tired Tunnel Jumbo; Scissors Truck; Slurry Truck Driver; Straddle Carrier (Ross, Hyster, & similar); Tireperson; Transit Mixers & Truck Hauling Concrete (3 yd. to & including 6 yds.); Trucks, side, end, bottom & articulated end dump (3 yards to and including 6 yds.); Warehouseperson (to include shipping & receiving); Wrecker & Tow Truck

GROUP 4: A-Frame; Burner, Cutter, & Welder; Service Greaser;

Trucks, side, end, bottom & articulated end dump (over 6 yards to and including 12 yds.); Truck Mounted Hydro Seeder; Warehouseperson; Water Tank truck (0-8,000 gallons)

GROUP 5: Dumptor (over 6 yds.); Lowboy (50 tons & under); Self-loading Roll Off; Semi-Truck & Trailer; Tractor with Steer Trailer; Transit Mixers and Trucks Hauling Concrete (over 6 yds. to and including 10 yds.); Trucks, side, end, bottom and end dump (over 12 yds. to & including 20 yds.); Truck-Mounted Crane (with load bearing surface either mounted or pulled, up to 14 ton); Vacuum Truck (super sucker, guzzler, etc.)

GROUP 6: Flaherty Spreader Box Driver; Flowboys; Fork Lift (over 16,000 lbs.); Dumps (Semi-end); Mechanic (Field); Semi-end Dumps; Transfer Truck & Trailer; Transit Mixers & Trucks Hauling Concrete (over 10 yds. to & including 20 yds.); Trucks, side, end, bottom and articulated end dump (over 20 yds. to & including 40 yds.); Truck and Pup; Tournarocker, DW's & similar with 2 or more 4 wheel-power tractor with trailer, gallonage or yardage scale, whichever is greater Water Tank Truck (8,001-14,000 gallons)

GROUP 7: Oil Distributor Driver; Stringer Truck (cable operated trailer); Transit Mixers & Trucks Hauling Concrete (over 20 yds.); Truck, side, end, bottom end dump (over 40 yds. to & including 100 yds.); Truck Mounted Crane (with load bearing surface either mounted or pulled (16 through 25 tons);

GROUP 8: Prime Movers and Stinger Truck; Trucks, side, end, bottom and articulated end dump (over 100 yds.); Helicopter Pilot Hauling Employees or Materials

Footnote A - Anyone working on a HAZMAT job, where HAZMAT certification is required, shall be compensated as a premium, in addition to the classification working in as follows:

LEVEL C-D: - \$.50 PER HOUR (This is the lowest level of protection. This level may use an air purifying respirator or additional protective clothing.

LEVEL A-B: - \$1.00 PER HOUR (Uses supplied air in conjunction with a chemical splash suit or fully encapsulated suit with a self-contained breathing apparatus.

NOTE: Trucks Pulling Equipment Trailers: shall receive \$.15/hour over applicable truck rate

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.
=====

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR 5.5(a)(1)(v)).

In the listing above, the "SU" designation means that rates listed under that identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U. S. Department of Labor

200 Constitution Avenue, N. W.
Washington, D. C. 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

4.) All decisions by the Administrative Review Board are final.
END OF GENERAL DECISION

This page intentionally blank

TABLE OF CONTENTS

SECTION C – TECHNICAL SPECIFICATIONS

Section
No.

Section Title

DIVISION 1 – GENERAL REQUIREMENTS

UFGS

NOTE: SPECIFICATIONS HAVE BEEN RE-NUMBERED TO REFLECT A NEW NUMBERING SYSTEM. THE NUMBER LISTED REFLECTS THE NEW NUMBER FOR THAT SPECIFICATION. THE NUMBER IN PARANTHESIS IS THE OLD SPECIFICATION NUMBER. IF THERE IS NOT A NUMBER IN PARENTHESIS, THE SPECIFICATION NUMBER DID NOT CHANGE.

- 01110 (01001) Summary of Work
- 01011 Supplementary Requirements
- 01015 Site Related Supplementary Requirements
- 01101 Management Plan and Field Reports
- 01270 (01025) Measurement and Payment
- 01330 (01300) Submittals
- 01351 Safety, Health, and Emergency Response (HTRW/UST)
- 01355 (01061) Environmental Protection
- 01355 (01061) Environmental Protection
- 01450 Chemical Data Quality Control
- 01451 (01400) Contractor Quality Control
- 01500 (01501) Construction Facilities and Temporary Controls
- 01780 (01702) As Built Records and Drawings
- 01781 As Built Records and Drawings (Form 1354 Checklist)

DIVISION 2 – SITEWORK

- 02070 Asbestos Survey
- 02095-1 Lead Containing Materials and Hazards
- 02115 (02081) Petroleum Underground Storage Tank Removal
- 02120 Characterization Handling Transportation and Disposal of Waste
- 02220 (02050) Demolition
- 02300 (02210) Grading and Surface Restoration
- 02821 (02831) Fencing
- 02921 (02935) Turf

DIVISIONS 3 THROUGH 12

(Not Applicable)

DIVISION 13 - SPECIAL CONSTRUCTION

- 13280 (02080) Asbestos Abatement
- 13281 Lead Hazard Control Activities

DIVISIONS 14 THROUGH 16

(Not Applicable)

This page intentionally blank

SECTION 01110

SUMMARY OF WORK

1. DESCRIPTION OF WORK:

The Fort Lewis Building Demolition Contract is the sixth contract from the U.S. Army Corps of Engineers to demolish several categories of buildings at Fort Lewis and its sub-installations in western Washington and locations in western Washington. It is anticipated most work will be in the Puget Sound area. The Phase VI contract will be a multiple award task order construction contract which will address all stages of building demolition. These phases consist of: (1) Asbestos Surveys, (2) Asbestos Abatement, (3) AST/UST Removal, (4) Building Demolition, (5) Building Debris Disposal, (6) Site Restoration, including soil remediation. Technical specifications have been developed for the contractor in the specification package to address these six stages. The buildings that will be demolished have been assigned to Building Categories "WB1" which is single story wood, with concrete slab on grade floor, and CAB siding; "WB2" which is single story wood, with concrete slab on grade floor, and wood siding; "WB3" which is single story wood, with pier and post foundation and CAB siding; "WB4" which is single story wood, with pier and post foundation, and wood siding; "WB5" which is double story wood, with pier and post foundation, and CAB siding; "WB6" which is double story wood, with pier and post foundation, and wood siding; "MT1" which is Metal Canopy Shelter Structure, Open wall; "MT2" which is single story metal structure, with pier and post foundation, and wood siding; "MT3" which is single story metal structure, with pier and post foundation, and CAB and metal siding; "MT4" which is double story metal structure, with concrete slab on grade floor, and metal siding; "MS1" which are single story masonry buildings, with concrete slab on grade floor, and CMU exterior walls; "MS 2" which are single story masonry buildings, with concrete slab on grade floor, and brick exterior walls [see attachment A]. This building category is the basis for pricing of "complete building demolition" on a square foot unit of measure. Certain items such as AST/UST removal and work outside the 5 foot building wall line may be included as separately priced items but will generally be included as part of the lump sum work for the line item(s) on the task orders.

2. ASBESTOS SURVEYS:

An Asbestos Hazard Emergency Response (AHERA) - Survey for demolition shall be conducted by the contractor on all buildings prior to demolition. The survey will be used to (1) Identify types and quantities of all Asbestos Containing Building Material (ACBM) which included exterior and hidden surfaces; (2) Comply with worker "right to know" regulations; and (3) meet the Puget Sound Clean Air Agency (PSCAA) and Washington State requirements to obtain a building demolition permit.

3. ASBESTOS ABATEMENT:

The amount of asbestos that will need removal will be dependent on the results of the asbestos surveys and the requirements listed in federal, state and local regulations, whichever is more stringent. Historical data is provided which shall be used to estimate the level of effort that will be needed to remove asbestos from the buildings before the demolition. Data taken from previous demolition projects which have similar buildings to PHASE VI is available upon request.

4. AST/UST REMOVAL:

The only anticipated above ground and below ground storage tanks (AST/UST) are less than 1100 Gallons and contain only heating oil. See Section 02081 (02115)- UNDERGROUND STORAGE TANK REMOVAL.

5. ENVIRONMENTAL SAMPLING:

A sampling and analysis plan (SAP) is provided as an attachment to the AST/UST removal specification (Section 02081 (02115)- UNDERGROUND STORAGE TANK REMOVAL) which provides guidance and requirements for (1) sampling soils during AST/UST removal to determine if soils are contaminated with heating oil; (2) sampling soils along the building dripline for each building (before demolition) to determine if contamination from lead or cadmium has

resulted; and (3) taking building material core samples under COR direction. The government will have the core samples and produce a report on the analytical results.

6. DISPOSAL OF ALL DEMOLITION DEBRIS:

All demolition debris is required to be taken off-site for disposal at a permitted municipal waste landfill and recycled in strict accordance with contract specifications.

END OF SECTION

SECTION 01011 - SUPPLEMENTARY REQUIREMENTS

1. GENERAL:

1.1 CORRESPONDENCE:

1.1.1 All correspondence shall be addressed to the Contracting Officer's Representative, shall be serially numbered commencing with Number 1, with no numbers missing or duplicated and shall be furnished with an original copy. Enclosures attached or transmitted with the correspondence shall be furnished with an original and one copy. Each serial letter shall make reference to the contract name, contract number, task order number, and shall have only one subject.

1.1.1.1 All correspondence from the Contracting Officer will be also serially numbered with no numbers missing or duplicated. Letters to the contractor will be forwarded in duplicate.

1.1.2 For each task order, correspondence shall contain separate and distinct submittals to identify each project by name and T.O. number.

1.1.3 For submission of Contractor payment requests, see section 01025, MEASUREMENT AND PAYMENT.

1.2 Scheduling

1.2.1 Progress Charts and Status Reports

1.2.1.1 The proposed Progress Chart shall be prepared on ENG Form 2454. Additional instructions are obtained in INSTRUCTIONS AND INFORMATION FOR CONTRACTORS, a manual furnished to the Contractor by the Contracting Officer. This manual is available for inspection in the office of the Seattle District, Corps of Engineers 4735 East Marginal Way South, Seattle, Washington.

1.2.1.2 The Minimum contract features (activities) to be included on ENG Form 2454 shall represent the work in each of the following divisions:

For each Task Order - Onsite Demolition/Restoration Activities:

- Installation of Temporary Fencing
- Asbestos Survey
- Sampling and Analysis
- Asbestos Abatement
- Building Demolition
- Removal of Temporary fencing
- AST/UST Removal
- Site Grading and Restoration
- Hazardous Material Surveys

1.2.2 The Progress Chart shall show the total bid amount distributed among the features shown on the chart. The schedule shall show the percentage of completion at the close of each weekly QC report. (Mobilization and demobilization shall not be listed as a separate payment item unless so noted in the schedule)

1.2.3 The Progress Chart shall be submitted within 10 calendar days after the date of receipt of the Task Order Award (DD Form 1155).

1.2.4 The contractor shall prepare and submit a monthly project status report. The report shall tell whether the project as a whole is on, ahead of or behind schedule. If the project is behind schedule, the contractor shall explain what actions he will take to regain his schedule. The report shall include a description of the problem areas, delaying factors and their impact, and an explanation of

corrective actions taken or proposed. Any delays caused by the government shall be identified. Any significant items or events that occurred during the report month shall also be detailed.

1.3 IDENTIFICATION OF EMPLOYEES AND MILITARY REGULATIONS

- (a) The contractor shall be responsible for compliance with all regulations and orders of the Commanding Officer of the Military Installation, respecting identification of employees, movements on installation, parking, truck entry, and all other military regulations, which may affect the work. Special requirements will be identified in the statement of work for an individual task order.
- (b) The work under this Contract may be performed at an operating Military Installation with consequent restrictions on entry and movement of nonmilitary personnel and equipment.
- (c) The Commanding Officer of Fort Lewis, Washington has initiated the following specific requirement regarding vehicle registration for this contract.

Contractors performing work on Fort Lewis shall, after award, register all vehicles to be used on the installation with the Vehicle Registration Section of the Law Enforcement Command. Contractor employees entering the installation in privately owned vehicles (POVs) shall register their vehicles. A copy of contract award, proof of liability insurance, current driver's license and state vehicle registration shall be required to register Contractor, subcontractor, and employee vehicles.

Upon completion of the contract, it shall be the prime contractor's responsibility to collect all vehicle decals issued under the contract including those issued to employees and subcontractors. Decals are to be carefully removed from the vehicle, placed in an envelope and attached to the original documentation (ie. Post vehicle registration document), must be returned to Vehicle Registration, Building 2140 Waller Hall. Proof of decal clearance for all vehicles registered under this contract will be issued to the prime contractor and shall be returned to the Contracting Officer prior to final payment.

In the event of contract extension, it shall be the prime contractor's responsibility to report time extension to Vehicle Registration, with evidence of same. For further information, contact Vehicle Registration, at (253) 967-7668/5197, Building 2140 Waller Hall, Fort Lewis, Washington 98433-5000.

1.4 SPECIAL SAFETY REQUIREMENTS

In addition to Safety and Health Requirements Manual EM 385- 1 - 1, dated 3 September 1996, the Contractor shall comply with the requirements listed below. Paragraph numbers refer to EM 385-1-1 or are added thereto.

- (a) Paragraph 01.A .12: Add new paragraph: Safety Personnel. The Contractor shall designate a person on his staff to manage the Contractor's safety and accident prevention program. This person will provide a point of contact for the Contracting Officer on matters of job safety, and shall be responsible for ensuring the health and safety of on site personnel.
- (b) Paragraph 01.D.02: revise as follows:
 - (1) Replace paragraph 01.D. 02c with the following:

“c. Property damage in excess of \$2,000.00”

(2) Add new paragraph d as follows:

“An injury resulting in a lost workday, not including the day of injury.”

1.5 TIME EXTENSIONS FOR UNUSUALLY SEVERE WEATHER (ER 415-1-15 / 31 OCT 89)

This Paragraph specifies the procedure for the determination of time extensions for unusually severe weather. In order for the Contracting Officer to award a time extension under this clause, the following conditions must be satisfied:

- 1.5.1 The weather experienced at the project site during the contract period must be found to be unusually severe, that is, more severe than the adverse weather anticipated for the project location during any given month.
- 1.5.2 The unusually severe weather must actually cause a delay to the completion of the project. The delay must be beyond the control and without the fault or negligence of the contractor.
- 1.5.3 The following schedule of monthly anticipated adverse weather delays is based on National Oceanic and Atmospheric Administration (NOAA) or similar data for the project location and will constitute the base line for monthly weather time evaluations. The contractor’s progress schedule must reflect these anticipated adverse weather delays in all weather dependent activities.

MONTHLY ANTICIPATED ADVERSE WEATHER DELAY WORK DAYS BASED ON (5) DAY WORK WEEK

| JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------|
| 9 | 8 | 8 | 4 | 2 | 3 | 1 | 2 | 4 | 7 | 10 | 10 | Ft Lewis |

- 1.5.4 Upon receipt of Task Order award and continuing throughout the Task Order, the contractor will record on the daily CQC report, the occurrence of adverse weather and resultant impact to normally scheduled work. Actual adverse weather delays must prevent on critical activities for 50 percent or more of the contractor’s scheduled workday.
- 1.5.5 The number of actual adverse weather delay days shall include days impacted by actual adverse weather (even if adverse weather occurred in a previous month), be calculated chronologically from the last day of each month, and be recorded as full days. If the number of actual adverse weather delay days exceeds the number of days anticipated in paragraph 1.5.3, above, the Contracting Officer will convert any qualifying delays to calendar days, giving full consideration for equivalent fair weather work days, and issue a bilateral modification.

1.6 SALVAGE MATERIALS AND EQUIPMENT FOR THE GOVERNMENT

The Contractor shall maintain adequate property control records for all materials or equipment specified to be salvaged. These records may be in accordance with the Contractors system of properly control, if approved by the property administrator. The Contractor shall be responsible for the adequate storage and

protection of all salvaged materials and equipment and shall replace, at no cost to the Government, all salvage materials and equipment, which are broken or damaged during salvage operations as the result of its negligence or while in its care. Point of contact concerning Government salvaged items will be identified under the individual task order.

PARTS 2 AND 3 NOT USED

END OF SECTION

SECTION 01015

SITE RELATED SUPPLEMENTARY REQUIREMENTS

1. CONDUCT OF WORK

1.1 COORDINATION AND ACCESS TO SITE

1.1.1 Coordination with using agencies shall be made through the Contracting Officer to assist the Contractor in completing the work with a minimum of interference and inconvenience.

1.1.2 Contractor-owned and privately owned vehicles: See Paragraph IDENTIFICATION OF EMPLOYEES AND MILITARY REGULATIONS in SECTION 01011 for specific requirements.

1.1.3 Facility Keys

When keys are required for access to facilities on this contract they shall be obtained through Department of Public Works Building 2012. Contact Larry Balch/Don Hamilton at 967-6375 for procedures. Listing of all keys obtained, including dates of receipt and turn-in, shall be coordinated through the Contracting Officer.

1.1.3.1 The Contractor shall be responsible for Government-owned keys issued for access to facilities or areas pertinent to this contract.

1.1.3.2 Upon completion of the work in an area, or upon request of the Contracting Officer, the key or keys relevant to the completed areas shall be returned.

1.1.3.3 Should the Contractor lose a key:

a. The Contracting Officer shall be notified, in writing, within three (3) working days after the loss is discovered and

b. should the key not be found before final acceptance the final contract payment shall be reduced by \$100 for each key not returned,

1.1.4 Work Hours

Work hour, in the project area, will be restricted to 7:30 am to 4 p.m. daily, Monday through Friday, excluding Federal holidays, unless otherwise specified in the task order. Work hours other than as specified above shall be coordinated with and approved by the Contracting Officer

1.1.5 Personnel Identification

Contractor's workmen shall have on either a uniform with the firm name and the workman's last name or shall have a badge pinned on with both the firm name and the workman's photograph

and full name.

1.2 UTILITY OUTAGES

Contractor shall coordinate utility outages with the Contracting Officer at least 7 days in advance. Outages shall be kept to a minimum and any one outage to adjacent occupied facilities shall not last more than 2 hours.

1.3 PROTECTION OF GOVERNMENT PROPERTY

In addition to requirements of the CONTRACT CLAUSES Contractor shall protect all Government property to remain in place, including property of the building occupants, in the areas which it is working. Any damage caused by the Contractor's operations shall be remedied at the Contractor's expense.

END OF SECTION

SECTION 01101

MANAGEMENT PLAN AND FIELD REPORTS

PART 1-GENERAL

1.1 SCOPE

Prior to receiving authority to proceed on items of work under this Contract, the Contractor shall be required to submit for Government approval a Management Plan (MP). The MP is a compilation of more specific plans listed under the specifications of this Contract. All work shall be performed in accordance with the approved plans and contract specifications.

1.2 SUBMITTALS

Submittals shall be in accordance with Section 01330, SUBMITTALS except as modified herein. Government approval is required for submittals with a "GA" designation; submittals having a "FIO" designation are for information only. Field Reports and monthly Status Reports will be required as applicable.

Corporate Management Plan; GA.

The Corporate Management Plan (MP) shall be submitted 30 Calendar days after award of the basic contract and shall be written in accordance with paragraph 1.3. The Corporate MP shall be subject to review and comment from the Government prior to acceptance. The Corporate MP shall contain as a minimum the following items: 1) Waste Management Plan, 2) Environmental Protection Plan; 3) Corporate Health and Safety Program.

Task Order Work Plan; GA.

The Task Order Work Plan shall be submitted for approval prior to commencement of each task order in accordance with Paragraph 1.4.1. At a minimum the Task Order Work Plan shall contain: 1) Schedule of field activities 2) Names of on-site personnel and a description of their roles and responsibilities, 3) Site Specific Accident Prevention Plan (or Site Safety and Health Plan (SSHP) if shown to be applicable by the Contractor), 3) Anticipated waste analysis procedures, and 4) Anticipated waste management practices.

Interim Reports; GA.

The Contractor shall submit interim reports in accordance with paragraph 1.4.2 and as specified in the Task Order Statement of Work.

Final Report: GA.

The Contractor shall prepare and submit for Government review and acceptance a Final Field Report at the conclusion of the Task Order. The Final Report Format shall be in accordance with paragraph 1.4.3 and as specified in the Task Order Statement of Work.

1.2.1 Number of Each Document

Three copies of the MP shall be provided. All copies shall be delivered concurrently. The number of copies for task order work plans, interim reports, and the Final Report shall be as specified in the Task Order Statement of Work.

1.2.2 Binding

One copy of each submittal shall be in reproducible format (bound in three ring binder.) All other documents shall be bound either in binders or permanently bound. All submittals shall contain a minimum of 10 percent post consumer waste recycled paper in accordance with EPA specifications. **An electronic copy of documents may also be requested in The Task Order Statement or Work.**

1.2.3 Content

See descriptions of each document under this Section and supplemental or additional requirements under all sections for complete requirements for content. In addition, each copy of the Corporate Management Plan and Task Order Work Plans shall be accompanied by the appropriate submittal checklist which has been checked off and signed by the Contractor's project manager or similarly qualified individual who is familiar with the requirements of the document and is responsible for preparing or reviewing the document contents.

1.3 CORPORATE MANAGEMENT PLAN

The Corporate Management Plan (MP) is intended to ensure that all safety and health and environmental issues are suitably addressed. The Management Plan will be used by the COR to evaluate the overall approach that will be taken by the Contractor to complete the objectives of the Contract. It will also be used to assure the sequencing of the work will be performed in an appropriate manner. Until the Corporate MP has been reviewed and approved by the Government no on-site work shall be authorized under the Contract. The Government will review the Corporate MP once and the Contractor shall make necessary revisions if needed. The Corporate MP may be subject to modification at any time under this Contract to correct deficiencies or to reflect changes in any applicable regulations. Changes after the first revision shall be submitted as an addendum to the Corporate MP. Site-specific information from every Task Order shall be placed in the Task Order Work Plan.

1.3.1 Waste Management Plan

This plan shall conform to the requirements in Specification Section 02120: CHARACTERIZATION HANDLING TRANSPORTATION AND DISPOSAL OF WASTE and Specification Section 01450: CHEMICAL DATA QUALITY CONTROL.

1.3.2 Environmental Protection Plan

This plan shall conform to the requirements in Specification Section 01355: ENVIRONMENTAL PROTECTION.

1.3.3 Corporate Health and Safety Program

The Corporate Health and Safety Program shall address how the Contractor manages employee health and safety and shall be consistent with the requirements defined in EM 385-1-1 and 29 CFR 1910.120.

1.4 REPORTS

1.4.1 Task Order Work Plan

The work plan shall contain the site specific information unique to the task order. At a minimum, the following items shall be included in the work plan, more specific requirements will be detailed in the Task Order Statement of Work: (1) Schedule of field activities, (2) Names of on-site personnel and a description of their roles and responsibilities, (3) Site Specific Accident Prevention Plan (or Site Safety and Health Plan (SSHP) if shown to be applicable by the Contractor), (3) Anticipated waste analysis procedures (4) Anticipated waste management procedures. The anticipated procedures and practices shall reference the applicable sections of the Corporate MP. An addendum to the Corporate MP shall also be submitted for activities that reflect changes to The Corporate MP.

1.4.1.1 The Site Specific Accident Prevention Plan (SSHP) shall conform to requirements in Appendix A of the Sept. 1996 Engineering Manual (EM 385-1-1 (US Army Corps of Engineers Safety and Health Requirements Manual). The Contractor is required by EM 385-1-1 to accomplish a Site-specific Safety and Health Plan (SSHP) under requirements of Section, 28, if the work is Hazardous, Toxic or Radiological Waste (HTRW) work.

1.4.1.2 A Site Safety and Health Plan (SSHP) is only required if the type of work expected to be accomplished meets the functional definition for HTRW work provided in 29 CFR 1926.65. Because this contract covers containerized wastes, it is the Governments expectation that the contractor will be usually able to demonstrate that the operation does not involve employee exposure or the reasonable possibility for employee exposure to safety or health hazards, such as exceeding the Permissible Exposure Limits (or Threshold Limit Values). Therefore, for most of the warts an SSHP may not be required.

1.4.1.3 The Anticipated waste analysis and waste management procedures shall be consistent with those procedures in the Corporate Management Plan and shall be in accordance to Specification Section 02120: CHARACTERIZATION HANDLING TRANSPORTATION AND DISPOSAL OF WASTE and Specification Section 01450 CHEMICAL DATA QUALITY CONTROL.

1.4.2 Interim Reports

Critical documents require submittal for Government information prior to submittal of the Field Report. These documents include, but are not limited to: Manifesting documents, waste analysis reports, chemical analysis, project and QA reports, accident reports, and other documents of a time-sensitive nature. The COR may request immediate submittal of any document deemed to be of a critical nature by the Government.

1.4.3 Final Report

The Contractor shall prepare and submit for Government review and acceptance a Final Field Report at the conclusion of the Task Order. Final payment will not be made until the Field Report is approved. Details about the content of the Final Report shall be provided in the Task Order Statement of Work. At a

minimum the Final Report shall provide (1) A summary of work performed, (2) Certificates of Disposal and Shipment Documents (See Specification Section 02120: CHARACTERIZATION HANDLING TRANSPORTATION AND DISPOSAL OP WASTE); and (3) Other information requested from The Task Order Statement of Work and local or state regulatory sources.

1.5 CONTRACTOR'S FILES

A copy of the Corporate MP and the Task Order Work Plan shall be maintained on each work site by the Contractor. The Corporate MP shall be made available for review and inspection by any authorized local, state, or Federal visitor. Site employees shall be guaranteed access to the Corporate MP and Task Order Work Plan at all times. The Corporate MP and Task Order Work Plan shall be kept up to date and include the latest addendum

1.6 LOGS REPORTS AND RECORD KEEPING

The following logs, reports and records shall be developed, retained and submitted to the COR and/or entitled regulatory agencies upon request (unless otherwise noted in previous sections) where more specific logs, reports and records will be specified in the Task Order Statement of Work. The Contractor shall also include all additional federal, state and local record keeping requirements:

- (1) Training logs including employees' printed names and signatures in addition to training subject and date or copy of applicable training certificate;
- (2) Daily safety inspection logs;
- (3) Employee/Visitor register
- (4) Medical opinions/certifications;
- (5) Environmental and personal exposure monitoring records;
- (6) Phase-out reports (final decontamination verification certificates, summary of air monitoring data, final medical certificates, etc.); and
- (7) A copy of all State licensing certificates required to conduct all required activities.

-End of Section-

SECTION 01270

MEASUREMENT AND PAYMENT

1.1 GENERAL

The contract price for each item shall constitute full compensation for furnishing all plant, labor, materials, appurtenances and incidentals, and performing all operations necessary to complete each item of the work as specified per task order and in accordance with these specifications and applicable drawings if any. Payment for each item shall be considered as full compensation; notwithstanding that minor features may not be mentioned herein. Material and work paid for under one item, will not be paid for under any other item. No separate payment will be made for the work, services, or operations required by the Contractor, as specified in DIVISION 1 GENERAL REQUIREMENTS, to complete the project in accordance with these specifications; all costs thereof shall be considered as incidental to the work. The Contractor will not be compensated for loss of time or equipment due to breakdown of equipment, lack of proper equipment as determined by the CO, labor shortages or disputes, delay in obtaining materials, or for any other reason not directly the fault of the Government. No payment will be made for any work abandoned by the Contractor or rejected by the CO because of failure to meet specification requirements. Payment for any work that is abandoned at the direction of the CO due to no fault of the Contractor will be as listed in the Unit Price Schedule of the Contract for the actual amount of work accomplished. Items of work for which no separate payment is provided shall be considered as incidental to the performance of the work with which it is associated. No payment shall be made to the contractor for soil disposed of or treated prior to receipt of the final Field Report including final conformational sample analysis. Payment will be made for only the actual amount of work completed as specified in the Individual Task Order(s) and in accordance with the specifications. Notwithstanding this Section, or any other clause of the Contract, payment under each task order will not exceed 90 percent of the work actually accomplished prior to receipt of the "Field Report" in its final form.

1.2 MEASUREMENT

1.2.1 Area Measurement

1.2.1.1 Building Measure

- (a) Administrative/Office Space: Building dimensions will be measured to the outside surface of the exterior walls including stairwells, for each separate floor level (floor level is defined as vertical clear space of 6 feet or more up to a height of 10 feet) in the structure and the computed area will be to the nearest square foot (SF). Roof structures including dormers, attics, mezzanines and associated typical appurtenances such as equipment sheds, skylights, and parapet walls will not be separately priced but shall be included as incidental to the building demolition. Payment for work based on the building footprint includes related demolition work as an incidental item such as associated footings, foundations and floor slabs, to 5 feet outside the building exterior wall lines and the capping of all utility lines.
- (b) Warehouse Space: Building dimensions will be measured to the outside surface of the exterior walls including stairwells and the computed area will be to the nearest square foot (SF). Roof structures including attics, mezzanines and associated typical appurtenances such as equipment sheds, skylights and parapet walls will not be separately priced but shall be included as incidental to the building demolition. Payment for work based on the building footprint includes related demolition work as an incidental item such as associated footings, foundations and floor slabs, to 5 feet outside the building exterior wall lines and the capping of all utility lines.

1.2.1.2 Other Site Features

- (a) Asphalt concrete and portland concrete slabs shall be measured in place prior to demolition or after

installation, as applicable, to the neatline dimensions and the computed area will be to the nearest square yard (SY).

- (b) Borrow material is to be imported from an off post supplier and shall be measured by the cubic yard (CY) of the material in place to the lines of the excavation or structure requiring the fill. Clean excavated material suitable for placement in The Fort Lewis Disposal area shall be measured based on the in place volume of the excavated material removed from the site.
- (c) Chain -link fencing shall be measured in place along its line to the nearest lineal foot (LF).
- (d) Continuous Concrete footing shall be measured in place to the nearest lineal foot (LF).
- (e) Concrete Foundation or perimeter walls shall be measured in place to the nearest square foot (SF).

1.2.2 Weight Measurement -Vehicle

All material measured by weight (Ton) shall be weighed in the hauling vehicle on public scales or scales provided by the Contractor and approved by the Contracting Officer. The scales shall be of sufficient capacity to permit weighing the transporting vehicle both empty and full. Classes of material or debris types shall not be mixed in any given load. Scales shall be of the type that prints weight tickets. A duplicate copy of each weight ticket shall be furnished to the Contracting Officer. The Contractor's weighmaster shall be subject to the approval of the Contracting Officer. All costs for providing acceptable weighing devices shall be borne by the Contractor and shall be included in the contact unit prices for the material. All items for payment based on material weights shall be measured in a dry condition. Materials containing excess moisture (over 5%) shall be allowed to dry before the weight measurement is made. The Contracting Officer may apply a correction factor to material weights found to contain excessive moisture content.

1.2.3 Miscellaneous Abatement Features

Miscellaneous abatement features to be demolished consist of the additional work not covered under the base building demolition ranges for the item 0001. All additional work items shall be identified and measured prior to removal (except as noted) as follows:

- (a) CAB, VAT, linoleum, wainscot and tank insulation shall be measured in place to the nearest square foot (SF).
- (b) Pipe insulation shall be measured in place to the nearest lineal foot (LF).
- (c) Asbestos debris shall be identified to the COR prior to removal and collected into drums or other suitable containment for payment identification by the cubic foot (drum measure) or square foot.

1.3 PAYMENT

- (a) Definition of Work included for Building: The complete building demolition is defined to include but is not limited to temporary fencing off of the work site obtaining, all permits, capping all utilities and removing all above ground utility lines such as telephone or electric back to the nearest pole or service drop. Performing asbestos survey, asbestos abatement, pre and post demolition drip-line soil sampling and analysis, demolition and segregation per the waste stream analysis (provided by the Government); loading, hauling and disposal; site restoration including grading and hydro-seeding; and submittal of the final report, and Form 1354 checklist for each task order.
- (b) The building types are described under Section 01001 SUMMARY OF WORK. A summary of the ranges

of hazardous materials encountered for similar building types identified in previous projects will be available upon request.

(c) The items identified in the UNIT PRICE BOOK are further described in the following subparagraphs.

1.3.1 Item 0001 - Building Type WB1, to 2500 SF

Payment will be made at the contract unit price under Item No. 0001 “All Work for Demolition of Type WB1 Building - Single Story Wood Structure, Concrete Slab on Grade Floor, CAB Exterior Siding to 2,500 square feet.” This item includes all work associated with complete building demolition as defined herein except for the unit priced items listed in the schedule. Payment shall include the cost of all labor, materials, equipment, supplies, and all incidentals necessary for said action per task order.

1.3.2 Item 0002- Building Type WB1, 2501 SF or More

Payment will be made at the contract unit price under Item No. 0002 “All Work for Demolition of Type WB1 Building - Single Story Wood Structure, Concrete Slab on Grade Floor, CAB Exterior Siding 2,501 or more square feet.” This item includes all work associated, with complete building demolition as defined herein except for the unit priced items listed in the schedule. Payment shall include the cost of all labor, materials equipment, supplies, and all incidentals necessary for said action per task order.

1.3.3 Item 0003 - Building Type WB2

Payment will be made at the contract unit price under Item No. 0003 “All Work for Demolition of Type WB2 Building - Single Story Wood Structure, Concrete Slab on Grade Floor, Wood Exterior Siding.” This item includes all work associated with complete building demolition as defined herein except for the unit priced items listed in the schedule. Payment shall include the cost of all labor, materials, equipment, supplies, and all incidentals necessary for said action per task order.

1.3.4 Item 0004- Building Type WB3, at 1144 SF

Payment will be made at the contract unit price under Item No. 0004 “All Work for demolition of Type WB3 Building - Single Story Wood Structure, Pier and Post Foundation, CAB Exterior Siding at 1144 square feet.” This item includes all work associated with complete building demolition as defined herein except for the unit priced items listed in the schedule. Payment shall include the cost of all labor, materials, equipment, supplies and all incidentals necessary for said action per task order.

1.3.5 Item 0005 - Building Type WB3, at 2207 SF

Payment will be made at the contract unit price under Item No. 0005 “All Work for Demolition of type WB3 Building - Single Story Wood Structure, Pier and Post Foundation, CAB Exterior Siding at 2,207 square feet.” This item includes all work associated with complete building demolition as defined herein except for the unit priced items listed in the schedule. Payment shall include the cost of all labor; materials, equipment, supplies and all incidentals necessary for said action per task order.

1.3.6 Item 0006- Building Type WB4

Payment will be made at the contract unit price under Item No. 0006 “All Work for Demolition of Type WB4 Building - Single Story Wood Structure, Pier and Post Foundation, Wood Exterior Siding.” This item includes all work associated with complete building demolition as defined herein except for the unit priced items listed in the

schedule. Payment shall include the cost of all labor; materials, equipment, supplies and all incidentals necessary for said action per task order.

1.3.7 Item 0007- Building type WB5

Payment will be made at the contract unit price under Item No. 0007 “All Work for Demolition of Type WB5 Building -Double Story Wood Structure, Pier and Post Foundation, CAB Exterior Siding.” This item includes all work associated with complete building demolition as defined herein except for the unit priced items listed in the schedule. Payment shall include the cost of all labor; materials, equipment, supplies and all incidentals necessary for said action per task order.

1.3.8 Item 0008 - Building Type WB6

Payment will be made at the contract unit price under Item No. 0008 “All Work for Demolition of Type WB6 Building - Double Story Wood Structure, Pier and Post Foundation, Wood Exterior Siding.” This item includes all work associated with complete building demolition as defined herein except for the unit priced items listed in the schedule. Payment shall include the cost of all labor; materials, equipment, supplies and all incidentals necessary for said action per task order.

1.3.9 Item 0009 - Building Type MT1

Payment will be made at the contract unit price under Item No. 0009 “All Work for Demolition of Type MT1 Building - Metal Canopy Shelter Structure, Open Wall.” This item includes all work associated with complete building demolition as defined herein except for the unit priced items listed in the schedule. Payment shall include the cost of all labor; materials, equipment, supplies and all incidentals necessary for said action per task order.

1.3.10 Item 0010- Building Type MT2

Payment will be made at the contract unit price under Item No. 0010 “All Work for Demolition of Type MT2 Building - Single Story Metal Structure, Concrete Slab on Grade floor, Wood Exterior Siding.” This item includes all work associated with complete building demolition as defined herein except for the unit priced items listed in the schedule. Payment shall include the cost of all labor; materials, equipment, supplies and all incidentals necessary for said action per task order.

1.3.11 Item 0011 - Building Type MT3

Payment will be made at the contract unit price under Item No. 0011 “ All Work for Demolition of Type MT3 Building - Single Story Metal Structure, Pier and Post Foundation, CAB & Metal Exterior Siding.” This item includes all work associated with complete building demolition as defined herein except for the unit priced items listed in the schedule. Payment shall include the cost of all labor; materials, equipment, supplies and all incidentals necessary for said action per task order.

1.3.12 Item 0012- Building Type MT4

Payment will be made at the contract unit price under Item No. 0012 “All Work for Demolition of Type MT4 Building - Two Story Metal Structure, Concrete Slab on Grade Floor, Metal Exterior Siding.” This item includes all work associated with complete building demolition as defined herein except for the unit priced items listed in the schedule. Payment shall include the cost of all labor; materials, equipment, supplies and all incidentals necessary for said action per task order.

1.3.13 Item 0013- Building Type MS1

Payment will be made at the contract unit price under Item No. 0013 “All Work for Demolition of Type MS1 Building-Single Story Masonry, Concrete Slab on Grade Floor, CMU Exterior Walls.” This item includes all work associated with complete building demolition as defined herein except for the unit priced items listed in the schedule. Payment shall include the cost of all labor; materials, equipment, supplies and all incidentals necessary for said action per task order.

1.3.14 Item 0014- Building Type MS2

Payment will be made at the contract unit price under Item No. 0014 “All Work for Demolition of Type MS2 Building - Single Story Masonry, Concrete Slab on Grade Floor, Brick Exterior Walls.” This item includes all work associated with complete building demolition as defined herein except for the unit priced items listed in the schedule. Payment shall include the cost of all labor; materials, equipment, supplies and all incidentals necessary for said action per task order.

1.3.15 Item 0015- Demo PCC Slabs

Payment will be made at the contract unit price under Item No. 0015 “Demolish Portland Cement Concrete Slabs for Roads and Sidewalks - Up to Eight Inches Thick (All Outside 5 foot Building Wall Lines).” This work includes topsoil and hydroseeding. Payment shall include the cost of all labor; materials, equipment supplies, and all incidentals necessary for said action per task order.

1.3.16 Item 0016- Demo AC Slabs

Payment will be made at the contract unit price under Item No. 0016 “Demolish Asphalt Concrete Slabs for Roads and Sidewalks - Up to Six Inches Thick (All Outside 5 foot Buildings Wall Lines).” This work includes topsoil and hydroseeding. Payment shall include the cost of all labor, materials, equipment, supplies, and all incidentals necessary for said action per task order.

1.3.17 Item 0017- Remove AST to 500 Gal

Payment will be made at the contract unit price under Item No. 0017 “All Work for Removal and Disposal of Aboveground Fuel Oil Storage Tank (AST) Up to 500 Gallon Tank.” All Work for Tank Pumping, Cleaning, Removal and Disposal. This work shall include the costs for removal and disposal of ten cubic yards (assume 17 tons weight) of petroleum contaminated soil (PCS), including submission of weight slips, and testing of tank contents. The material removed shall not exceed the specified quantity of material unless approved in writing by the COR. All additional removal approved in excess of this amount will be paid under Item No.0020.

1.3.18 Item 0018 - Remove AST to 501- 1100 Gal

Payment will be made at the contract unit price under Item No. 0018 “All Work for Removal and Disposal of Aboveground Fuel Oil Storage Tank (AST) from 501 Gallon Up to 1100 Gallon Tank.” All Work for Tank Pumping, Cleaning, Removal and Disposal. This work shall include the costs for removal and disposal of ten cubic yards (assume 17 tons weight) of petroleum contaminated soil (PCS), including submission of weight slips, and testing of tank contents. The material removed shall not exceed the specified quantity of material unless approved in writing by the COR. All additional removal approved in excess of this amount will be paid under Item No.0020.

1.3.19 Item 0019- Remove UST to 1100 Gal

Payment will be made at the contract unit price under Item No, 0019 “All Work for Removal and Disposal of Underground Fuel Oil Storage Tank (UST) Up to 1100 Gallon Tank” including tank pumping, inerting, cleaning,

excavation, removal and disposal. This work shall include the costs for removal and disposal of ten cubic yards (assume 17 tons weight) of petroleum contaminated soil (PCS), including submission of weight slips, and testing of tank contents. The material removed shall not exceed the specified quantity of material unless approved in writing by the COR. All additional removal approved in excess of this amount will be paid under Item No.0020.

1.3.20 Item 0020- Additional PCS Remove/Dispose

Payment will be made at the contract unit price under Item No. 0020, "All Work for Additional PCS Removal and Disposal Including Excavation, Soil Screening, Hauling and Disposal." This is material, which is required to be removed after all required excavation at UST/AST site has been removed but additional contamination is remaining onsite. No payment will be made for any contamination of site which is due to the Contractor's operations or failure to perform the work in accordance with applicable regulations. Payment shall include the cost of all labor, equipment, supplies and materials necessary to perform additional excavation as specified in individual task orders and any associated field surveying and lab testing. Payment will only be made for material removed from authorized excavations.

1.3.21 Item 0021- Additional Backfill Material

Payment will be made at the contract unit price under Item No. 0021, "Provide Additional Backfill Material to Restore Excavated Areas of Fill in Basement Holes." Contractor shall compact, but will not be required to perform compaction testing. This is clean suitable backfill material obtained from borrow site(s) located off post which is required to complete filling of the excavation after using all available onsite suitable backfill material. Payment shall include the cost of equipment, labor, loading, hauling and other incidentals for placement and compaction of all additional backfill material.

1.3.22 Item 0022- Remove Clean Excavated Material

Payment will be made at the contract unit price under Item No. 0022, "Removing Clean Excavated Materials to Fort Lewis Disposal Area." This is clean uncontaminated material, which is required to be removed from the site because of excess excavated material. Payment shall include the cost of equipment, labor, hauling and spreading and other incidentals for disposal of clean fill.

1.3.23 Item 0023 - Restore PCC Surface to 10 SY

Payment will be made at the contract unit price under Item No. 0023, "Restore PCC Surface to 10 SY." This includes all work to perform restoration of site as required to match adjacent surface. Payment shall include the cost of equipment, labor and other incidentals for installing concrete surface.

1.3.24 Item 0024 - Restore PCC Surface 10-20 SY

Payment will be made at the contract unit price under Item No. 0024, "Restore PCC Surface to 10-20 SY." This includes all work to perform restoration of site as required to match adjacent surface. Payment shall include the cost of equipment, labor and other incidentals for installing concrete surface

1.3.25 Item 0025 - Restore PCC Surface Over 20 SY

Payment will be made at the contract unit price under Item No. 0025, "Restore PCC Surface Over 20 SY." This includes all work to perform restoration of site as required to match adjacent surface. Payment shall include the cost of equipment, labor and other incidentals for installing concrete surface.

1.3.26 Item 0026 - Restore AC Surface to 10 SY

Payment will be made at the contract unit price under Item No. 0026, "Restore AC Surface to 10 SY." This includes all work to perform restoration of site as required to match adjacent surface. Payment shall include the cost of equipment, labor and other incidentals for installing asphaltic concrete surface.

1.3.27 Item 0027- Restore AC Surface 10-20 SY

Payment will be made at the contract unit price under Item No. 0027, "Restore AC Surface to 10-20 SY." This includes all work to perform restoration of site as required to match adjacent surface. Payment shall include the cost of equipment, labor and other incidentals for installing asphaltic concrete surface.

1.3.28 Item 0028 - Restore AC Surface Over 20 SY

Payment will be made at the contract unit price under Item No. 0028, "Restore AC Surface Over 20 SY." This includes all work to perform restoration of site as required to match adjacent surface. Payment shall include the cost of equipment, labor and other incidentals for installing asphaltic concrete surface.

1.3.29 Item 0029- Fencing to 100 LF

Payment will be made at the contract unit prices under item No. 0029, "Provide Chain-Link Fencing to 100 Lineal feet per task order." This includes all work to provide chain-link fence for permanent closure at fill-in areas to connect to existing fencing or adjacent building in accordance with Section 02831. Chainlink fencing shall be 6-foot high with 3 strand barb wire outrigger.

1.3.30 Item 0030- Fencing to 100-1000 LF

Payment will be made at the contract unit prices under item No. 0030, "Provide Chain-Link Fencing Over 100 Lineal feet and up to 1,000 Lineal feet per task order." This includes all work to provide chain-link fence for permanent closure at fill-in areas to connect to existing fencing or adjacent building in accordance with Section 02831. Chainlink fencing shall be 6-foot high with 3 strand barb wire outrigger.

1.3.31 Item 0031- Fencing over 1000 LF

Payment will be made at the contract unit prices under item No. 0031, "Provide Chain-Link Fencing Over 1000 Lineal feet per task order." This includes all work to provide chain-link fence for permanent closure at fill-in areas to connect to existing fencing or adjacent building in accordance with Section 02831. Chainlink fencing shall be 6-foot high with 3 strand barb wire outrigger.

1.3.32 Item 0032- Double Swing Gate

Payment will be made at the contract unit prices for all work under Item No. 0032, "Double Swing Gate, 6 foot gate leaf." Payment of which shall constitute full compensation for Item 0032, complete.

1.3.33 Item 0033- Personnel Gate

Payment will be made at the contract unit prices for all work under Item No. 0033, "Provide Personnel Gate," payment of which shall constitute full compensation for Item 0033 complete with dimensions of 5 feet wide, and 6 feet high with 3 strand barb wire outrigger.

1.3.34 Item 0034- Remove Continuous Reinforced Concrete Footing

Payment will be made at the contract unit prices under Item No. 0034, "Remove Continuous Reinforced Concrete Footing, up to 2-foot width by 1-foot thickness, up to depth of 5 feet below adjacent grade," complete. This item includes all work associated with specific demolition of the features as defined herein. Payment shall include the cost of labor; materials, equipment, supplies and all incidentals necessary for said action per task order

1.3.35 Item 0035 - Remove Foundation Wall, No Basement

Payment will be made at the contract unit prices under Item No. 0035, "Remove Continuous Foundation or Perimeter - Concrete wall, up to 8 inches thick to a depth of 5 feet below adjacent grade, No Basement," complete. This item includes all work associated with specific demolition of the features as defined herein. Payment shall include the cost of all labor; materials equipment, supplies and all incidentals necessary for said action per task order.

1.3.36 Item 0036- Remove Foundation Wall, at Basement

Payment will be made at the contract unit prices under Item No. 0036, "Remove Continuous Foundation or Perimeter Reinforced Concrete wall, around Basement Structure up to 8 inches thick from adjacent grade to depth of 5 feet below adjacent grade, complete. This item includes all work associated with specific demolition of the features as defined herein. Payment shall include the cost of all labor, materials, equipment, supplies, and all incidentals necessary for said action per task order.

1.3.37 Item 0037- Break up Basement Floor Slab

Payment will be made at the contract unit prices under Item No. 0037, "Breakup Basement Concrete Floor Slab, Leave in Place," complete. This item includes all work associated with specific demolition of the features as defined herein. Payment shall include the cost of all labor, materials, equipment, supplies, and all incidentals necessary for said action per task order.

1.3.38 Item 0038 - Remove Wood Power Pole

Payment will be made at the contract unit price per each under item No. 0038, "Removal of Wood Power Pole, up to 35 foot maximum height above grade, and Backfill of Hole." This work shall include the removal and disposal of pole and providing clean backfill materials to fill hole, payment of which shall constitute full compensation for Item 0038, complete.

1.3.39 Item 0039 - Remove Trees

Payment will be made at the contract unit price per each under Item No. 0039, "Tree Removal, up to 18 inches Diameter at Breast Height, including stump grinding 1 foot below grade or removal." This work shall include the removal and disposal of tree and associated stump and re-grading as necessary to match surrounding site, payment of which shall constitute full compensation for Item 0039, complete.

1.3.40 Item 0040- Remove Cement Asbestos Board

Payment will be made at the contract unit price under Item No. 0040, " Removal of Cement Asbestos Board (Additional beyond Base Range)." This work shall include all additional abatement removal and disposal of the specified material, in accordance with applicable specifications, found to be outside the basic building demolition range for the work covered under Items 0001, 0002, 0004, 0005, 0007,0011 and approved by the COR. Payment shall constitute full compensation for the cost of all labor, materials, equipment, supplies, and all incidentals necessary for said action per task order.

1.3.41 Item 0041 - Remove Vinyl Asbestos Tile.

Payment will be made at the contract unit price under Item No. 0041, "Removal of Vinyl Asbestos Tile and Mastic (Additional beyond Base Range)." This work shall include all additional abatement removal and disposal of the specified material, in accordance with applicable specifications, found to be outside the basic building demolition range for the work covered under Items 0001 through 0014, and approved by the COR. Payment shall constitute full compensation for the cost of all labor, materials, equipment, supplies, and all incidentals necessary for said action per task order.

1.3.42 Item 0042- Remove Linoleum w/ Asbestos

Payment will be made at the contract unit price under Item No. 0042, "Removal of Linoleum and Asbestos Containing Mastic (Additional beyond Base Range)." This work shall include all additional abatement removal and disposal of the specified material, in accordance with applicable specifications, found to be outside the basic building demolition range for the work covered under Items 0001 through 0014, and approved by the COR. Payment shall constitute full compensation for the cost of all labor, materials, equipment, supplies, and all incidentals necessary for said action per task order.

1.3.43 Item 0043- Remove Wainscot w/ Asbestos

Payment will be made at the contract unit price under Item No. 0043, "Removal of Wainscot with Asbestos containing Mastic (Additional beyond Base Range)." This work shall include all additional abatement removal and disposal of the specified material, in accordance with applicable specifications, found to be outside the basic building demolition range for the work covered under Items 0001 through 0014, and approved by the COR. Payment shall constitute full compensation for the cost of all labor, materials, equipment, supplies, and all incidentals necessary for said action per task order.

1.3.44 Item 0044- Remove Sheet Debris w/ Asbestos

Payment will be made at the contract unit prices under Item No. 0044, "Removal of Sheet Debris with Asbestos," complete. This work shall include all additional abatement removal and disposal of the specified material, in accordance with applicable specifications, found to be outside the basic building demolition range for the work covered under Items 0001 Through 0014, and approved by the COR. Payment shall constitute full compensation for the cost of all labor, materials, equipment, supplies, and all incidentals necessary for said action per task order.

1.3.45 Item 0045: Remove Misc. Debris w/ Asbestos.

Payment will be made at the contract unit price under Item No. 0045, "Removal of Miscellaneous Debris with Asbestos," complete. This work shall include all additional abatement removal and disposal of the specified material, in accordance with applicable specifications, found to be outside the basic building demolition range for the work covered under Items 0001 through 0014 and approved by the COR. Payment shall constitute full compensation for the cost of all labor, materials, equipment, supplies, and all incidentals necessary for said action per task order.

1.3.46 Item 0046 - Remove Pipe Insulation w/ Asbestos

Payment will be made at the contract unit price under Item No. 0046, "Removal of Pipe Insulation Containing Asbestos Material, up to 6 inches in diameter pipe (Additional beyond Base Range)." This work shall include all additional abatement removal and disposal of the specified material, in accordance with applicable specifications found to be outside the basic building demolition range for the work covered under Items 0001 through 0014, and

approved by the COR. Payment shall constitute full compensation for the cost of all labor, materials, equipment, supplies, and all incidentals necessary for said action per task order.

1.3.47 Item 0047- Removal of Tank Insulation w/ Asbestos

Payment will be made at the contract unit price under Item No. 0047, "Removal of Tank Insulation Containing Asbestos Material (Additional beyond Base Range)." This work shall include all additional abatement removal and disposal of the specified material, in accordance with applicable specifications found to be outside the basic building demolition range for the work covered under Items 0001 through 0014, and approved by the COR. Payment shall constitute full compensation for the cost of all labor, materials, equipment, supplies, and all incidentals necessary for said action per task order

1.3.48 Item 0048 - Remove Stair Treads w/ Asbestos

Payment will be made at the contract unit price under Item No. 0048, "Removal of Rubber/Vinyl Type 3-Foot-Wide Stair Treads with Asbestos Containing Mastic (Additional beyond Base Range)." This work shall include all additional abatement removal and disposal of the specified material, in accordance with applicable specifications, found to be outside the basic building demolition range for the work covered under Items 0001 through 0014, and approved by the COR. Payment shall constitute full compensation for the cost of all labor, materials, equipment, supplies, and all incidentals necessary for said action per task order.

1.3.49 Item 0049 - Temporary Fencing

Payment will be made at the contract unit price for all work for Item 0049, "Temporary Fencing During Demolition." Payment of which shall constitute full compensation for Item 0049, complete. Fencing is not to be included in any other bid item.

1.3.50 Item 0050 - 3 Inch Slab Overlay

Payment will be made at the contract unit price for all work for Item 0050, "Removal of 3-Inch Concrete Overlay on Wood Sub-Floor," payment of which shall constitute full compensation for Item 0050, complete.

1.4 PROGRESS PAYMENT INVOICE

Requests for payment shall be submitted in accordance with Federal Acquisition Regulations (FAR) Subpart 32.9, entitled "PROMPT PAYMENT", and Paragraphs 52.232-5 and 52.232-27, entitled "Payments Under Fixed-Price Construction Contracts", and "Prompt Payment for Construction Contracts" respectively. In addition each request shall be submitted in the number of copies and to the designated billing office as shown on the applicable contract (DD 1155).

1.4.1 When submitting payment requests, the Contractor shall complete Blocks 1 through 12 of the "PROGRESS PAYMENT INVOICE" Form as directed by the Contracting Officer. (A sample form is attached at the end of this Technical Specification.) The completed form shall then become the cover document to which all other support data shall be attached.

1.4.2 One additional copy of the entire request for payment, to include the "PROGRESS PAYMENT INVOICE" cover document, shall be forwarded to a separate address as designated by the Contracting Officer.

1.4.3 The Contractor shall submit with each pay request, a list of subcontractors that have worked during that pay period. The listing shall be broken down into weeks, identifying each subcontractor that has worked during a

particular week, and indicate the total number of employees that have worked on site for each subcontractor for each week. The prime Contractor shall also indicate the total number of employees for it's on site staff for each week.

PARTS 2 and 3 NOT USED

END OF SECTION

Demolition of Buildings - Phase VI

Price Book

| Item No. | Description of Item | Quantity | Unit | Unit Price |
|----------|---|----------|------|------------|
| 0001 | All Work for Demolition of Type WB1 Building - Single Story Wood Structure, Concrete Slab on Grade Floor, CAB Exterior Siding to 2,500 square feet | 2,500 | SF | 7.50 |
| 0002 | All Work for Demolition of Type WB1 Building - Single Story Wood Structure, Concrete Slab on Grade Floor, CAB Exterior Siding 2,501 or more square feet | 10,334 | SF | 6.14 |
| 0003 | All Work for Demolition of Type WB2 Building - Single Story Wood Structure, Concrete Slab on Grade Floor, Wood Exterior Siding | 190 | SF | 15.12 |
| 0004 | All Work for Demolition of Type WB3 Building - Single Story Wood Structure, Pier and Post Foundation, CAB Exterior Siding at 1,144 square feet | 1,144 | SF | 9.50 |
| 0005 | All Work for Demolition of Type WB3 Building - Single Story Wood Structure, Pier and Post Foundation, CAB Exterior Siding at 2,207 square feet | 2,207 | SF | 8.02 |
| 0006 | All Work for Demolition of Type WB4 Building - Single Story Wood Structure, Pier and Post Foundation, Wood Exterior Siding | 2,612 | SF | 6.46 |
| 0007 | All Work for Demolition of Type WB5 Building - Double Story Wood Structure, Pier and Post Foundation, CAB Exterior Siding | 4,720 | SF | 6.27 |
| 0008 | All Work for Demolition of Type WB6 Building - Double Story Wood Structure, Pier and Post Foundation, Wood Exterior Siding | 4,970 | SF | 6.01 |
| 0009 | All Work for Demolition of Type MT1 Building - Metal Canopy Shelter Structure, Open Wall | 834 | SF | 3.92 |
| 0010 | All Work for Demolition of Type MT2 Building - Single Story Metal Structure, Concrete Slab on Grade Floor, Wood Exterior Siding | 6,173 | SF | 4.66 |
| 0011 | All Work for Demolition of Type MT3 Building - Single Story Metal Structure, Pier and Post Foundation, CAB & Metal Exterior Siding | 5,397 | SF | 11.17 |
| 0012 | All Work for Demolition of Type MT4 Building - Two Story Metal Structure, Concrete Slab on Grade Floor, Metal Exterior Siding | 2,300 | SF | 5.65 |
| 0013 | All Work for Demolition of Type MS1 Building - Single Story Masonry, Concrete Slab on Grade Floor, CMU Exterior Walls | 303 | SF | 10.50 |
| 0014 | All Work for Demolition of Type MS2 Building - Single Story Masonry, Concrete Slab on Grade Floor, Brick Exterior Walls | 18,200 | SF | 5.50 |

Price Book

| Item No. | Description of Item | Quantity | Unit | Unit Price |
|----------|--|----------|------|------------|
| 0015 | Demolish Portland Cement Concrete Slabs for Roads and Sidewalks - Up to Eight Inches Thick (All Outside 5 foot Building Wall Lines). This work includes topsoil and hydroseeding | 1 | SY | 11.75 |
| 0016 | Demolish Asphalt Concrete Slabs for Roads and Sidewalks - Up to Six Inches Thick (All Outside 5 foot Buildings Wall Lines). This work includes topsoil and hydroseeding | 1 | SY | 9.65 |
| 0017 | All Work for Removal and Disposal of Aboveground Fuel Oil Storage Tank (AST) Up to 500 Gallon Tank | 1 | EA | 2,472.77 |
| 0018 | All Work for Removal and Disposal of Aboveground Fuel Oil Storage Tank (AST) From 501 Gallon Up to 1,100 Gallon Tank | 1 | EA | 3,097.64 |
| 0019 | All Work for Removal and Disposal of Underground Fuel Oil Storage Tank (UST) Up to 1,100 Gallon Tank | 1 | EA | 4,125.27 |
| 0020 | All Work for Additional PCS Removal and Disposal, Including Testing, Excavation, Soil Screening, Hauling and Disposal | 1 | TON | 104.16 |
| 0021 | Provide Additional Backfill Material to Restore Excavated Areas of Fill in Basement Holes. No Compaction or Compaction testing required | 1 | CY | 10.08 |
| 0022 | Removing Clean Excavated Materials to Fort Lewis Disposal Area | 1 | CY | 8.54 |
| 0023 | Restore PCC Surface to 10sy | 1 | SY | 40.11 |
| 0024 | Restore PCC Surface 10-20sy | 1 | SY | 34.82 |
| 0025 | Restore PCC Surface over 20sy | 1 | SY | 29.52 |
| 0026 | Restore AC Surface to 10sy | 1 | SY | 35.74 |
| 0027 | Restore AC Surface 10-20sy | 1 | SY | 31.13 |
| 0028 | Restore AC Surface over 20sy | 1 | SY | 24.00 |
| 0029 | Provide Chain-Link Fencing 38 to 100 Lineal feet per task order | 1 | LF | 14.76 |
| 0030 | Provide Chain-Link Fencing Over 100 Lineal feet and up to 1,000 Lineal feet per task Order | 1 | LF | 13.33 |
| 0031 | Provide Chain-Link Fencing Over 1,000 Lineal feet per task order | 1 | LF | 12.71 |
| 0032 | Provide Double Swing Gate, 6 foot gate leaf | 1 | EA | 613.71 |
| 0033 | Provide Personnel Gate | 1 | EA | 335.01 |

Demolition of Buildings - Phase VI

Price Book

| Item No. | Description of Item | Quantity | Unit | Unit Price |
|----------|---|----------|------|------------|
| 0034 | Remove Continuous Reinforced Concrete Footing, up to 2-foot width by 1-foot thickness, up to depth of 5 feet below adjacent grade | 1 | LF | 5.32 |
| 0035 | Remove Continuous Foundation or Perimeter Concrete wall, up to 8 inches thick to a depth of 5 feet below adjacent grade, No Basement | 1 | SF | 1.78 |
| 0036 | Remove Continuous Foundation or Perimeter Reinforced Concrete wall, around Basement Structure, up to 8 inches thick from adjacent grade to depth of 5 feet below adjacent grade | 1 | SF | 3.10 |
| 0037 | Breakup Basement Concrete Floor Slab, Leave in Place | 1 | SF | 7.68 |
| 0038 | Removal of Wood Power Pole, up to 35 foot maximum height above grade, and Backfill of Hole | | EA | 249.01 |
| 0039 | Tree Removal, up to 18 inches Diameter at Breast Height, including stump grinding 1 foot below grade or removal | 1 | EA | 675.17 |
| 0040 | Removal of Cement Asbestos Board (Additional Beyond Base Range) | 100 | SF | 1.45 |
| 0041 | Removal of Vinyl Asbestos Tile and Mastic (Additional Beyond Base Range) | 1 | SF | 1.49 |
| 0042 | Removal of Linoleum and Asbestos Containing Mastic (Additional Beyond Base Range) | | SF | 1.83 |
| 0043 | Removal of Wainscot With Asbestos containing Mastic (Additional Beyond Base Range) | | SF | 1.72 |
| 0044 | Removal of Sheet Debris with Asbestos | | SF | 1.72 |
| 0045 | Removal of Miscellaneous Debris with Asbestos | 27 | CF | 12.25 |
| 0046 | Removal of Pipe Insulation Containing Asbestos Material, up to 6 inches diameter pipe (Additional Beyond Base Range) | 200 | LF | 6.77 |
| 0047 | Removal of Tank Insulation Containing Asbestos Material (Additional Beyond Base Range) | 162 | SF | 6.32 |
| 0048 | Removal of Rubber/Vinyl Type 3-Foot-Wide Stair Treads with Asbestos Containing Mastic (Addition Beyond Base Range) | 54 | EA | 4.17 |
| 0049 | Temporary Fencing During Demolition (Fencing is not to be included in any other bid item) | 1 | LF | 2.37 |
| 0050 | Removal of 3" Concrete Overlay on Wood Sub-Floor | 1 | SF | 1.87 |

SECTION 01330

SUBMITTALS

PART 1 GENERAL

1.1 SUBMITTAL OF ENG FORM 4288

1.1.1 Basic Contract Submittals

Within 30 days after the date of contract award, the Contractor shall submit to the Contracting Officer, 3 copies of all submittal items required for the basic contract (see ENG Form 4288 at the end of this section for list of items). Adequate time (minimum of 30 days) shall be allowed for review and approval and possible re-submittal.

1.1.2 Task Order Specific Submittals

The Contractor shall complete and submit to the Contracting Officer, 3 copies of all submittal items required for the Task Order (see ENG Form 4288 at end of this Section). Scheduling of submittals shall be coordinated with the approved progress schedule. All submittals for addenda to basic contract submittals shall be made prior to the date of negotiations.

1.2 APPROVED SUBMITTALS

The approval of submittals by the Contracting Officer shall not be construed as a complete check, but will indicate only that the general method of construction, materials, detailing and other information are satisfactory. Approval will not relieve the Contractor of the responsibility for any error which may exist, as the Contractor under the CQC requirements of this contract, is responsible for the dimensions and design of adequate connections, details and satisfactory construction of all work. After submittals have been approved by the Contracting Officer, no re-submittal for the purpose of substituting materials or equipment will be given consideration unless accompanied by an explanation as to why a substitution is necessary.

1.3 DISAPPROVED SUBMITTALS

The Contractor shall make all corrections required by the Contracting Officer and promptly furnish a corrected submittal in the form and number of copies required for Government approval. If the Contractor considers any correction indicated on the submittals to constitute a change to the contract, notice as required under the Contract Clause entitled "Changes" shall be given promptly to the Contracting Officer.

1.4 WITHHOLDING OF PAYMENT

Payment for materials incorporated in the work will not be made if required approvals have not been obtained.

1.5 PAYMENT

Separate payment will not be made for submittals, and all costs associated therein shall be included in the applicable unit prices or lump sum prices contained in the schedule.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 GENERAL

The Contractor shall submit all items listed on the Submittal Register (ENG Form 4288). The Contracting Officer may request submittals, in addition to those listed when deemed necessary to adequately describe the work covered in the respective sections. Units of weights and measures used on all submittals shall be the same used in the contract drawings. Each submittal shall be complete and in sufficient detail to allow ready determination of compliance with contract requirements. Prior to submittal, all items shall be checked and approved by the Contractors Quality Control (CQC) representative and each item of the submittal shall be stamped, signed, and dated and each respective transmittal form (ENG Form 4025) shall be signed and dated by the CQC representative certifying that the accompanying submittal complies with the contract requirements. Proposed deviations from the contract requirements shall be clearly identified. Submittals shall include items such as: Contractors, manufactures, or fabricators drawings; descriptive literature including (but not limited to) catalog cuts, diagrams, test reports; test cylinders; samples; certifications; warranties and other such required submittals.

3.2 SUBMITTAL REGISTER (ENG Form 4288)

At the end of this section are two sets of ENG Forms 4288 listing the items for which submittals are required by the Technical Specifications Divisions 1 through 16. One set of the form shown under Attachment 1, is for basic contract submittals to be submitted at beginning of contract, thereafter submit only addenda for changes; the other set of forms, shown under Attachment 2, is for individual task order submittals to be submitted for each task order under the contract. Columns "Specification Paragraph Number" through "Government Approved" have been, completed by the Government. The Contractor shall complete columns "Item No." and all data under Contractor Schedule Dates" and "Contractor Action". The item numbers in column "Item No." are to be assigned sequentially starting with "1" for each specification section.

The submittal register will become the scheduling document and will be used to control submittals throughout the life of the contract. This register, Contractors schedule and the progress schedules shall be coordinated.

3.3 SCHEDULING

No delays damages or time extensions will be allowed for time lost in late submittals.

3.4 TRANSMITTAL FORM (ENG Form 4025)

The transmittal form (ENG Form 4025), sample attached at end of this section, shall be used for all submittals in accordance with the instructions on the reverse side of the form. These forms will be furnished to the Contractor. This form shall be properly completed by filling out all the heading blank spaces and identifying each item submitted. Special care will be exercised to ensure proper listing of the specification paragraph and/or sheet number of the contract drawings pertinent to the data submitted for each item.

3.5 SUBMITTAL PROCEDURE

Submittal shall be made as follows:

3.5.1 General

Shop drawings and ENG Form 4025 (sample attached at end of this section) shall be submitted in the number of copies specified in subparagraphs "Government Approved Submittals" and "Information Only Submittals." ENG Form 4025 is the transmittal document and shall be initiated by the Contractor in accordance with the instructions herein and as on the reverse side of ENG Form 4025. Blank ENG Form 4025's will be furnished by the Contracting

Officer upon request. Each submittal item shall be listed separately on the form, naming subcontractor; supplier, or manufacturer, applicable specification paragraph number(s), drawing/sheet number, pay item number, and any other information needed to identify the item, define its use, and locate it in the work. One or more ENG Forms 4025 shall be used per specification SECTION, however, never include more than one specification SECTION per form. Each submittal shall be complete, containing all information needed to determine contract compliance.

3.5.2 Approval of Submittals

Before submission, Contractor shall review and correct shop drawings prepared by subcontractors, suppliers, and itself, for completeness and compliance with plans and specifications. Contractor shall not use red markings for correcting material to be submitted. Red markings are reserved for Contracting Officer use. Approval by Contractor shall be indicated on each shop drawing by an "Approval" stamp containing information as shown, on stamp outline in paragraph CONTRACTOR APPROVAL STAMP. Submittals not conforming to the requirements of this Section will be returned to the Contractor for correction and resubmittal.

3.5.3 Variations

For submittals which include proposed variations requested by the Contractor, the column "h" variation of ENG Form 4025 shall be checked. The Contractor shall set forth in writing the justification for any variations and annotate such variations on the submittal in the REMARKS BLOCK. Normally, variances are not approved unless there is an advantage to the Government. The Government reserves the right to rescind inadvertent approval of submittals containing unnoted deviations.

3.5.4 Drawings

Each drawing shall be not more than 28 inches high by 40 inches wide, with a title block in lower right hand corner and a 3 - by 4-inch clear area adjacent. Title block shall contain subcontractors or fabricators name, Contract number, description of item(s), bid item number, and a revision block. Contractor shall submit the required number of prints of any type, except blueprints. Provide a blank margin of $\frac{3}{4}$ of an inch at bottom, 2 inches at left, and $\frac{1}{2}$ inch at top and right. Where drawings are submitted for assemblies of more than one piece of equipment or systems of components dependent on each other for compatible characteristics, complete information shall be submitted on all such related components at the same time. Contractor shall insure that information is complete and that sequence of drawing submittal is such that all information is available for reviewing each drawing. Drawings for all items and equipment, of special manufacture or fabrication, shall consist of complete assembly and detail drawings. All revisions after initial submittal shall be shown by number, date, and subject in revision block.

3.5.5 Printed Material

All requirements for shop drawings shall apply to catalog cuts, illustrations, printed specifications, or other data submitted, except 3- by 4-inch clear area adjacent to the title block is not mandatory. Inapplicable portions shall be marked out and applicable items such as model numbers, sizes, and accessories shall be indicated.

3.6 FIELD TEST REPORTS

Routine daily tests such as soil density, concrete deliveries, routine pressure testing shall be delivered to the Contracting Officer with the daily Quality Control reports. See SECTION: 01400 (01451) CONTRACTOR QUALITY CONTROL for daily Quality Control Reports.

3.7 CONTROL OF SUBMITTALS

The Contractor shall carefully control his procurement operations to ensure that each individual submittal is made on or before the Contractor scheduled submittal date shown on the approved "Submittal Register."

3.8 GOVERNMENT APPROVED SUBMITTALS (SUBMIT 3 COPIES)

Upon completion of review of submittals requiring Government approval, the submittals will be identified as having received approval by being so stamped and dated. Two copies of the submittal will be retained by the Contracting Officer and 1 (one) copy of the submittal will be returned to the Contractor.

3.8.1 Processing of Government Approved Submittals

Three copies of all submittals requiring Government approval shall be submitted. Each copy submitted shall be identified by having a completed copy of ENG Form 4025 attached to it. Submittals will be reviewed and processed as follows:

a. Approved as Submitted (Action Code "A"): Shop drawings which can be approved without correction will be stamped "Approved" and two prints, or two copies of catalog and other printed data, will be returned to the Contractor.

b. Approved Except as Noted (Action Code "B"): Shop drawings which have only minor discrepancies will be annotated in red to indicate necessary corrections. Marked material will be stamped "Approved Except as Noted" and returned to the Contractor for correction. Distribution will be the same as for "Approved as Submitted (Action Code "A") submittals.

c. Approved Except as Noted (Action Code "C"): Shop drawings which are incomplete or require more than minor corrections will be annotated in red to indicate necessary corrections. Marked material will be stamped "Approved Except as Noted - Resubmission Required" and returned to the Contractor for correction. Two prints, or two copies of catalog and other printed data, will be returned to the Contractor. The Contractor need only resubmit the items of the submittal needing the corrections.

d. Disapproved (Action Code "E"): Shop drawings which are fundamentally in error, cover wrong equipment or construction, or require extensive corrections, will be returned to the Contractor stamped "Disapproved" an explanation will be furnished on the submitted material or on ENG Form 4025 indicating reason for disapproval. Distribution will be the same as for "Approved Except as Noted (Action Code "C") submittals.

e. Resubmittal will not be required for shop drawings stamped "Approved as Submitted (Action Code "A") or Approved Except as Noted (Action Code "B") unless subsequent changes are made by Contractor or a contract modification. For shop drawings stamped "Approved Except as Noted (Action Code "C") or "Disapproved (Action Code "E")", Contractor shall make corrections required, note any changes by dating the revisions to correspond with the change request date, and promptly resubmit the corrected material. Government costs incurred after the first resubmittal will be charged to the Contractor.

3.9 INFORMATION ONLY SUBMITTALS (SUBMIT 3 COPIES OF DATA AND 4 COPIES OF ENG FORM 4025)

Normally submittals for information only will not be returned. Approval of the government is not required on information only submittals. These submittals will be used for information purposes. The Government reserves the right to require the Contractor to resubmit any item found not to comply with the contract. The resubmittal shall be reclassified as Government approved submittal. This does not relieve the Contractor from the obligation to furnish

material conforming to the plans and specifications and will not prevent the Contracting Office from requiring removal and replacement if nonconforming material is incorporated in the work. This does not relieve the Contractor of the requirement to furnish samples for testing by the Government laboratory or check testing by the Government in those instances where the technical specifications so prescribe.

3.9.1 Processing of Information Only Submittals

Three copies of all shop drawings submitted for information only shall be submitted prior to delivery of the material or equipment to the job site. Each copy submitted shall be identified by having a completed copy of ENG Form 4025 attached to it. ENG Form 4025 shall be marked as follows to identify the Contractor approved submittals. The words "Contractor approved - information copy only" shall be placed in the remarks block of the form. Submittals will be monitored and spot checks will be made. When such checks indicate noncompliance, Contractor will be notified by the same method used for Government approvals. An additional completed ENG form 4025 shall be submitted (without attachments) which will be returned to the Contractor to signify that the submittal has been received.

3.10 CONTRACTOR APPROVAL STAMP

The stamp used by the Contractor on the submittal data to certify that the submittal meets contract requirements shall be similar to the following:

| |
|---|
| CONTRACTOR: _____ |
| CONTRACT NO. _____ |
| TRANSMITTAL NO. _____ |
| ITEM NO. _____ |
| SPECIFICATION SECTION _____ |
| PARAGRAPH NO. _____ |
| APPROVED: YES _____ NO _____ |
| APPROVED WITH CORRECTIONS AS NOTED ON SUBMITTAL DATA _____ |
| ON ATTACHED COMMENT SHEET _____ |
| SIGNATURE: _____ |
| TITLE: _____ DATE: _____ |

CONTRACTORS REVIEW STAMP

MAXIMUM SIZE 3-INCHES X 3-INCHES

3.11 TRANSMITTAL CHECKLIST

The following checklist is intended to aid in the preparation of form 4025 and related transmittals and is intended only as a partial summary of requirements stated elsewhere within this specification.

- (1) Use originals of the ENG FORM 4025. DO NOT use photocopies.
- (2) DO NOT submit multiple 5-digit specification sections on one ENG FORM 4025.
- (3) Submittals shall be numbered sequentially as submitted except for resubmittals. Resubmittals must be related to the parent (original) transmittal, i.e. transmittal no. 2 resubmittal would be number 2A, etc.
- (4) Submit 5 copies or enclosures; each with ENG FORM 4025's attached.
- (5) Break the submittal into items which can be reviewed independently. For a Transmittal with more than 9 items use multiple sets at ENG FORM 4025's.
- (6) Item numbers must be written on the enclosures and the ENG FORM 4025 (column A)
- (7) There shall be a reviewer's set with one copy of all items (not the originals) with the remainder of the submittal having each item and associated copies in separate bundles.
- (8) Each item of an enclosure shall be "approval stamped" by the Contractor.
- (9) Enter the specification technical paragraph for each Item in column "e" on the ENG FORM 4025.
- (10) Identify the contract drawing number that applies, if applicable in column "f" on ENG FORM 4025.
- (11) Variations shall be identified in column "g" ENG FORM 4025 and justified in the Remarks Block and 5 copies submitted for Government Approval.
- (12) Cross out inapplicable portions of submitted data or point to exact equipment being used on the project.
- (13) Allow a minimum 30 days for submittals requiring Government Approval. Justify exceptions for shorter periods.
- (14) SIGN the ENG FORM 4025.

ATTACHMENT 1

SUBMITTAL REGISTER (ENG FORM 4288)

(Basic Contract Submittals - Submit within 15 days after date of Contract award; thereafter submit only addenda for changes)

ATTACHMENT 2

SUBMITTAL REGISTER (ENG FORM 4288)

(Individual Task Order Submittals - Submit for each Task Order under the Contract)

01300- (Task Order) - i

01330-8

SUBMITTAL REGISTER

(ER 415-1-10)

| TITLE AND LOCATION | | | | | | | | | | | | | | | | | | | CONTRACT NUMBER | | | | | | | |
|--|------------|-----------------------------------|-------------------------------|-------------------|----------|--------------|-----------|------------|---------|--------------|---------|---------|------------------|---------------------|--------------------|--------|-----------------------|------------------------------|-----------------------|------|-------------------------|------|------|----------------------|--|---------|
| DEMOLITION OF WOODEN BUILDINGS PHASE VI, FT. LEWIS, WA | | | | | | | | | | | | | | | | | | | SPECIFICATION SECTION | | | | | | | |
| TRANS MITTAL NO | ITEM NO | SPECIFICATION PARAGRAPH NUMBER | DESCRIPTION OF ITEM SUBMITTED | TYPE OF SUBMITTAL | | | | | | | | | | | CLASSI FICATION | | | CONTRACTOR SCHEDULE DATES | | | CONTRACTOR ACTION | | | GOVERNMENT ACTION | | REMARKS |
| | | | | DATA | DRAWINGS | INSTRUCTIONS | SCHEDULES | STATEMENTS | REPORTS | CERTIFICATES | SAMPLES | RECORDS | INFORMATION ONLY | GOVERNMENT APPROVED | REVIEWER | SUBMIT | APPROVAL NEEDED BY | MATERIAL NEEDED BY | CODE | DATE | SUBMIT TO GOVERNMENT | CODE | DATE | | | |
| a. | b. | c. | d. | e. | f. | g. | h. | i. | j. | k. | l. | m. | n. | o. | p. | q. | r. | s. | t. | u. | v. | w. | x. | y. | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | |

SECTION 01351

SAFETY, HEALTH, AND EMERGENCY RESPONSE

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS (ACGIH)

ACGIH Threshold Limits (2001) Threshold Limit Values for Chemical Substances and
Physical Agents and Biological Exposure Indices

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI Z358.1 (1990) Emergency Eyewash and Shower Equipment

AMERICAN PETROLEUM INSTITUTE (API)

API Publ 2219 (1986) Safe Operation of Vacuum Trucks in Petroleum
Service

CODE OF FEDERAL REGULATIONS (CFR)

29 CFR 1904 Recording and Reporting Occupational Injuries and Illnesses

29 CFR 1910 Occupational Safety and Health Standards

29 CFR 1926 Safety and Health Regulations for Construction

49 CFR 171 General Information, Regulations, and Definitions

49 CFR 172 Hazardous Materials Table, Special Provisions, Hazardous
Materials Communications, Emergency Response
Information, and Training Requirements

WASHINGTON ADMINISTRATIVE CODE (WAC)

WAC 296-24 General Health and Safety Regulations

| | |
|-------------|--|
| WAC 296-62 | Occupational Health Regulations |
| WAC 296-65 | Asbestos Abatement Requirements |
| WAC 296-155 | Safety Standards for Construction Work |

ENGINEERING MANUALS (EM)

| | |
|------------|---|
| EM 385-1-1 | (1996) U.S. Army Corps of Engineers Safety and Health Requirements Manual |
|------------|---|

1.2 DESCRIPTION OF WORK

This section provides additional requirements for implementing the accident prevention provisions of EM 385-1-1, and specifies a Site Safety and Health Plan (SSHP) which shall satisfy the requirements for submission of a separate Accident Prevention Plan (APP) as required by EM 385-1-1. The requirements shall apply to work performed in both "contaminated" and "clean" areas.

1.3 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals not having a "GA" designation are for information only.

SD-09 Reports

Site Safety and Health Plan; GA.

Safety and health requirements for personnel working at the site.

1.4 REGULATORY REQUIREMENTS

Work performed under this contract shall comply with EM 385-1-1, applicable Federal, state, and local safety and occupational health laws and regulations. Where the requirements of this specification, applicable laws, criteria, ordinances, regulations, and referenced documents vary, the most stringent requirements shall apply.

1.5 PRECONSTRUCTION SAFETY CONFERENCE

Contractor's SSHP shall be discussed at the Preconstruction Meeting.

1.6 SAFETY AND HEALTH PROGRAM

The SSHP shall interface with the employer's overall Safety and Health Program.

1.7 SITE SAFETY AND HEALTH PLAN

1.7.1 Preparation and Implementation

A Site Safety and Health Plan (SSHP) shall be prepared covering onsite work to be performed by the Contractor and all subcontractors. The Contractor shall appoint a Safety and Health Manager who shall be responsible for the development, implementation, and oversight of the SSHP. The SSHP shall establish, in detail, the protocols necessary for the anticipation, recognition, evaluation, and control of hazards associated with each task performed. The SSHP shall address site-specific safety and health requirements and procedures based upon site-specific conditions. The level of detail provided in the SSHP shall be tailored to the type of work, complexity of operations to be performed, and hazards anticipated. Additional details shall be included in the activity hazard analyses as described in paragraph ACTIVITY HAZARD ANALYSES.

1.7.2 Acceptance and Modifications

Prior to submittal, the SSHP shall be signed and dated by the Safety and Health Manager and the Site Superintendent. The SSHP shall be submitted for review five days prior to the Preconstruction Safety Conference. Any deficiencies in the SSHP will be discussed at the Preconstruction Safety Conference, and the Contractor shall revise and resubmit the SSHP for acceptance. Onsite work shall not begin until the SSHP has been accepted by the Government. A copy of the final written SSHP shall be maintained onsite. As work proceeds, the SSHP shall be adapted to new situations and new conditions. Changes and modifications to the accepted SSHP shall be made with the knowledge and concurrence of the Safety and Health Manager, the Site Superintendent, and the Contracting Officer. Should any unforeseen hazard become evident during the performance of the work, the Site Safety and Health Officer (SSHO) shall bring such hazard to the attention of the Safety and Health Manager, the Site Superintendent, and the Contracting Officer, both verbally and in writing, for resolution as soon as possible. In the interim, necessary action shall be taken to re-establish and maintain safe working conditions in order to safeguard onsite personnel, visitors, the public, and the environment. Disregard for the provisions of this specification or the accepted SSHP shall be cause for stopping of work until the matter has been rectified.

1.7.3 Availability

The SSHP shall be made available to all site workers.

1.7.4 Elements

Topics required by the Accident Prevention Plan as described in Appendix A of EM 385-1-1 and those described in this section shall be addressed in the SSHP. Where the use of a specific topic is not applicable to the project, the SSHP shall include a statement to justify its omission or reduced level of detail and establish that adequate consideration was given to the topic.

1.8 SITE DESCRIPTION AND CONTAMINATION CHARACTERIZATION

1.8.1 Project/Site Conditions

The following information is a description of the site. This information is provided to assist in preparing the SSHP. Additional sources of information are available as listed below.

1.8.1.1 Site Information

The known or suspected environmental issues at the site that will be addressed by the Contractor in the work of this project include:

- a. The underground (USTs) and/or aboveground storage tanks (ASTs) remaining on the site contain residual heating oil. Soils surrounding the UST/AST sites may or may not contain total petroleum hydrocarbons above Washington State soil screening criteria.
- b. The buildings contain asbestos-containing materials (ACM).
- c. The fluorescent light ballasts may contain polychlorinated biphenyls (PCBs).
- d. The fluorescent light tubes and thermostats may contain mercury.
- e. Lead-based paint is present on the interiors and exteriors of the existing buildings, and paint chips from the building exteriors have been observed on the soil surface surrounding several of the buildings.
- f. The electrical vaults may have transformers or other electrical equipment containing PCBs or asbestos.
- g. The site soils may contain lead above applicable Washington soil cleanup criteria.

1.8.2 Plan Requirements

The SSHP shall include a site description and contamination characterization section that addresses the following elements:

- a. Description of site location, topography, size and past uses of the site.
- b. A list of contaminants which may present occupational health and safety hazards. This list shall be created by evaluating the analytical results in this section and by researching sources of information

from past site investigation activities. The contamination characterization shall be reviewed and revised if new chemicals are identified as work progresses.

1.9 HAZARD/RISK ANALYSIS

The SSHP shall include a safety and health hazard/risk analysis for each site task and operation to be performed. The hazard/risk analysis shall provide information necessary for determining safety and health procedures, equipment, and training to protect onsite personnel, the environment, and the public. Available site information shall be reviewed when preparing the "Hazard/Risk Analysis" section of the SSHP. The following elements, at a minimum, shall be addressed.

1.9.1 Site Tasks and Operations (Workplan)

The SSHP shall include a comprehensive section that addresses the tasks and objectives of the site operations and the logistics and resources required to reach those tasks and objectives. The following is a list of anticipated major site tasks and operations to be performed:

- a. Remove and dispose of asbestos-containing materials from the buildings;
- b. Remove and dispose of petroleum-contaminated soils;
- c. Remove and dispose of USTs/ASTs and oil-water separators;
- d. Remove and dispose of PCB-containing electrical equipment;
- e. Remove and dispose of mercury-containing lights and thermostats;
- f. Remove and disposal of all surface structures, some painted with lead containing paint;
- g. Remove and dispose of concrete, roads, sidewalks, electrical lines, electrical vaults, telephone lines, sewer lines, water lines, signs, and manhole covers;
- h. Sample for residual TPH in subsurface soils, and lead in surface soils after demolition is complete; and
- i. Fill in subsurface excavations, grade for drainage, and restore site.

This is not necessarily a complete list of site tasks and operations; therefore, it shall be expanded and/or revised, during preparation of the SSHP as necessary.

1.9.2 Hazards

The following potential hazards may be encountered during site work. These are not complete lists; therefore, they shall be expanded and/or revised as necessary during preparation of the SSHP. No radiological or biological hazards are anticipated at the site.

1.9.2.1 Safety Hazards and Physical Agents

Heavy equipment operations, open excavations, falling debris, working at heights, noise, and slip and trip hazards are the principal safety hazards and physical agents anticipated at the site.

1.9.2.2 Confined Space Entry

Entry into and work in a confined space is not generally anticipated on this project. However, if subsurface vaults and their contents require entry, the SSHP shall describe, in detail, procedures for safely entering and working in the confined spaces present on this project site. Confined space emergency rescue procedures will be included in the SSHP.

1.9.2.3 Chemical Hazards

Potential chemical hazards that may be encountered during site work are discussed in paragraph SITE DESCRIPTION AND CONTAMINATION CHARACTERIZATION. The Hazard/Risk Analysis section of the SSHP shall describe the chemical, physical, and toxicological properties of contaminants, sources and pathways of employee exposures, anticipated onsite and offsite exposure level potentials, and regulatory (including Federal, state, and local) or recommended protective exposure standards. The SSHP shall also address employee exposure to hazardous substances brought onsite, and shall comply with the requirements of 29 CFR 1926.59, Hazard Communication.

The following known chemical hazards are present at the site:

a. Asbestos

Asbestos is a generic term for a fibrous form of mineral silicates. There are currently three commercially important mineral forms of asbestos: chrysotile, amosite, and crocidolite. These minerals are composed of silicate, magnesium, and iron arranged in complex molecular fibril structure. Analytically, asbestos fibers are typically less than 5 micrometers (um) in diameter and have a length to diameter ratio of 3:1 or greater.

Asbestos can also often be found in older building materials, such as pipe and duct insulation, floor tile, mastics, linoleum, cement asbestos board, gaskets, woven fireproof cloths and blankets, transite, wallboard joint compounds, caulking, mortar in boiler rooms, and window putty.

Occupational exposure studies have demonstrated that inhalation of asbestos fibers can cause cancer or asbestosis, a form of pulmonary fibrosis. These effects may occur primarily following exposure to fibers less than 0.5 μm in diameter. The EPA currently classifies asbestos as a Class A, or confirmed, human carcinogen. The current Permissible Exposure Limit (PEL) for asbestos is 0.1 fibers per cubic centimeter (f/cc) of air, averaged over an 8-hour period.

b. Fuel Oil

Fuel oil is a generic term for several types of petroleum products typically used for home or commercial heating, pot burners, stoves, furnaces, etc. They are similar to diesel fuel and kerosene. They are not as hazardous as gasoline from inhalation of the vapors, but nevertheless may cause similar effects, including CNS depression in acute exposures, such as during tank cleaning. They can be expected to typically act as a central nervous system depressant, resulting in slurred speech and mental confusion. No PEL has been established for heating oils. They are a serious aspiration hazard.

c. Lead

Inorganic lead exposure can occur via inhalation or ingestion of dusts, and skin and eye contact. The principal target organs of lead toxicity include the nervous system, kidneys, blood, gastrointestinal, and reproductive systems. Generalized symptoms of lead exposure include decreased physical fitness, fatigue, sleep disturbances, headaches, bone and muscle pain, constipation, abdominal pain, and decreased appetite. More severe exposure can result in anemia, severe gastrointestinal disturbance, a "lead-line" on the gums, neurological symptoms, convulsions, and death.

Neurological effects are among the most severe of inorganic lead's toxic effects and vary depending on the age of individual exposed. Effects observed in adults occur primarily in the peripheral nervous system, resulting in nerve destruction and degeneration. Wrist-drop and foot-drop are two characteristic manifestations of this toxicity.

The EPA also currently lists inorganic lead as a Group B2 probable human carcinogen via the oral route. This conclusion is based on feeding studies conducted in laboratory animals. The current PEL-TWA for inorganic lead is 0.05 mg/m^3 . Occupational exposure to lead is also specifically regulated under WAC 296-62-07521, with an action level established at 0.03 mg/m^3 that triggers monitoring and other requirements.

d. PCBs

PCBs is a generic term for a range of polychlorinated biphenyl compounds used commercially in heat transfer media and in the chemical/coatings industry. PCBs have been marketed commercially under the trade names Askarel and Aroclor, with a designation referring to the percent weight of chlorine. Prolonged skin contact with PCBs may cause acne-like symptoms, known as chloracne. Irritation to eyes, nose and throat may also occur. Acute and chronic exposure can cause liver damage, and symptoms of edema, jaundice, anorexia, nausea, abdominal pains, and fatigue. If pregnant women

accidentally ingest PCBs, stillbirth or infant skin and eye problems may occur. PCBs are a suspect carcinogen. The EPA currently classifies PCBs as a Class B2, or probable, human carcinogen. The PEL-TWA for PCBs with 54 percent chlorine content is 0.5 milligrams per cubic meter (mg/m³), while the PEL-TWA for PCBs with 42 percent chlorine is 1 mg/m³. Skin exposure may contribute significantly to uptake of these chemicals, and therefore all skin exposure should be strictly avoided.

e. Mercury

The health effects of mercury exposure are dependent on the chemical form of mercury involved. Elemental mercury is toxic by inhalation, skin absorption, eye, and skin contact. Symptoms of exposure include coughing, chest pains, headache, fatigue, salivation, weight loss, and skin and eye irritation. The primary target organ of elemental mercury is the central nervous system, resulting in damage to sensory systems. The PEL-TWA for exposure to mercury vapor is 0.05 mg/m³.

Inorganic mercury compounds are toxic by inhalation, ingestion, and skin and eye contact. Acute poisoning results in lung damage. Chronic poisoning typically produces four classical symptoms: gingivitis, salivation, increased irritability, and muscular tremors. Delirium and other psychological abnormalities can also result from chronic exposures. Inorganic mercurials also have a corrosive effect on the alimentary tract, and kidney damage can result from exposure. The current PEL-C (Ceiling) limit for inorganic mercury is 0.1 mg/m³.

1.9.3 Action Levels

Action levels shall be established in the SSHP for the situations listed below, at a minimum. The action levels and required actions (engineering controls, changes in PPE, etc.) shall be presented in tabular form.

- a. Implementation of engineering controls and work practices.
- b. Upgrade or downgrade in level of personal protective equipment.
- c. Work stoppage and/or emergency evacuation of onsite personnel.
- d. Prevention and/or minimization of public exposures to hazards created by site activities.

1.10 ACTIVITY HAZARD ANALYSES

Prior to beginning work, an Activity Hazard Analysis shall be prepared by the Contractor and submitted for review and acceptance. The format shall be in accordance with EM 385-1-1, Figure 1-1. The analysis shall define the activities to be performed and identify the sequence of work, the specific hazards anticipated, and the control measures to be implemented to eliminate or reduce each hazard to an acceptable level. Work shall not proceed on that phase until the activity hazard analysis has been accepted and a preparatory meeting has been conducted by the Contractor to discuss its contents with

everyone engaged in the activities, including the government onsite representatives. The activity hazard analyses shall be continuously reviewed and when appropriate modified to address changing site conditions or operations, with the concurrence of the Safety and Health Manager, the Site Superintendent, and the Contracting Officer. Activity hazard analyses shall be attached to and become a part of the SSHP.

1.11 STAFF ORGANIZATION, QUALIFICATIONS, AND RESPONSIBILITIES

An organizational structure shall be developed that sets forth lines of authority (chain of command), responsibilities, and communication procedures concerning site safety, health, and emergency response. This organizational structure shall cover management, supervisors, and employees of the Contractor and subcontractors. The structure shall include the means for coordinating and controlling work activities of subcontractors and suppliers. The SSHP shall include a description of this organizational structure as well as qualifications and responsibilities of each of the following individuals. The Contractor shall obtain Contracting Officer's acceptance before replacing any member of the Safety and Health Staff. Requests shall include the names, qualifications, duties, and responsibilities of each proposed replacement.

1.11.1 Site Superintendent

A Site Superintendent, who has responsibility to implement the SSHP, the authority to direct work performed under this contract, and to verify compliance, shall be designated.

1.11.2 Safety and Health Manager

1.11.2.1 Qualifications

The services of an Certified Industrial Hygienist or a safety professional shall be utilized. The name, qualifications (education summary and documentation, certifications, and work experience summary shall be included in the SSHP. The Safety and Health Manager shall have the following additional qualifications:

- a. A minimum of three years experience in developing and implementing safety and health programs at demolition or hazardous waste sites.
- b. Documented experience in supervising professional and technician level personnel.
- c. Documented experience in the development of personal protective equipment programs, including programs for working in and around potentially toxic, flammable and combustible atmospheres and confined spaces.
- d. Working knowledge of state and Federal occupational safety and health regulations.

1.11.2.2 Responsibilities

The Safety and Health Manager shall:

- a. Be responsible for the development, implementation, oversight, and enforcement of the SSHP.
- b. Sign and date the SSHP prior to submittal.
- c. Conduct initial site-specific training.
- d. Be present onsite during initiation of major site activities.
- e. Be available for emergency response.
- f. Provide onsite consultation as needed to ensure the SSHP is fully implemented.
- g. Coordinate any modifications to the SSHP with the Site Superintendent, the SSHO, and the Contracting Officer.
- h. Provide continued support for upgrading/downgrading of the level of personal protection.
- i. Be responsible for evaluating air monitoring data and recommending changes to engineering controls, work practices, and PPE.
- j. Review accident reports and results of daily inspections.
- k. Serve as a member of the Contractor's quality control staff.

1.11.3 Site Safety and Health Officer (SSHO)

1.11.3.1 Qualifications of SSHO

An individual shall be designated the Site Safety and Health Officer (SSHO). The name, qualifications (education and training summary and documentation), and work experience of the Site Safety and Health Officer shall be included in the SSHP. The SSHO shall have the following qualifications:

- a. A minimum of 2 years experience in implementing safety and health programs at hazardous waste sites, in the hazardous waste disposal industry, or at underground storage tank removal projects where personal protective equipment was required.
- b. Documented experience in construction techniques and construction safety procedures.
- c. Working knowledge of Federal and state occupational safety and health regulations.

d. Specific training in personal and respiratory protective equipment program implementation, confined space program oversight, and in the proper use of air monitoring instruments, and air sampling methods including monitoring for ionizing radiation.

1.11.3.2 Responsibilities of SSHO

The Site Safety and Health Officer shall:

a. Assist and represent the Safety and Health Manager in onsite training and the day to day onsite implementation and enforcement of the accepted SSHP.

b. Be assigned to the site on a full time basis for the duration of field activities. If operations are performed during more than 1 work shift per day, a site Safety and Health Officer shall be present for each shift.

c. Have authority to ensure compliance with specified safety and health requirements, Federal, state and OSHA regulations and all aspects of the SSHP including, but not limited to, activity hazard analyses, air monitoring, use of PPE, decontamination, site control, standard operating procedures used to minimize hazards, safe use of engineering controls, the emergency response plan, spill containment program, and preparation of records by performing a daily safety and health inspection and documenting results on the Daily Safety Inspection Log.

d. Have authority to stop work if unacceptable health or safety conditions exist, and take necessary action to re-establish and maintain safe working conditions.

e. Consult with and coordinate any modifications to the SSHP with the Safety and Health Manager, the Site Superintendent, and the Contracting Officer.

f. Serve as a member of the Contractor's quality control staff on matters relating to safety and health.

g. Conduct accident investigations and prepare accident reports.

h. Review results of daily quality control inspections and document safety and health findings into the Daily Safety Inspection Log.

i. In coordination with site management and the Safety and Health Manager, recommend corrective actions for identified deficiencies and oversee the corrective actions.

1.11.4 Persons Certified in First Aid and CPR

At least two persons who are currently certified in first aid and CPR by the American Red Cross or other approved training provider shall be onsite at all times during site operations. They shall be

trained in universal precautions and the use of PPE as described in the Bloodborne Pathogens Standard of 29 CFR 1910, Section .1030. These persons may perform other duties but shall be immediately available to render first aid when needed.

1.12 TRAINING

Personnel shall receive training in accordance with the Contractor's written safety and health training program and 29 CFR 1910 Section .120, 29 CFR 1926 Sections .62, 65 and .1101, and 29 CFR 1926 Section .21. The SSHP shall include a section describing training requirements.

1.12.1 General Training

Personnel entering the exclusion or contamination reduction zones shall have successfully completed 24 hours of hazardous waste instruction off the site; 3 days actual field experience under the direct supervision of a trained, experienced supervisor; and 8 hours refresher training annually. Onsite supervisors shall have completed the above training and 8 hours of additional, specialized training covering at least the following topics: the employer's safety and health program, personal protective equipment program, spill containment program, and health hazard monitoring procedures and techniques. Copies of current training certification statements shall be submitted prior to initial entry onto the work site.

1.12.2 Site-specific Training

Site-specific training sessions shall be documented in accordance with Section 01.B.03.b of EM 385-1-1.

1.12.2.1 Initial Session (Pre-entry Briefing)

Prior to commencement of onsite field activities, all site employees shall attend a site-specific safety and health training session conducted by the Safety and Health Manager and the Site Safety and Health Officer to ensure that all personnel are familiar with requirements and responsibilities for maintaining a safe and healthful work environment. Procedures and contents of the accepted SSHP shall be thoroughly discussed. The Contracting Officer shall be notified at least five days prior to the initial site-specific training session so government personnel involved in the project may attend.

1.12.2.2 Periodic Sessions

Periodic onsite training shall be conducted by the SSO daily for personnel assigned to work at the site. The training shall address variations (if any) in site safety and health procedures, work practices, any changes in the SSHP, activity hazard analyses, work tasks, or schedule; results of previous week's air monitoring, review of safety discrepancies and accidents. Should an operational change affecting onsite field work be made, a meeting prior to implementation of the change shall be convened to explain safety and health procedures. Site-specific training sessions for new personnel, visitors, and

suppliers shall be conducted by the SSHO using the training curriculum outlines developed by the Safety and Health Manager.

1.13 PERSONAL PROTECTIVE EQUIPMENT (PPE)

1.13.1 PPE Program

A written Personal Protective Equipment (PPE) program that complies with 29 CFR 1926 is to be included in the employer's Safety and Health Program. The SSHP shall detail the minimum PPE ensembles and specific materials from which the PPE components are constructed for each site-specific task and operation to be performed, based upon the hazard/risk analysis. Components of levels of protection (B, C, D and modifications) must be relevant to site-specific conditions, including heat stress potential and safety hazards. Only respirators approved by NIOSH shall be used. Onsite personnel shall be provided with appropriate personal protective equipment. Protective equipment and clothing shall be kept clean and well maintained. The PPE section of the SSHP shall include site-specific procedures to determine PPE program effectiveness and for onsite fit-testing of respirators, cleaning, maintenance, inspection, and storage of PPE.

1.13.2 Levels of Protection

The Safety and Health Manager shall establish appropriate levels of protection for each work activity based on review of historical site information, existing data, an evaluation of the potential for exposure (inhalation, dermal, ingestion, and injection) during each task, past air monitoring results, and a continuing safety and health monitoring program. The Safety and Health Manager shall also establish action levels for upgrade or downgrade in levels of PPE from the following specified minimum levels of protection. Protocols and the communication network for changing the level of protection shall be described in the SSHP. The PPE reassessment protocol shall address air monitoring results, potential for exposure, changes in site conditions, work phases, job tasks, weather, temperature extremes, individual medical considerations, etc.

Based on available information, the initial minimum protective equipment requirements for the site is Level D for other than lead and asbestos related work. Available site information shall be reviewed and the list of tasks and operations and this level of protection shall be expanded and/or revised during preparation of the SSHP.

1.14 MEDICAL SURVEILLANCE

The Safety and Health Manager, in conjunction with the Occupational Physician, shall detail, in the employer's Safety and Health Program and the SSHP, the medical surveillance program that includes scheduling of examinations, certification of fitness for duty, compliance with OSHA requirements, and information provided to the physician. Examinations shall be performed by or under the supervision of a licensed physician, preferably one knowledgeable in occupational medicine, and shall be provided without cost to the employee, without loss of pay and at a reasonable time and place. Medical

surveillance protocols and examination and test results shall be reviewed by the Occupational Physician. The medical surveillance program shall contain the requirements specified below.

Employees shall have been provided with medical examinations within the past 12 months and shall receive exams annually thereafter (if contract duration exceeds 1 year); on termination of employment; reassignment if the employee develops signs or symptoms of illness related to workplace exposures; if the physician determines examinations need to be conducted more often than once a year; and when an employee develops a lost time injury or illness during the period of this contract. The supervisor shall be provided with a written statement signed by the physician prior to allowing the employee to return to the work site after injury or illness resulting in a lost workday, as defined in 29 CFR 1904.12 (f).

1.16 EXPOSURE MONITORING/AIR SAMPLING PROGRAM

The Safety and Health Manager shall prepare and implement an exposure monitoring/air sampling program to identify and quantify safety and health hazards and airborne levels of hazardous substances in order to assure proper selection of engineering controls, work practices and personal protective equipment for affected site personnel. Available site information shall be reviewed and the exposure monitoring/air sampling program shall be expanded and/or revised for submittal as part of the SSHP.

1.17 HEAT STRESS

As part of the SSHP, a heat stress prevention program will be implemented for site activities. Details of the program, including schedules for work and rest, and physiological monitoring requirements, shall be described in the SSHP. Personnel shall be trained to recognize the symptoms of heat stress. The SSHP shall be responsible for implementing heat stress monitoring. An adequate supply of cool drinking water and shaded rest area(s) shall be provided for the workers.

1.18 SAFETY PROCEDURES, ENGINEERING CONTROLS AND WORK PRACTICES

The SSHP shall describe the standard operating safety procedures, engineering controls and safe work practices to be implemented for the work covered. These shall include, but not be limited to, the following:

1.18.1 General Site Rules/Prohibitions

The SSHP shall detail general site rules/prohibitions, including restrictions on eating while on contaminated portions of site, and no smoking or ignition sources.

1.18.2 Materials Transfer Safety

Liquids and residues shall be removed from the ASTs using explosion-proof or air-driven pumps. Pump motors and suction hoses shall be bonded to the tank and grounded to prevent electrostatic ignition hazards. Use of a hand pump will be permitted to remove the last of the liquid from the

bottom of the tanks. If a vacuum truck is used for removal of liquids or residues, the area of operation for the vacuum truck shall be vapor free. The truck shall be located upwind from the tank and outside the path of probable vapor travel. The vacuum pump exhaust gases shall be discharged through a hose of adequate size and length downwind of the truck and tank area. Vacuum truck operating and safety practices shall conform to API Publ 2219. Tank residues shall be collected in drums, tanks, or tank trucks and disposed of as specified. After the materials have been transferred and the tanks have been exposed, fittings and lines leading to the tanks shall be disconnected and drained of their contents. The contents of the lines shall not spill to the environment during cutting or disconnecting of tank fittings. Materials drained shall be transferred into DOT-approved drums for storage and/or transportation. Only non-sparking or non-heat producing tools shall be used to disconnect and drain or to cut through tank fittings. Electrical equipment (e.g., pumps, portable hand tools, etc.) used for tank preparation shall be explosion-proof. Following cutting or disconnecting of the fittings, openings leading to the tanks shall be plugged.

1.18.3 Other Safety Procedures

The SSHP will provide details for Contractor site-specific safety precautions, addressing each of the following areas:

- a. Fire Protection and Prevention;
- b. Excavation and Trench Safety;
- c. Guarding of Machinery and Equipment;
- d. Lockout/Tagout;
- e. Fall Protection;
- f. Hazard Communication;
- g. Illumination;
- h. Sanitation;
- i. Engineering Controls;
- j. Signs and Labels; and
- k. Waste Disposal.

1.18.4 Tank Cleaning and Removal

Safety practices and procedures for the pumping and cleaning of the USTs/ASTs shall be submitted in the SSHP. Volatile organic solvents shall not be permitted for cleaning. The tanks shall be demolished before being removed from the site unless they are transported directly to a state certified tank destruction facility. Demolition will not be permitted until cleaning of tank interiors is complete. Demolition shall involve opening the tanks sufficiently to permanently prohibit further use as containers of liquids. Plans and procedures, including a list of materials and supplies, for safely and effectively demolishing the tanks shall be submitted in the SSHP. Upon completion of this project, written certification shall be made that the tank was properly cleaned and demolished prior to being removed from the site.

Tanks shall be lifted using equipment with a rated capacity greater than the load to be lifted. During transportation, the tanks shall be secured to prevent movement.

1.19 SITE CONTROL MEASURES

In order to prevent the spread of contamination and control the flow of personnel, vehicles, and materials into and out of work areas, site control measures shall be established and described in the SSHP. The SSHP shall describe the methodology to be used by the Safety and Health Manager and SSHO to limit the spread of contamination. The SSHP shall include procedures for the implementation and enforcement of safety and health rules for all persons on the site, including employers, employees, outside Contractors, government representatives, and visitors.

1.19.1 Work Zones

Site access points shall be established and the boundary delineations shall be included in the SSHP. Delineation of work zone boundaries shall be based on the contamination characterization data and the hazard/risk analysis to be performed as described in paragraph: HAZARD/RISK ANALYSIS. A site map, showing work zone boundaries and locations of decontamination facilities, shall be posted in the onsite office.

1.19.2 Site Control and Security

A log of personnel visiting, entering, or working on the site shall be maintained. The log shall include the following: date, name, agency or company, time entering and exiting site, time entering and exiting the exclusion zone (if applicable), and personal protective equipment utilized. This visitor information, including date, shall be recorded in the log.

Signs shall be printed in bold large letters on contrasting backgrounds in English. Signs shall be visible from all points where entry might occur and at such distances from the restricted area(s) that employees may read the signs and take necessary protective steps before entering.

Fencing will be maintained around the site during the demolition, excavation, and grading portions of the project. Fencing may be removed, as specified elsewhere in the specifications, during revegetation, should that be desired.

1.20 PERSONAL HYGIENE AND DECONTAMINATION

Personnel entering the Exclusion Zones or otherwise exposed or subject to exposure to hazardous chemical vapors, liquids, or contaminated solids shall adhere to the following personal hygiene and decontamination provisions. A detailed discussion of personal hygiene and decontamination facilities and procedures to be followed by site workers shall be submitted as part of the SSHP. Employees shall

be trained in the procedures and the procedures shall be enforced throughout site operations. Persons disregarding these provisions of the SSHP shall be barred from the site.

1.21 EQUIPMENT DECONTAMINATION

Vehicles and equipment used on the site shall be decontaminated prior to leaving the site. The procedures for decontamination of vehicles and equipment shall be addressed in the SSHP. These procedures shall address disposal of contaminated products and spent materials used on the site, including containers, fluids, oils, etc. Construction material shall be handled in such a way as to minimize the potential for contaminants being spread and/or carried offsite. Prior to exiting the site, vehicles and equipment shall be monitored to ensure the adequacy of decontamination.

1.22 EMERGENCY RESPONSE EQUIPMENT AND PROCEDURES

The SSHP shall describe the emergency and first aid equipment to be available onsite. The following items, as a minimum, shall be maintained onsite and available for immediate use:

- a. First aid equipment and supplies.
- b. Emergency eyewashes that comply with ANSI Z358.1.
- c. Fire extinguishers with a minimum rating of 20-A:120-B:C

An Emergency Response Plan shall be developed and implemented as a section of the SSHP. In the event of any emergency associated with site activities, the Contractor shall, without delay, alert all onsite employees that there is an emergency situation; take action to remove or otherwise minimize the cause of the emergency; alert the Contracting Officer; and institute measures necessary to prevent repetition of the conditions or actions leading to, or resulting in, the emergency. Employees that are required to respond to hazardous emergency situations shall be trained in how to respond to such expected emergencies. The plan shall be rehearsed regularly as part of the overall training program for site operations. The plan shall be reviewed periodically and revised as necessary to reflect new or changing site conditions or information.

The following elements, as a minimum, shall be addressed in the plan:

- a. Pre-emergency planning. The local emergency response agencies shall be contacted during preparation of the Emergency Response Plan. Agencies to be contacted include local fire and police. They shall be notified of upcoming site activities and potential emergency situations.
- b. Emergency recognition and prevention.

c. Criteria and procedures for site evacuation (emergency alerting procedures, employee alarm system, emergency PPE and equipment, safe distances, places of refuge, evacuation routes, site security and control).

d. Specific procedures for decontamination and medical treatment of injured personnel.

e. Route maps to nearest medical facility. Site-support vehicles shall be equipped with maps. Drivers of the support vehicles shall become familiar with the emergency route and the travel time required.

f. Emergency alerting and response procedures including posted instructions and a list of names and telephone numbers of emergency contacts (physician, nearby medical facility, fire and police departments, ambulance service, Federal, state, and local environmental agencies; as well as Safety and Health Manager, the Site Superintendent, the Contracting Officer and/or their alternates).

g. Procedures for reporting incidents to appropriate government agencies. In the event that an incident such as an explosion or fire, or a spill or release of hazardous or toxic materials occurs during the course of the work, the appropriate government agencies shall be immediately notified. In addition, the Contracting Officer shall be verbally notified immediately and receive a written notification within 24 hours. The report shall include the following items:

- Name, organization, telephone number, and location of the Contractor.
- Name and title of the person(s) reporting.
- Date and time of the incident.
- Location of the incident, i.e., site location, facility name.
- Brief summary of the incident giving pertinent details including type of operation ongoing at the time of the incident.
- Cause of the incident, if known.
- Nature of injury or casualties.
- Details of any existing chemical hazard or contamination.
- Estimated property damage, if applicable.
- Nature of damage, effect on contract schedule.
- Action taken to ensure safety and security.

- Other damage or injuries sustained, public or private.

k. Procedures for critique of emergency responses and follow-up.

1.24 CERTIFICATE OF WORKER/VISITOR ACKNOWLEDGEMENT

A copy of a Contractor-generated certificate of worker/visitor acknowledgement shall be completed and submitted for each visitor allowed to enter contamination reduction or exclusion zones, and for each employee, following the example certificate provided at the end of this section.

1.25 INSPECTIONS

The SSHO shall perform daily inspections of the jobsite and the work in progress to ensure compliance with EM 385-1-1, the Safety and Health Program, the SSHP and other occupational health and safety requirements of the contract, and to determine the effectiveness of the SSHP. Procedures for correcting deficiencies (including actions, timetable and responsibilities) shall be described in the SSHP. Follow-up inspections to ensure correction of deficiencies shall be conducted and documented.

Daily safety inspection logs shall be used to document the inspections, noting safety and health deficiencies, deficiencies in the effectiveness of the SSHP, and corrective actions taken. The SSHO's Daily Inspection Logs shall be attached to and submitted with the Daily Quality Control reports. Each entry shall include the following: date, work area checked, employees present in work area, PPE and work equipment being used in each area, special safety and health issues and notes, and signature of preparer.

In the event of an accident, the Contracting Officer shall be notified according to EM 385-1-1. Within 2 working days of any reportable accident, an Accident Report shall be completed on ENG Form 3394 and submitted to the Contracting Officer.

1.26 SAFETY AND HEALTH PHASE-OUT REPORT

A Safety and Health Phase-Out Report shall be submitted within 10 working days following completion of the site work, prior to final acceptance of the work. The following minimum information shall be included:

- a. Summary of the overall performance of safety and health (accidents or incidents including near misses, unusual events, lessons learned, etc.).
- b. Final decontamination documentation including procedures and techniques used to decontaminate equipment, vehicles, and on site facilities.
- c. Summary of exposure monitoring and air sampling accomplished during the project.

d. Signatures of Safety and Health Manager and SSHO.

EXAMPLE CERTIFICATE OF WORKER ACKNOWLEDGMENT

PROJECT NAME CONTRACT NO.

PROJECT ADDRESS

CONTRACTOR'S NAME

EMPLOYEE NAME

The contract for the above project requires the following: that you be provided with and complete formal and site-specific training; that you be supplied with personal protective equipment; that you be trained in its use; and that you receive a medical examination to evaluate your physical capacity to perform your assigned work tasks, under the environmental conditions expected, while wearing the required personal protective equipment. These things are to be done at no cost to you. By signing this certification, you are acknowledging that your employer has met these obligations to you.

I HAVE READ, UNDERSTAND AND AGREE TO FOLLOW THE SITE SAFETY AND HEALTH PLAN FOR THIS SITE.

Name

Date

SITE-SPECIFIC TRAINING: I have been provided and have completed the site-specific training required by this Contract.

RESPIRATORY PROTECTION: If I need to use a respirator for this project, I have been trained in accordance with the criteria in my Employer's Respiratory Protection program. I have been trained in the proper work procedures and use and limitations of the respirator(s) I will wear.

I have been trained in the proper selection, fit, use, care, cleaning, and maintenance, and storage of the respirator(s) that I will wear. I have been fit-tested in accordance with the criteria in my employer's Respiratory Program and have received a satisfactory fit. I have been taught how to properly perform positive and negative pressure fit-check upon donning negative pressure respirators each time.

MEDICAL EXAMINATION: I have had a medical examination within the last twelve months which was paid for by my employer. A physician made a determination regarding my physical capacity to perform work tasks on the project while wearing protective equipment, including a respirator. I was personally provided a copy and informed of the results of that examination. The physician determined that there were no limitations to performing the required work tasks; or if there were identified physical limitations to performing the required work tasks, these are as follows:

Employee's Signature _____

Printed Name _____

Date _____

Site Safety and Health Officer Signature _____

Date _____

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION (NOT APPLICABLE)

END OF SECTION

SECTION 01355
ENVIRONMENTAL PROTECTION
FORT LEWIS, YAKIMA, AND VANCOUVER BARRACKS

PART 1 GENERAL REQUIREMENTS

1.1 The contractor shall perform the work minimizing environmental pollution and damage as the result of construction operations under this contract. For the purpose of this specification, environmental pollution and damage is defined as the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances of importance to human life; affect other species of importance to humankind; or degrade the utility of the environment for aesthetic, cultural, and/or historical purposes. The control of environmental pollution and damage requires consideration of air, water, and land, and includes management of visual esthetics, noise, solid waste, and erosion from stormwater, as well as pollutants.

1.2 Abbreviations and Acronyms:

| | |
|---------------|--|
| BACT | Best Available Control Technology |
| BMP | Best Management Practice |
| CFR | Code of Federal Regulations |
| CO | Contracting Officer |
| COR | Contracting Officer's Representative |
| DOT | Department of Transportation |
| ECMD | Engineering & Contract Management Division |
| ECO | Environmental Compliance Officer |
| ENRD | Environmental and Natural Resources Division |
| EPA | Environmental Protection Agency |
| HM | Hazardous Material |
| HMTA | Hazardous Materials Transportation Act |
| HW | Hazardous Waste |
| HWT | Hazardous Waste Technician |
| <u>ESHWMS</u> | Hazardous Waste Management Section |
| ISCP | Installation Spill Contingency Plan |
| MSDS | Material Safety Data Sheets |

NFPA National Fire Protection Association
NPDES National Pollutant Discharge Elimination System
NOI Notice of Intent
OSHA Occupational Safety and Health Act
PCB Polychlorinated Biphenyls
PCS Petroleum Contaminated Soil
PPE Personnel Protective Equipment
PW Public Works
PSAPCA Puget Sound Air Pollution Control Agency
RUL Restricted Use List
SPCCP Spill Prevention, Control and Countermeasures Plan
TPCHD Tacoma Pierce County Health Department
WAC Washington Administrative Code
WHPA Well Head Protection Area
WISHA Washington Industrial Safety and Health Act
YTC Yakima Training Center

1.3 Protection of Environmental Resources

The environmental resources within the project boundaries and those affected outside the limits of work under this contract shall be protected during the entire period of this contract. The Contractor shall confine his activities to areas defined by the drawings and specifications.

1.4 Subcontractors

The contractor shall ensure compliance with this section by all subcontractors.

1.5 Laws and Regulations

The Contractor shall comply with all applicable Federal, State, and Local environmental, natural and cultural resources, and historic preservation laws and regulations. Specific attention is directed to Fort Lewis Regulation No. 200-1 "Environmental Protection and Enhancement". These specifications supplement these laws and regulations.

1.6 Coordination

The Environmental and Natural Resources Division (ENRD) of PW coordinates most environmental concerns at Fort Lewis and its sub-installations. The Contractor shall make contact with this office through PW, Engineering & Contract Management Division.

1.7 Submittals

The following is a summary of required submittals. Complete details and schedules are described in the rest of the section.

Environmental Protection Plan

The Contractor shall submit an environmental protection plan within 15 days after receipt of the notice to proceed. Approval of the Contractor's plan will not relieve the Contractor of responsibility for adequate and continuing control of pollutants and other environmental protection measures. The environmental protection plan shall include, but not be limited to, the following:

- a. A list of Federal, State, and local laws, regulations, and permits concerning environmental protection, pollution control and abatement that are applicable to the Contractor's proposed operations and the requirements imposed by those laws, regulations, and permits.
- b. Methods for protection of features to be preserved within authorized work areas like trees, shrubs, vines, grasses and ground cover, landscape features, air and water quality, fish and wildlife, soil, historical, archaeological, and cultural resources.
- c. Procedures to be implemented to provide the required environmental protection, to comply with the applicable laws and regulations, and to correct pollution due to accident, natural causes, or failure to follow the procedures of the environmental protection plan.
- d. Location of the permitted solid waste disposal facility to be used and location of recycling facility to be used.
- e. Drawings showing locations of any proposed temporary material storage areas, structures, sanitary facilities, and stockpiles of excess or spoil materials.
- f. Environmental monitoring plans for the job site, including land, water, air, and noise monitoring.
- g. Plan showing the proposed activity in each portion of the work area and identifying the areas of limited use or nonuse. Plan should include measures for marking the limits of use areas.
- h. Applicable environmental training (both formal and on the job) the Contractor's personnel have received prior to the construction period.

Hazardous Materials and Hazardous Wastes

Hazardous Materials Inventory Form (Initial and ongoing)

Material Safety Data Sheets (MSDS)
Hazardous Waste Profile Sheets
Hazardous Waste Accumulation Log
Hazardous Waste Manifest
PCB Transformer Certification and Information

Asbestos

Permits and any amendments
Management Plan
Removal Summary
Bulk Sample Results
Air Monitoring Sample Results (Pre-abatement, area, clearance,
and personnel)
Jobsite Entry Logs
Waste Shipment Record
Summary of Asbestos Removed and Remaining
90 Day Waste Storage Facility Permits (if applicable)

Lead-based Paint

Drip line Test results
Provide Sketch of building and locations tested along dripline
for each building.

Underground Storage Tanks and Petroleum Contaminated Soil

Management Plan
Contractor Qualifications
Intent to Close/Change of Service Notification
Site Check/Site Assessment Checklist
Permanent Closure/Change of Service Checklist

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION

3.1 WORK AREA LIMITS

The Contractor shall confine all activities to areas defined by the design drawings and specifications. Prior to any construction, the Contractor shall mark the areas that will not be disturbed under this contract. Isolated areas within the general work area, which are to be saved and protected, shall also be marked or fenced. Monuments and markers shall be protected before construction operations commence. Where construction operations are to be conducted during darkness, the markers shall be visible. The Contractor's personnel shall be knowledgeable of the purpose for marking and/or protecting particular objects.

3.1.1 Contractor Facilities and Work Areas

The Contractor's field offices, staging areas, stockpile storage, and temporary buildings shall be placed in areas designated on the drawings or

as directed by the Contracting Officer or their representative. Temporary movement or relocation of Contractor facilities shall be made only when approved by the Contracting Officer or their representative.

3.2 MANAGEMENT OF HAZARDOUS MATERIALS AND HAZARDOUS WASTE

3.2.1 GENERAL

3.2.1.1 Definitions

a. Hazardous material (HM): A useful product that requires special management because it has hazardous characteristics (ignitability, corrosivity, reactivity, or toxicity) that could pose dangers to human health or the environment. A HM becomes a Hazardous Waste when it can no longer be used for its intended purpose.

b. Hazardous waste (HW): A discarded material with properties that could pose dangers to human health or the environment. A HW either exhibits a hazardous characteristic (ignitability, corrosivity, reactivity, or toxicity) or is specifically listed as a HW by the EPA or by the State.

c. Material Safety Data Sheet (MSDS): A document containing information that manufacturers are required by law to provide on all products they manufacture and sell. The MSDS is useful in evaluating the product to determine if it has hazardous constituents and the type of medical treatment in case of an accident.

3.2.1.2 Environmental Services (ES) Hazardous Waste Management Section (HWMS)

The Contractor shall contact the ESHWMS at (253) 967-4786 with any questions pertaining to the storage, use, and disposal of Hazardous Materials and/or Hazardous Waste during the execution of this contract.

3.2.1.3 Restricted Use Materials

Certain chemicals are restricted from use on Fort Lewis. These chemicals are listed on the Restricted Use List (RUL). The RUL is maintained by the PW Environmental and Natural Resources Division (ENRD) and is updated semi-annually. A print out and/or an electronic copy of the entire RUL is available from ENRD, Building 1210. The Contractor shall receive authorization from the Contracting Officer or their representative prior to using any product that contains chemicals listed on the RUL. Only materials necessary for and associated with the execution of this Contract will be allowed on Government property.

3.2.1.4 Contingency Planning and Spill Response

The Contractor shall comply with the provisions of the Fort Lewis Spill Prevention, Control and Countermeasures Plan (SPCCP) and the Installation Spill Contingency Plan (ISCP). The PW ENRD maintains these plans. The Contractor shall also maintain on site a written contingency plan for HW accumulation and HM storage areas if the work associated with this contract generates HW or require storage of HM.

3.2.1.5 Transportation of HM and HW

The Contractor shall comply with all Department of Transportation (DOT) requirements associated with HM/HW, including proper container marking/labeling and vehicle placarding when transporting HM/HW on or off the installation. The Contractor shall obtain Government approval prior to removal of any HW from the installation. Removal shall only be done by an authorized HW transporter having an EPA Identification Number and with the HW recorded on a Uniform Hazardous Waste Manifest (EPA Form 8700-22). And in accordance with paragraph 3.2.3.5 Transportation and Disposal.

3.2.1.6 HM/HW Personnel and Training Requirements

The Contractor shall appoint an Environmental Compliance Officer (ECO), ~~and a~~ Hazardous Waste Technician (HWT), and a Hazardous Material Technician (HMT) in writing, if the work associated with this contract causes the Contractor to generate, store, or handle HM/HW. The ECO/HWT/HMT shall be responsible for insuring the requirements of this specification are met.

The Contractor shall insure that all personnel are trained in accordance with Washington Department of Ecology regulations before being assigned to any position handling HW/HM. This training shall include, but not be limited to:

- a. Hazardous Materials and/or Waste Use, Storage and Disposal Training Course for ECOs/HWTs/HMTs. These courses are—8 hour course is available weekly from the Fort Lewis ENRD, Environmental Services (ES)—Hazardous Waste Management Section (HWMS) and shall be taken prior to the Contractor generating, storing, or handling HM or HW on the installation. The Contractor shall contact the ESHWMS to schedule attendance.
- b. First Responder Awareness Level as specified in the ISCP.
- c. Quarterly contingency plan review and rehearsal.
- d. Hazard Communication training as stated in paragraph 3.2.2.5.

The Contractor shall maintain a record of all required training, and the date conducted, for each individual requiring training and shall make this record available to the Government at all times during the execution of this contract.

3.2.2 HAZARDOUS MATERIALS

3.2.2.1 Notification

The Contractor shall provide an initial inventory and MSDS copies for all HM to be used during the execution of this contract, to the PW, Engineering & Contract Management Division. The inventory shall include the type of HM, proposed storage location and quantity to be stored and shall be provided before bringing any HM onto the installation. The Contractor shall use the Hazardous Material Inventory form (HFL Form 953-Attached at the end of

this section.) or a contractor-generated form providing the same information. An electronic version of the Hazardous Material Inventory form is available from the PW ENRD in Building 1210.

3.2.2.2 Storage Facilities

Facilities shall meet all fire code requirements and provide adequate ventilation, containment, and protection from the elements. Provide warning signs, limit access to the facility, and lock it when it is unattended. Only HM shall be stored in the facility. Contractor vehicles are not considered a proper storage facility. No HM shall be stored in vehicles overnight or for any length of time.

3.2.2.3 Storage and Use

The Contractor shall store HM according to product labels and MSDS requirements. Non-compatible materials shall not be stored together. All containers shall be properly labeled as to contents and kept in good condition with tight fitting lids. Unopened containers shall be segregated from opened containers. Personal protective equipment (PPE) required by the MSDS or product label shall be available and worn by all personnel who handle the product.

3.2.2.4 Inspections, Record Keeping and Reporting

The Contractor shall perform weekly inspections of their HM storage facilities utilizing the HM Inspection Checklist **(HFL Form 951- Attached at the end of this section.)** A current inventory of the HM storage facility shall be maintained on site and a copy forwarded to PW, Engineering & Contract Management Division quarterly using the Hazardous Material Inventory form. Additionally, a current MSDS for each product used or stored shall be present and on file at the site where the product is used or stored.

3.2.2.5 Hazard Communication Program

The Contractor shall have a written Hazard Communication program, which explains how personnel are informed and trained concerning HM in the workplace as required by Federal, state and Fort Lewis regulations. The written program shall be located at a hazard communication station that is accessible to all Contractor personnel and shall contain the following sections:

- a. A current inventory of HM, who is responsible for classifying a product as a HM, and how the inventory is updated.
- b. Labels and other forms of warning: This section shall describe the procedure for insuring that each HM container is clearly labeled and has the appropriate warnings. The section also states who is responsible for labeling requirements and how label information is updated.
- c. MSDS file: The location of the MSDS file, who maintains the file, and how personnel may access the file, shall be described. This section

shall also describe what is done when a product is received without the MSDS and how the MSDS file is updated.

d. Personnel training and information: This section shall describe initial and refresher training provided to personnel concerning the hazards of the HM in the workplace, the training provided, and who conducts the training.

e. Information to non-Contractor personnel: This section shall describe how non-Contractor personnel are informed about possible hazards, where MSDS copies can be obtained, and what PPE is required in the workplace.

3.2.3 HAZARDOUS WASTE

3.2.3.1 Identification

The Contractor shall identify all HW generated during the execution of this contract. The Contractor shall completely characterize the waste stream to identify the waste constituents. Each waste stream identity shall be recorded on a Hazardous Waste Profile Sheet (HWPS) and submitted to PW, Engineering & Contract Management Division for approval prior to waste generation. Profile sheets are available from the ESHWMS or Contractor generated equivalent sheets may be used. The Contractor is responsible for any costs associated with laboratory analysis to verify the waste stream identity if it is not obviously evident.

3.2.3.2 Accumulation

HW shall be accumulated in waste-compatible, sturdy, leak-proof, closed containers that are Department of Transportation (DOT) approved. If the waste is to be disposed of on Fort Lewis, YTC and Vancouver Barracks, the Contractor shall accumulate wastes only in Government issued HW containers. The Contractor shall contact the HWMSES, phone (253) 967-4786 for drums at Fort Lewis. At YTC, contact the Directorate of Environmental and Natural Resources, phone (509) 577-3402. At VCB contact the ECO, phone (360) 694-5538.

Each HW container shall be clearly labeled with the words HAZARDOUS WASTE, a description of the waste, and the hazard associated description or label. Any container issued by the HWMSES at Fort Lewis or the Directorate of Environment & Natural Resources at YTC shall have a Bar-coded label that contains all necessary labeling information. This label can be obtained by contacting the HWMSES.

3.2.3.3 Container Management

HW shall be handled in a manner that prevents leaks, spills, fires, and explosions. Container tops and/or bungs shall be serviceable and tightly installed (wrench tight) at all times except when adding material to the container (material should not spill if the container tips over). Containers shall be properly grounded when transferring flammable materials. Containers holding flammable liquids (flash point less than 140 degrees F) shall be grounded. Reactive and ignitable waste containers shall be stored

in a manner compatible with NFPA Fire Code requirements. Incompatible wastes shall not be accumulated in the same container or in the same area.

The container accumulation area shall be 50 feet from any other occupied building, shall have overhead cover, and shall be capable of being secured. Access to the area shall be restricted to trained personnel who need to be in and use the area. The site shall be locked when not in use. The container accumulation area shall have a secondary containment system capable of collecting and holding spills and leaks. It shall be sized to hold 110% of the volume of the largest container. A minimum of thirty inches of aisle space shall be maintained between container rows. Container markings and labels shall be clearly visible.

3.2.3.4 Inspection, Record Keeping and Reporting

A log shall be maintained that records the HW that is accumulated. Each time waste is added, an entry shall be made to the log. The completed weekly HW accumulation log shall be maintained on site and a copy submitted monthly to PW, Contract Management Branch. The attached Hazardous Waste Accumulation Log (**Attached at the end of this section.**) or a contractor-generated form providing the same information shall be used.

The Contractor shall inspect each accumulation point weekly, utilizing the attached Hazardous Waste Accumulation Areas checklist, (**HFL Form 950- attached at the end of this section.**) to verify compliance with the above requirements. The checklist shall be available on site for inspection.

3.2.3.5 Transportation and Disposal

The Contractor shall be responsible for the transportation and disposal off site of all HW generated from the execution of this contract, unless stated otherwise in this specification.

The Contractor or his representative, who provides services that generate, prepare for shipment or transports hazardous waste or provides hazardous waste clean-up/disposal services, shall be responsible for preparing EPA Form 8700-22, Uniform Hazardous Waste Manifest, for the state to which the material is being transported. The Contractor shall comply with all manifest and record keeping and reporting requirements. Specific manifesting procedures include:

- a. The Uniform Hazardous Waste Manifest will only be signed by personnel in the **HWMSSES** at Building 1210 on Fort Lewis. At Yakima Training Center, it will be signed by the Director of Environmental and Natural Resources, and at Vancouver Barracks, by the Environmental Compliance Officer.
- b. The Contractor shall provide a copy of the Uniform Hazardous Waste Manifest and supporting documentation (i.e., waste profile and land ban as appropriate) no less than 72 hours in advance of the proposed transporter pick up date.

c. The Contractor shall coordinate and schedule transportation pick up dates and times by contacting the HWMSES at (253) 967-4786 or 3268. This will ensure qualified individuals are available for the certification/signature of the manifest and other related documentation. A waste profile (land ban when required) must accompany the manifest to verify description of material being transported.

The Contractor shall be responsible for verifying that the shipment is properly identified (profiled), packaged, marked, labeled, and not leaking. The Contractor shall apply appropriate placards to his vehicle while transporting hazardous materials/waste.

The Contractor shall insure that the transporter and disposal facility have a valid Environmental Protection Agency identification number for the applicable hazardous waste services, i.e., transportation, treatment, storage, or disposal.

The Contractor shall ensure that the transporter drivers have current DOT combination licenses. The Contractor shall ensure that the carrier has instructed and trained personnel concerning the applicable Hazardous Materials Transportation Act (HMTA) regulations relevant to their job functions.

The Contractor or his representatives shall take appropriate action (including cleanup) in the event of a release/spill. If a release/spill occurs on Fort Lewis the Contractor shall immediately notify the Fort Lewis Fire Department (Dial 911). Secondary notification shall be made to (253) 967-4786 or 3268.

The Contractor shall ensure the transporter and disposal facility has liability insurance in effect for claims arising out of death or bodily injury and property damage from hazardous material/waste transport, treatment, storage, and disposal, including vehicle liability and legal defense costs in the amount of \$1,000,000.00, as evidenced by a certificate of insurance for General, Automobile, and Environmental Liability Coverage.

3.2.3.6 Hazardous Waste Turn-In

The Contractor shall coordinate turn-in of small quantities of Hazardous Waste. Only HW generated on site as a result of the Contractor's execution of this contract will be accepted. At Fort Lewis, coordination for turn-in shall be made with ~~the HWMSES~~, phone (253) 967-4786. At Yakima Training Center, contact the Directorate of Environmental and Natural Resources, phone (509) 577-3402. At Vancouver Barracks, contact the Environmental Compliance Officer, phone (360) 694-5538.

Hazardous Waste Containers shall be turned in no later than 90 days after the accumulation start date (earlier if full). All HW that is turned in must be properly identified and characterized, contained, marked/labeled, and (if turned in from a site outside Fort Lewis) manifested. The HWMSES will provide assistance to the Contractor at Fort Lewis, YTC, and Vancouver Barracks. This assistance does not free the Contractor from the responsibility of insuring that the waste is identified and managed in accordance with all of the above requirements so that it is acceptable for turn-in. The following procedures shall be followed:

a. Identify the HW. The HW should be one of the waste streams that the activity is permitted to generate and for which a HWPS has been submitted. HM that has become HW shall require the name of the product, the MSDS, the stock number if known, and manufacturer if known, or a completed waste profile analysis.

b. List the type, size, and number of containers, or items (e.g., PCB transformers).

c. Prepare the HW container(s) for turn-in as directed by the HWMSES representative. If the container is closed, the HWMSES representative may require the Contractor to open the container(s) to verify proper identification of the HW (not applicable to original, factory-sealed containers).

d. Provide certification as to HW identity and container compliance with appropriate regulations. The Contractor's ECO shall sign the certificate.

3.3 POLYCHLORINATED BIPHENYLS (PCB)

3.3.1 Transformers

The Contractor shall notify PW, Engineering & Contract Management Division on the day that any electrical transformer is delivered to Fort Lewis. All transformers brought on to Fort Lewis that are fluid filled must contain less than two parts/million (ppm) PCBs and be accompanied by a letter from the manufacturer that indicates that the level of PCBs in the transformer is below two ppm. Copies of all PCB letters and nameplate information shall be provided to PW, Engineering & Contract Management Division.

3.3.2 Light Ballasts

The Contractor shall place all PCB light ballasts being removed into a DOT Specification 1A2 drum and turned in as specified for Hazardous Wastes above. All light ballasts removed which are marked, as non-PCB must be disposed of in accordance with Fort Lewis waste designations. This designation can be obtained from the HWMSES.

3.4 LEAD PAINT

3.4.1 General

The Contractor shall follow all applicable laws and regulations when performing the removal or disturbance of lead-based paint. This includes the applicable guidance contained in "Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing", published by the U.S. Department of Housing and Urban Development, unless or until it is superceded by other approved guidance.

3.4.2 Disposal

Prior to the disposal of any lead paint removed, the Contractor shall obtain laboratory analysis results for either total lead or TCLP (Toxic Characteristic Leaching Procedure), per project or individual building, and provide them to PW, Engineering & Contract Management Division. At the completion of the project, the amount of lead containing paint disposed of by the Contractor shall be provided to the Government. Lead paint shall be disposed of as specified above for Hazardous Waste.

3.4.3 Post Construction Requirements

The location of lead paint removed, and the suspected locations and approximate amounts of lead paint remaining in the project area, shall be shown on the floor plan/as-built of each building and provided to PW, Engineering & Contract Management Division upon completion of the project.

3.5 ASBESTOS

3.5.1 General

The Contractor shall follow all applicable laws and regulations when performing the removal or disturbance of asbestos containing materials and shall be responsible for obtaining all necessary asbestos removal permits. All documentation submitted must have the building number and asbestos permit number indicated for the associated project. The following shall be submitted to PW, Engineering & Contract Management Division prior to the contractor beginning work on the project:

a. Copies of all approved permits for asbestos removal, including any amendments. All asbestos permit applications must indicate the building number and street name of the project site. If a permit application has multiple buildings included on it, all the building numbers and street names must be included. The Contractor shall indicate the following address on the permit application under property owner: PUBLIC WORKS, ATTN: AFZH-PWE, MS 17E, BOX 339500, FORT LEWIS, WA, 98433-9500.

b. A detailed asbestos plan (management plan) for the removal procedures to be followed. This shall also include information on the Contractor's qualifications to perform asbestos work (i.e., experience and a list of the asbestos workers/supervisors who will work on the project and their certification numbers and expiration dates).

c. Upon completion, a floor plan and summary showing the exact locations where asbestos has been removed or encapsulated and approximate amounts of asbestos removed and remaining as per the survey provided and any additional bulk samples taken.

d. Copies of laboratory analysis results for clearance sampling and air monitoring including pre-abatement, area, and personal air samples.

e. All job site entry logs or other documentation indicating who worked at or entered the regulated work site.

3.5.2 Additional Sampling

The Contractor shall provide the results of any additional asbestos bulk samples taken during the execution of this contract to PW, Engineering & Contract Management Division.

3.5.3 Disposal

Asbestos removed shall be disposed of at an off site permitted landfill. A Waste Shipment Record (**HFL Form 954-Attached at the end of Spec Section 02080 (13280) .**) shall be provided to PW, Engineering & Contract Management Division signed by the Contractor prior to disposal at the landfill with a second copy provided after disposal signed by any and all transporters and the landfill operator. The two copies shall be provided within 10 days of each other. If the two copies are not provided within 10 days of each other, Fort Lewis will be obligated to report the incident to the Puget Sound Clean Air Agency (PSCAA) in accordance with PSCAA Regulation III, Section 4.07, or report to any other regulatory agency with jurisdiction. If the landfill operator finds a discrepancy in the waste shipment record the Contractor shall report the discrepancy to the Contracting Officer or their representative. NOTE: The HFL Form 954 is the only form the Contractor shall use as the Waste Shipment Record.

3.5.4 Transportation

Transportation of all asbestos shall be in accordance with DOT regulations for transporting hazardous materials.

3.5.5 Asbestos Use

No asbestos-containing material shall be installed/used on any structure.

3.6 Radiation Safety

All aspects of the job relating to radiation safety, including transportation, use, storage or handling must be addressed by the Contractor through PW, Engineering & Contract Management Division to the Installation Radiation Safety Officer, Installation Safety Office, Building 6069, Fort Lewis, WA, phone: (253) 967-3079/6764.

3.7 UNDERGROUND STORAGE TANKS (USTs) AND PETROLEUM CONTAMINATED SOIL(PCS)

All work on USTs and associated contaminated soil shall be completed in compliance with Washington Administrative Code (WAC) 173-340 and 173-360. The Contractor shall be responsible for removal of PCS and its treatment and disposal at an off site location.

3.8 DISPOSAL OF SOLID WASTE.

3.8.1 General

The Contractor shall be responsible for the disposal off site of all refuse generated in the course of performance of this contract, to include containers, transport, handling, and dumping fees. All solid waste transported off the installation for disposal or recycling must be reported

to the COR as to type, weight and receiving facility. All solid wastes shall be placed in containers that are emptied on a regular schedule. The Contractor will not be permitted to deposit refuse in existing garbage cans or refuse dumpsters. No burning of refuse is allowed. All vehicle loads of waste being transported shall be adequately secured to prevent spillage.

3.8.2 Clean Fill Materials

Clean fill materials shall be disposed of on Fort Lewis at a site as directed by PW, Engineering & Contract Management Division. Clean fill shall not contain any items such as vegetative material, asphalt, concrete or metals.

3.9 PROTECTION OF LAND RESOURCES

Prior to the beginning of any construction, the Contractor shall identify the land resources to be preserved within the work area. Except in areas indicated on the drawings or specified to be cleared, the Contractor shall not remove, cut, deface, injure, or destroy land resources including trees, shrubs, vines, grasses, topsoil, and land forms without special permission from the Contracting Officer or their representative. No ropes, cables, or guys shall be fastened to or attached to any trees for anchorage unless specifically authorized.

3.9.1 Landscape

Trees, shrubs, vines, grasses, land forms and other landscape features indicated and defined on the drawings to be preserved shall be clearly identified by marking, fencing, or wrapping with boards, or any other approved techniques.

3.9.2 Unprotected Erodible Soils

Earthwork brought to final grade shall be finished as indicated on the design drawings and specifications. Side slopes and back slopes shall be protected as soon as practicable upon completion of rough grading. All earthwork shall be planned and conducted to minimize the duration of exposure of unprotected soils. Except in cases where the constructed feature obscures borrow areas, quarries, and waste material areas, these areas shall not initially be totally cleared. Clearing of such areas shall progress in reasonably sized increments as needed to use the developed areas as approved by the Contracting Officer or their representative.

3.9.3 Disturbed Areas

The Contractor shall effectively prevent erosion and control sedimentation through approved methods including, but not limited to, the following:

a. Retardation and control of runoff. Runoff from the construction site or from storms shall be controlled, retarded, and diverted to protected drainage courses by means of diversion ditches, benches, berms, and by any measures required by area wide plans under the Clean Water Act.

b. Erosion and sedimentation control devices. The Contractor shall

construct or install temporary and permanent erosion and sedimentation control features as indicated on the drawings. Berms, dikes, drains, sedimentation basins, grassing, and mulching shall be maintained until permanent drainage and erosion control facilities are completed and operative.

c. Sediment basins. Sediment from construction areas shall be trapped in temporary or permanent sediment basins in accordance with the drawings.

The basins shall accommodate the runoff of a local 5 year, 24 hour storm. After each storm, the basins shall be pumped dry and accumulated sediment shall be removed to maintain basin effectiveness. Overflow shall be controlled by paved weirs or by vertical overflow pipes. The collected topsoil sediment shall be reused for fill on the construction site, and/or stockpiled for use at another site. The Contractor shall institute effluent quality monitoring programs as required by State and local environmental agencies.

3.9.4 Tree Protection

The Contractor shall exercise care when excavating trenches in the vicinity of trees. Where roots are two inches in diameter or greater, the trench shall be excavated by hand or tunneled. When large roots are exposed, they shall be wrapped with heavy burlap for protection and to prevent drying. Trenches dug by machines adjacent to trees having roots less than two inches in diameter shall have the sides hand trimmed, making a clean cut of the roots. Trenches having exposed tree roots shall be backfilled within 24 hours unless adequately protected by moist burlap or canvas.

3.9.5 Trees Removed During Construction

Logs from trees removed during construction shall be decked for subsequent disposal by the Government. Decks shall be located so as not to interfere with the construction work and shall be located as directed by PW, Engineering & Contract Management Division. Logs shall be sorted by size and placed in separate decks for sawlogs and fuelwood. Trees shall be cut from the stump and limbed to the top before decking. Whenever possible logs shall be left in tree length. If trees are too large to be handled tree length, cut 40-foot logs plus 12 inches trim allowance from the butt. The minimum size for a sawlog is 6 diameter inches on the small end and 16 foot in length. All logs not suitable for sawlogs shall be placed in a fuelwood deck. The minimum size for a fuelwood log is 5 inches diameter on the large end and 8 feet in length.

3.9.6 Restoration of Landscape Damage

All landscape features (vegetation - such as trees, plants, and grass) damaged or destroyed during Contractor operations outside and within the work areas shall be restored by the Contractor to a condition similar to that which existed prior to construction activities unless otherwise indicated on the drawings or in the specifications. All vegetation that was removed or damaged consisting of native species shall be replaced with native species. If the area had been previously landscaped with non-native

species then similar plants shall be used for replacement. Landscaping shall be maintained for a minimum of 60 days after planting, to include irrigation. The Contractor shall coordinate with ENRD prior to planting any non-native species.

Trees shall be replaced in kind with a minimum 4-inch caliper nursery stock. Shrubs, vines, and ground cover shall be replaced in kind; the Contracting Officer or their representative shall approve size. All plant material shall meet specifications outlined in ANSI Z60.1 - current publication, "American Standard for Nursery Stock."

Grass areas shall be replaced in kind by sodding or seeding. Sod shall be required in all regularly maintained lawn areas.

Plant material damaged or destroyed within the historical district shall be replaced or repaired as directed by the Contracting Officer or their representative.

3.10 PROTECTION OF WATER RESOURCES

3.10.1 General

The Contractor shall keep construction activities under surveillance, management, and control to avoid pollution of surface and ground waters. Toxic or hazardous chemicals shall not be applied to soil or vegetation when such application may cause contamination of the fresh water reserve. Monitoring of water areas affected by construction shall be the Contractor's responsibility. The Contractor shall monitor all water areas affected by construction activities. The Contractor shall observe all prescribed setbacks from streams and wetlands as specified in FL REG 200-1.

3.10.2 Not Used

3.10.3 Not Used

3.10.4 Not Used

3.10.5 Fish and Wildlife

The Contractor shall minimize interference with, disturbance to, and damage of fish and wildlife. The Contractor prior to beginning of construction operations shall list species that require specific attention along with measures for their protection.

3.10.6 Wellhead Protection Areas

Particular care shall be taken to prevent the introduction of any contaminant to the surface in a designated Wellhead Protection Area (WPA). Certain activities that may pose a danger to groundwater resources are prohibited within WPAs.

3.10.7 Construction Stormwater Permit

The National Pollutant Discharge Elimination System (NPDES), requires general permits, a notice of intent, and a notice of discontinuation for

construction sites greater than 5 acres discharging stormwater to any waters of the United States. The Contractor shall file a Notice of Intent with the EPA for coverage under the EPA's general permit for storm water discharges from construction activities. A copy of the NOI shall be submitted to PW, Engineering & Contract Management Division. The Contractor shall be responsible for compliance with the terms of the permit, including the development of a storm water pollution prevention plan.

3.11 PROTECTION OF AIR RESOURCES

3.11.1 General

Dust particles, aerosols, and gaseous byproducts from construction activities, processing, and preparation of materials shall be controlled at all times, including weekends, holidays, and hours when work is not in progress. Hydrocarbons and carbon monoxide emissions from equipment shall be controlled to Federal and state allowable limits at all times. The Contractor shall not conceal or mask the emission of an air pollutant which violates air pollution regulations or causes a detriment to the health, safety, or welfare of any person.

An air pollution source shall not emit air pollutants in such quantities and of such characteristics and duration which are likely to be injurious to human health, plant or animal life, property, or which unreasonably interfere with enjoyment of life and property.

3.11.2 Fugitive Dust

Fugitive dust created as a result of construction activities shall be controlled with the BACT such as spraying with water. Contractor vehicles shall not enter public roadways with deposits of mud, dirt, or other debris or unsecured loads. Fugitive dust shall not be emitted from air pollution generating equipment such as boilers and incinerators.

3.11.3 Not Used

3.11.4 Burning Natural Vegetation

All cantonment areas, housing areas and all of North Fort are designated as no burn areas. A burning permit is required for burning natural vegetation in all other areas on Fort Lewis. Burning permits may be obtained from the PW Forestry Section. A copy of the permit shall be submitted to PW, Engineering & Contract Management Division.

3.11.5 Notice of Construction Permits

The Contractor shall be responsible for obtaining any necessary Puget Sound Air Pollution Control Agency "Notice of Construction" permits for the construction/installation of new air emission sources under this project. The Contractor is responsible for the associated fees.

The following process shall be followed when filing a Notice of Construction and Application for Approval. The Contractor shall complete the application including the Environmental Checklist (the proper forms can be obtained from

the Puget Sound Clean Air Agency PSCAA)†. The Contractor shall then submit the application and a cashier's check addressed to PSCAA for the associated plan examination fee to PW, Contract & Engineering Management Division. The application and check are to be submitted in a sealed envelope clearly marked with PSCAA Notice of Construction Application and Associated Fee. The Government will review the application. If it is complete and accurate, the Application will be submitted by the Government to PSCAA with check. If it is not complete or accurate, the Contractor will be requested to submit a revised Application. The Contractor shall allow 30 days for review and submission by the Government. After submission, the Contractor shall allow 75 days for review, negotiation, and approval by PSCAA. This process time line applies to standard projects. If the project is a major air pollution source, which requires other environmental documentation and public comment, the process time should be adjusted accordingly.

The Contractor is responsible for assuring all the standards/limits included in the Order of Approval to the Notice of Construction and Application for Approval are implemented or met. This includes developing an Operations and Maintenance plan to assure compliance with all environmental requirements and any testing of the air pollution source, the control equipment, or the monitoring equipment required by the Order of Approval or other regulatory requirement (this may be a supplement to any O&M manuals required elsewhere in the technical specifications).

The address on the Notice of Construction and Application for Approval for the property owner as well as the applicant should be PUBLIC WORKS, ATTN: AFZH-PWE, MS 17E, BOX 339500, FORT LEWIS, WA, 98433-9500.

3.11.6 Best Available Control Technology (BACT)

The Contractor shall utilize the BACT as determined by the regulatory authority on all air pollution sources. The Contracting Officer or their representative shall be notified for resolution if this requires a change in the design.

3.12 PRESERVATION OF HISTORICAL, CULTURAL, AND ARCHEOLOGICAL RESOURCES

If, during construction activities, the Contractor observes items that might have historical or archeological significance, the Contractor shall immediately contact the Contracting Officer or their representative and shall cease all activities that may result in the destruction of these resources and shall prevent its employees from trespassing on, removing, or otherwise damaging such resources.

3.13 PROTECTION OF FISH AND WILDLIFE

The Contractor shall conduct their operations in a manner that will minimize impacts on surrounding fish and wildlife. If, during construction activities, the Contractor observes any Federal or State protected species, the Contractor shall immediately contact the Contracting Officer or their representative and cease all activities at the site.

AFZHLBEQ
 Procedure for Inventory Material Inventory

HAZARDOUS MATERIAL INVENTORY

POC: _____ OFFICE CODE: _____
 UNIT: _____ PHONE: _____
 DODAC: _____ UIC: _____ BLDG: _____ DATE: _____

| # | MSDS | ITEM NAME | NSN | MANUFACTURER | Container Siz/Type | On Hand | Received (+) | Issued (-) | Down Graded to Waste (-) | Balance |
|----|------|-----------|-----|--------------|-----------------------|------------|-----------------|---------------|-----------------------------|---------|
| 1 | | | | | | | | | | |
| 2 | | | | | | | | | | |
| 3 | | | | | | | | | | |
| 4 | | | | | | | | | | |
| 5 | | | | | | | | | | |
| 6 | | | | | | | | | | |
| 7 | | | | | | | | | | |
| 8 | | | | | | | | | | |
| 9 | | | | | | | | | | |
| 10 | | | | | | | | | | |
| 11 | | | | | | | | | | |
| 12 | | | | | | | | | | |
| 13 | | | | | | | | | | |
| 14 | | | | | | | | | | |
| 15 | | | | | | | | | | |
| 16 | | | | | | | | | | |
| 17 | | | | | | | | | | |

Storage Location/Comments:

**HAZARDOUS MATERIAL INVENTORY SHEET INSTRUCTIONS
For Military Units, Government Activities, and Contractors****

ECO/HMT: Enter the names of Environmental Compliance Officer (**ECO**), Hazardous Materials Technician (**HMT**), and/or Hazardous Waste Technician (**HWT**). // ** *Name of person filling out form*

ACCT SECT: Enter the Accountable Section. This is the section responsible for ordering, receiving, transporting, storing and managing the Hazardous Material (HM) at this location. (For example: Supply, Motor Pool, BN HAZMAT, NBC, etc.) This entry should coincide with the Acct Sect on the unit's Authorized Use List (AUL).

UNIT/ORG: Provide complete unit/organization name including Major Subordinate Command or Directorate. // ***Company name*

DODAAC: * DOD Activity Address Code (**W # # # # #**).

UIC: * Enter the Unit Identification Code (**W # # # # #**).

OFC SYMBOL: * Enter the Unit/Organization Office Symbol, with the mail stop number. (For example: **AFZH-PWE MS17**).

PHONE: Enter the phone number where ECO, HMT, or HWT can be reached. // ** *POC phone #*

FAX: Enter the government FAX #. // ** *Same for contractors*

EMAIL: Enter the government email address of the ECO/HMT/HWT. If not available, enter the government email address where questions may be directed. // ** *Same for contractors*

CY QTR Mark the box with the appropriate Calendar Year quarter. // **

BLDG #: Enter the building number in which the HM is stored. If the HM is stored in an ENRD shed, enter the closest building number. // ** *Same for contractors*

RM #: Enter the room number in the building in which HM is stored. // ** *Same for contractors*

BLDG DESC: Enter the building description where HM is located, i.e., orderly room, motor pool, Admin, C-shed, White Shed, etc.

ENRD # * Enter the number that is stenciled on the white ENRD shed, if applicable (for example: ENRD 100).

DATE: Enter the date HM inventory is submitted to PW-ENRD Pollution Prevention-HM Section.

MSDS * Enter the ENRD assigned MSDS # (5 numbers and a letter) or the HMIS assigned MSDS code (5 letters). The ENRD assigned MSDS # is preferred if both are available. If neither MSDS number/code is available, leave blank and provide a copy of the MSDS with the inventory form. // ** *Contractors provide initial copy of MSDS*

Item Name Provide detailed descriptions of item including a product number if available. // **

NSN Enter the National Stock Number (NSN) only. (e.g. **9150-01-438-6049, 8010-00-F00-4034**) // **

Manufacturer Manufacturer's name or vendor/distributor. // **

Unit of Measure Enter the Unit of Measure in terms of weight or volume (i.e. **16 OZ CN** or **55 GL DR**) if appropriate. Radio batteries, for example, are not easily expressed in terms of weight or volume, therefore the Unit of Issue (i.e. EA) may be used. Insert appropriate codes from the tables below. // **

Container Size Codes

| Code | Name | Code | Name |
|------|------------------|------|------------|
| CC | CUBIC CENTIMETER | LI | LITER |
| CF | CUBIC FEET | MG | MILLIGRAM |
| FL | FLUID OUNCE | ML | MILLILITER |
| FT | FOOT | OZ | OUNCE |
| GM | GRAM | PT | PINT |
| GL | GALLON | QT | QUART |
| KG | KILOGRAM | TN | TON |
| LB | POUND | | |

Container Type Codes

| Code | Name | Code | Name |
|------|-----------|------|----------|
| AM | AMPOULE | CY | CYLINDER |
| BA | BALL | DR | DRUM |
| BG | BAG | EA | EACH |
| BL | BARREL | JR | JAR |
| BT | BOTTLE | KT | KIT |
| BX | BOX | PG | PACKAGE |
| CA | CARTRIDGE | TK | TANK |
| CN | CAN | TU | TUBE |

Auth Qty * Number of items that can be consumed in 7 days while in garrison under normal operations. This quantity should equal the Authorized quantity on the unit's AUL.

Begin Bal Number of items at the beginning of the reporting period. // **

Received (+) Number of items added to inventory (received) during reporting period. // **

Issued (-) Number of items issued for use during reporting period. An item is considered used once the container is opened. // **
Items used

Wasted (-) Number of items down-graded to waste. Include material that has been disposed of for expired shelf life, damaged containers, contamination, etc. Example: Oil contaminated with water or paint that has been frozen. // **

End Balance Number of items on hand at end of reporting period. To double check reporting accuracy, this row should balance mathematically. // **

Begin Balance + Received – Issued – Waste = End Balance

| Begin Balance | Received (+) | Issued (-) | Wasted (-) | End Balance |
|---------------|--------------|------------|------------|-------------|
| 10 | 2 | 4 | 2 | 6 |

Comments: Any clarifying comments necessary. // **

Signature The Inventory must be signed by the **ECO** (E6 or above) // ** *POC Signature*

Refer questions to your installation Environmental Office
Fort Lewis: PW/ENRD 253-967-4786, ext. 163/147/156. FAX# 253-967-9937. Email: HMinventory@lewis.army.mil.
Yakima Training Center (YTC): Larry Fain 509-577-3545 or Eric Egbers 509-577-3546

Submit completed forms in person to: Pollution Prevention, HM Section, Bldg 1210

* Does not apply to contractors
** Applies to contractors

Reverse of HFL Form 953, 7 JUL 00

Hazardous Waste Accumulation Area Checklist

Unit/Activity: _____

Inspection Date: _____

Building Number: _____

POC: _____

Inspection Type: _____

POC Phone Number: _____

| <u>Inspection Question</u> | <u>GO</u> | <u>NO GO</u> | <u>Comments</u> |
|--|--------------------------|--------------------------|-----------------|
| 1. Are all Hazardous Waste (HW) containers within a PW Environmental Services approved HW accumulation facility or meet facility requirements listed in FL Reg. 200-1, Appdx. F, Para. 7 a & b? NG=RED | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 2. Are only HW containers issued by PW Environmental Services used? (FL Reg 200-1, Appdx. F, Para. 6d (1)) NG=RED | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 3. Do HW containers have the PW Environmental Services issued bar code label and meet HW labeling requirements? (WAC 173-303-630) (FL Reg. 200-1, Appdx. F, Para. 6d (2)&(3)) NG=RED | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 4. Are containers positioned so labels can be easily read? (WAC 173-303-630) (FL Reg. 200-1, Appdx. F, Para. 6d (4)) NG=RED | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 5. Are containers free from leaks, excessive rust, damage or spillage/residue on the outside of the container? Are leaks into secondary containment cleaned up? (WAC 173-303-630, Para 2) (WAC 173-303-630 (7) (a)(ii)) (FL Reg 200-1, Appdx E, Tab 2, Para 3 f) NG=RED | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 6. Has any HW container exceeded its turn-in date? (WAC 173-303-200 (1)) (FL Reg. 200-1, Appdx. F, Para. 6 e (1)) NG=RED | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 7. Are container lids or bungs properly installed and wrench tight to prevent leakage if the container is overturned? (WAC 173-303-630, Para 5 (a & b)) (FL Reg. 200-1, Appdx. F, Para. 6 d (6)(a)) NG=RED | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 8. When stored together do incompatibles, flammables, corrosives, or oxidizers have barriers to prevent mixing? (WAC 173-303-630, Para. 9 c) (FL Reg. 200-1, Appdx. F, Para. 6d (6) (b)) NG=RED | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 9. Are HW containers, containing flammable liquids properly grounded? (WAC 173-303-630, Para 1 (a))(FL Reg. 200-1, Appdx. F, Para. 6d (6) (c)). NG=RED | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 10. Is there a minimum thirty-inch separation between aisles of HW containers, and are rows of drums no more than two wide? (WAC 173-303-630, Para 5 c) (FL Reg. 200-1 Appdx. F, Para. 6 d (4)) NG=RED | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 11. Is the HW separated from HM? (FL Reg. 200-1, Appdx. F, Para. 6 c) (Visually and Physically) NG=RED | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 12. Is there a functioning emergency alarm at the facility? (FL Reg. 200-1, Appdx. F, Para. 7 d (2)) NG=RED | <input type="checkbox"/> | <input type="checkbox"/> | _____ |
| 13. Is there a written, site specific, spill plan posted and are spill supplies on site? (FL Reg 200-1, Appdx. F, Para. 7 d (1)&(3)) NG=RED | <input type="checkbox"/> | <input type="checkbox"/> | _____ |

Inspector: _____ Signature _____

Hazardous Materials Storage Checklist

Unit/Activity: _____

Inspection Date: _____

Building Number: _____

POC: _____

Inspection Type: _____

POC Phone Number: _____

| <u>Inspection Question</u> | <u>GO</u> | <u>NO GO</u> | <u>Comments</u> |
|---|--------------------------------------|--------------------------|-----------------|
| 1. Is HM stored in a PW Environmental Services approved facility or meet facility requirements? (FL Reg 200-1, Appdx E, Tab 2, Para 1) | <input type="checkbox"/> NG=AMBER | <input type="checkbox"/> | _____ |
| 2. Are incompatible materials segregated, e.g., corrosives and oxidizers segregated from flammable products? (FL Reg 200-1, Appdx. E, Tab 2, Para 3g) | <input type="checkbox"/> NG=RED | <input type="checkbox"/> | _____ |
| 3. Are flammables stored away from sources of heat, ignition, flames, or sparks? (FL Reg. 200-1, Appdx. E, Tab 2, Para. 3g) | <input type="checkbox"/> NG=RED | <input type="checkbox"/> | _____ |
| 4. Are MSDSs available on-site for all HM stored? (29 CFR 1910.1200) FL Reg. 200-1, Appdx. M, Para.2 c (1)(a)), | <input type="checkbox"/> NG=AMBER | <input type="checkbox"/> | _____ |
| 5. Is a site specific spill plan posted, and is a spill kit readily available? (FL Reg. 200-1, Appdx. M, Para 3 b & c) | <input type="checkbox"/> NG=RED | <input type="checkbox"/> | _____ |
| 6. Are product containers serviceable? (Not leaking, no excessive dents or rust, and lid(s) tightly closed)(FL Reg. 200-1, Appdx. E, Tab 2, Para. 3 f) | <input type="checkbox"/> NG=RED | <input type="checkbox"/> | _____ |
| 7. Are container labels legible and do they clearly identify the name of the material in the container?(FL Reg. 200-1, Appdx. E, Tab 2, Para. 3 c) | <input type="checkbox"/> NG=RED | <input type="checkbox"/> | _____ |
| 8. Are containers within shelf life expiration dates?(FL Reg. 200-1, Appdx. E, Tab 2 Para 3e) | <input type="checkbox"/> NG=AMBER | <input type="checkbox"/> | _____ |
| 9. Are new products segregated from "in-use" containers, and are stocks rotated on a "first opened", first used" basis?(FL Reg. 200-1, Appdx. E, Tab 2, Para. 3d) | <input type="checkbox"/> NG=AMBER | <input type="checkbox"/> | _____ |
| 10. Are containers stored according to product label / MSDS requirements? (FL Reg. 200-1, Appdx. E, Tab 2, Para. 3g) | <input type="checkbox"/> NG=AMBER | <input type="checkbox"/> | _____ |
| 11. Are containers stored in an orderly manner, and is the HM storage area free of clutter and debris?(FL Reg. 200-1, Appdx. E, Tab 2, Para. 3c) | <input type="checkbox"/> NG=AMBER | <input type="checkbox"/> | _____ |
| 12. Are gas cylinders properly identified, leak-tight, secured or racked, with safety caps in place, and stored away from sources of heat, flames, or sparks? (29CFR 1910.101)(FL Reg 200-1, Appdx. E, Tab 2, Para. 3g) | <input type="checkbox"/> NG=RED | <input type="checkbox"/> | _____ |
| 13. Do opened, "in-use" containers have secondary containment? Are leaks into secondary containment cleaned up? (FL Reg 200-1, Appdx E, Tab 2, Para. 1 a) | <input type="checkbox"/> NG=AMBER | <input type="checkbox"/> | _____ |

Inspector: _____ **Signature** _____

This page intentionally blank

SECTION 01450

CHEMICAL DATA QUALITY CONTROL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

CODE OF FEDERAL REGULATIONS (CFR)

| | |
|------------|--|
| 40 CFR 261 | Identification and Listing of Hazardous Waste |
| 40 CFR 262 | Standards Applicable to Generators of Hazardous Waste |
| 40 CFR 268 | Land Disposal Restrictions |
| 49 CFR 172 | Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements |
| 49 CFR 178 | Specifications for Packaging |

ENGINEERING MANUALS (EM)

| | |
|------------|---|
| EM 200-1-1 | (1994) Validation of Analytical Chemistry Laboratories |
| EM 200-1-3 | (1994) Requirements for the Preparation of Sampling and Analysis Plans Ch 1 |
| EM 200-1-6 | (1997) Chemical Quality Assurance |

ENGINEERING REGULATIONS (ER)

| | |
|---------------|--|
| ER 1110-1-263 | (1996) Data Quality Management for Hazardous, Toxic, Radioactive Waste Remedial Activities |
|---------------|--|

ENVIRONMENTAL PROTECTION AGENCY (EPA)

| | |
|------------------|--|
| EPA 540/R 94-012 | (1994) Contract Laboratory Program National Functional Guidelines for Inorganic Data Review |
| EPA 540/R 94-013 | (1994) Contract Laboratory Program National Functional Guidelines for Organic Data Review |
| EPA SW-846 | (Rev O; updates I, II, IIA, IIB, and III) Test Methods for Evaluating Solid Waste (Vol IA, IB, IC, and II) |

U.S. ARMY ENVIRONMENTAL HYGIENE AGENCY (USAEHA)

USAEHA Sample Protocol (1993) Sampling Protocol Building Demolition Debris and Buildings Painted with Lead-Based Paint

WASHINGTON STATE DEPARTMENT OF ECOLOGY (ECOLOGY)

91-30 (1994) Guidance for Remediation of Petroleum Contaminated Soils

90-52 (1991) Guidance for Site Checks and Site Assessments for Underground Storage Tanks

1.2 ACRONYMS

The definition of acronyms used by the Contractor that pertain to chemical data quality control shall be clearly defined for all contract related products and communications.

1.3 MEASUREMENT AND PAYMENT

Separate payment will not be made for providing and maintaining the chemical data quality requirements including the chemical data quality management, chemical data validation, minimum chemical data reporting requirements, and chemical data quality submittal requirements; these costs shall be included in the applicable unit prices or lump sum prices contained in the bidding schedule.

1.4 CHEMISTRY REQUIREMENTS

Chemical Data Quality Control (CDQC) shall be as defined in ER 1110-1-263; this ER, which integrates USACE guidance on the subject, shall be supplemented by EM 200-1-6 for detail technical guidance on CDQC.

1.4.1 Site History

Various World War II era buildings on Fort Lewis are proposed for demolition. Demolition includes testing of the building debris for lead by toxicity characteristic leaching procedure (TCLP). Sampling shall also be performed at the location of each former underground storage tank [or above ground storage tank (AST)] associated with each building. Following removal of the building debris, the contractor shall sample within the dripline and footprint of the former buildings for total lead.

1.4.2 Data Quality Objectives (DQO)

Sample acquisition, chemical analysis and chemical parameter measurements shall be performed so that the resulting data meet and support data use requirements. The chemical data shall be acquired, documented, verified and reported to ensure that the specified precision, accuracy, representativeness, comparability, completeness and sensitivity requirements are achieved.

1.4.3 Sampling, Analysis and Measurement

The Contractor shall collect representative discreet soil samples for laboratory analysis as directed within this specification.

UST/AST Assessment

Sample collection, handling, analytical and QA/QC procedures shall be followed as directed by this specification. The information and data shall be sufficiently reliable to make a management decision to either permanently close the site or to recommend further investigation as required under Ecology 90-52. If groundwater is encountered, a groundwater sampled shall be collected and analyzed for diesel contamination and semi-volatiles (SVOCS, method 8270).

Three (3) soil samples shall be collected from the excavation of each former UST site (see paragraph 1.4.1). One (1) samples shall be collected from beneath the location of each AST. The Contractor shall collect one soil sample every 50 lineal feet of piping. Samples shall be collected in accordance with Ecology 91-30. Samples shall be analyzed for diesel contamination per NWTPH-Dx method. All samples shall be discrete samples.

The soil stockpile shall be sampled at the rate of three (3) samples per 100 CY of material excavated. Samples shall be submitted for NWTPH-Dx analysis. A minimum of three (3) samples per stockpile shall be collected.

If analytical results exceed state action levels for diesel, the contractor shall collect one additional soil sample for extractable petroleum hydrocarbon (EPH) analysis. The contractor shall follow the Ecology Interim Interpretive and Policy Statement for Cleanup of Total Petroleum Hydrocarbons and provide interpretive analysis of the results. Soils exceeding state action levels shall be disposed at an approved (Federal/state) facility.

Demolition Debris

Sampling and analysis for building demolition debris shall be according to USAEHA Sample Protocol. The Contractor shall sample the debris waste stream of two (2) buildings for total lead per TCLP analysis (EPA 1311/6010). If waste stream results exceed 5 mg/L lead, the waste shall be classified as a hazardous waste and handled, manifested, and disposed according to Federal, state, and local regulations. The analytical results shall apply to subsequent building demolitions under phase VI contract.

Sampling Dripline and Footprint

The Contractor shall collect eight (8) soil samples per building. Four (4) soil samples shall be collected at a depth of 0-6 inches. The remaining four (4) samples shall be collected at a depth of 18-24 inches below ground surface (bgs). Samples shall be submitted for laboratory analysis per method 6010 for total lead. Samples shall be collected in a random manner using a systematic grid pattern. Samples shall be collected from the center of the sample grid.

The Contractor shall also collect representative soil samples from soil lead stockpiles for disposal characterization. These samples shall be submitted for TCLP analysis of lead. Two (2) samples per stockpile shall be collected for analysis.

1.4.4 Field Screening

The Contractor shall propose in the SAP an appropriate field screening method for TPH contaminants in the diesel constituent range. PIF/FID instruments are designed for detection of gasoline range hydrocarbons; therefore, shall not be used for this project. X-ray Fluorescence (XRF) instrument is recommended as a field screening device for total lead analysis in soil. The XRF provides real-time data. If the Contractor elects to use an XRF, the Contractor shall provide proper certification of employee training and permits to operate the instrument. The XRF results shall be correlated with split laboratory total lead (EPA SW 6010) analysis. A minimum of three (3) split samples shall be used to develop the correlation value. A minimum correlation value of 0.95 or greater is acceptable. The correlation value and results of the lab analysis shall be provided in the Contractor's daily QA report and in the final project report.

1.5 QUALITY ASSURANCE ELEMENTS

The Contractor shall be responsible for the following QA elements necessary to monitor and ensure the quality of chemical data produced.

1.5.1 Laboratory Validation Requirements

The Contractor shall select currently validated USACE laboratories. The Contractor shall identify the proposed project laboratories in the sampling and analysis plan (SAP). If a proposed analytical laboratory cannot meet specified analytical requirements or achieve the required validation, the Contractor shall select another laboratory.

1.5.2 Quality Assurance Sample Collection and Analysis

The Contractor shall be responsible for collection and transportation of QA samples to the QA laboratory. Samples for all analyses shall be taken as splits of homogenized samples. Samples shall be collected at a rate of 10 percent per matrix per analysis per sampling event.

- a. The Contractor shall submit the QA Laboratory Advance Notification (QALAN) to the QA laboratory. The QALAN shall include a list of laboratory-related DQO. The DQO shall include, but shall not be limited to, identification of extraction and analysis method numbers, a list of analytes with required limits, estimated number of tests, approximate sampling dates, and requested completion date for QA testing. The Contractor shall notify the Contracting Officer (CO) and the QA laboratory immediately of any changes.
- b. The Contractor shall provide all labor and field supplies, including sample containers and shipping coolers, for collecting and shipping samples for QA testing. The Contractor shall, in the presence of the CO, properly collect, label, and package the QA samples, fill out all chain-of-custody forms, and ship the samples by one-day delivery service to the designated QA laboratory for analysis. The Contractor shall notify the laboratory when all sampling is completed and shall clearly mark the chain-of-custody form accompanying the final shipment "FINAL" in 25 mm 1 inch high lettering.
- c. The Contractor shall allow 30 calendar days for laboratory analysis of QA samples, data review, and submission of the Government chemical quality assurance report. The elapsed time shall begin when the Contractor's last sample arrives at the QA

laboratory, provided that the Contractor's completed chemistry data package is received within 30 calendar days thereafter. Otherwise, the Contractor shall allow 30 calendar days from the date the completed chemistry data package is received at the laboratory. Where QA results are unacceptable due to Contractor negligence (e.g. improper sample collection and/or handling by the Contractor), or where QA sample results conflict with the Contractor's primary sample results, further sampling and testing shall be performed as directed by the CO. All costs for such additional sampling and testing due to Contractor negligence, including both QC and QA testing and analysis, and for any required remedial actions in the work, shall be borne by the Contractor. USACE acceptance of final disposition of any excavated soil shall not occur until the Contractor's sampling and QC results have been confirmed by QA results. This includes all final stockpiling, wasting, backfilling, and related construction. No payment will be made for laboratory sampling and testing before receipt and acceptance by the Government of the QA samples and the completed Chemical Data Final Report (CDFR), properly formulated according to these specifications.

1.5.3 Review of Primary Laboratory Data

The Contractor shall be responsible for the independent data review of the entire primary data set.

1.5.4 Validation of Data

The Contractor shall be responsible for validating 100 percent of the data in accordance with EPA 540/R 94-012 and EPA 540/R 94-013. The data validation strategy shall be established at the beginning of the project to be consistent with project DQO.

1.6 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government. The following shall be submitted in accordance with Section 01330 SUBMITTAL PROCEDURES:

SD-03 Product Data

Sampling and Analysis Plan; GA

The SAP including the Field Sampling Plan (FSP) and the Quality Assurance Project Plan (QAPP), shall be submitted with the Management Plan and approved according to the project schedule.

SD-06 Test Reports

Quality Assurance Sample Collection and Analysis; FIO

The QA Laboratory Advance Notification (QALAN) shall be provided to the Government QA laboratory at least 14 days before the initial shipment of samples. Reference LIMS # ____ on all correspondence. Government QA laboratory address:

U.S. Army Corps of Engineers
Attention: Laura Percifield
420 S. 18th St. (CMQA Laboratory)
Omaha, Nebraska 68102-2586
Telephone (402) 444-4314, fax (402) 341-5448

Chemistry Data Package; FIO

The chemistry data package shall be provided to the Government QA lab within 14 days of receipt from the contractor laboratory. The 4025 for this submittal shall be sent to the CO as documentation. The chemistry data package shall also be provided as an attachment to the CDFR.

Chemical Data Final Report; GA

The CDFR, within 30 days of completing work at the site, before final payment. Each report shall be labeled with the contract number, project name and location.

1.7 QUALIFICATIONS

1.7.1 Chemical Quality Control Officer

As a minimum, the Contractor's Chemical Quality Control Officer shall have: a BS degree in Chemistry; 4 years of experience related to investigations, studies, design and remedial actions at HTRW sites; and 2 field seasons (or one continuous calendar year experience) in calibration and operation of various field monitoring devices as well as standard analytical chemistry methods common for analyzing soil, water, air and other materials for chemical contamination assessment, including hazardous waste manifesting. The Chemical Quality Control Officer shall ensure that all chemistry related objectives including responsibilities for DQO definitions, sampling and analysis, project requirements for data documentation and validation, and final project reports are attained. The Chemical Quality Control officer need not be present onsite during routine sampling, but shall be available for consultation with Government and Contractor personnel.

1.7.2 Project Chemist

As a minimum, the Contractor's Senior Chemist shall have: a BS degree in Chemistry; 4 years of experience related to investigations, studies, design and remedial actions at HTRW sites; 2 field seasons experience in calibrating and operating various field monitoring devices; and 2 years of experience in the operation of an HTRW commercial laboratory with standard analytical chemistry methods common for analyzing soil, water, air and other materials for chemical contamination assessment, including data for hazardous waste manifesting. The project chemist shall ensure that all chemistry related goals of the program are attained. The project chemist shall be onsite during all sampling events and shall also be available for consultation with Government personnel.

1.7.3 Environmental Sampler

As a minimum, the Contractor's Environmental Sampler shall have: 2 years of experience in the development and preparation of SAP and work plans; 2 years of experience in and knowledge of EPA methods for collecting environmental and hazardous waste samples; and 2 field seasons of experience with the particular field screening techniques for use on this project. The

Environmental Sampler shall collect all onsite samples and perform all field screening tests. The Environmental Sampler shall review the sampling results, and provide recommendations for the Contractor's sampling program. The Environmental Sampler shall be onsite during excavation and stockpiling operations involving contaminated soil or soil to be checked for contamination.

1.8 COORDINATION MEETING

After the preconstruction conference, before any sampling or testing, the Contractor and the Contracting Officer will meet at the construction site to discuss the CQC Plan and the SAP. The coordination meeting will be simultaneous to any CQC coordination meeting required in Section 01451 CONTRACTOR QUALITY CONTROL unless otherwise indicated or directed. A list of definable features that involve chemical measurements shall be agreed upon. Management of the chemical data quality system including project DQO, project submittals, chemical data documentation, chemical data assessment, required sampling and analysis protocols, and minimum data reporting requirements shall be agreed upon. The meeting will serve to establish an interrelationship between the Contractor's chemical data quality management and Government chemical quality assurance requirements. Minutes of the meeting will be documented by the Contractor and shall be signed by both the Contractor and the Contracting Officer. The minutes will include any or all unresolved chemical issues along with the conditions for resolution and will become a part of the contract file.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

The Contractor shall be responsible for chemical sample acquisition, sample analysis, instrumental measurements of chemical parameters and for chemical data quality control. An effective chemical data quality control system shall be established that meets the requirements for the chemical measurement DQO applicable to the project. The system shall cover chemical measurements pertaining to and required for Contractor and subcontractor produced chemical data. The Contractor shall control field screening, sampling, and testing in conjunction with remedial activities to meet all DQO; minimize the amount of excavated material requiring temporary storage; prevent dilution of contaminated soils with clean soils; and ensure completion of work within the required time.

3.2 QUALITY CONTROL PLAN

3.2.1 Additional Requirements

In addition to the quality control requirements specified in Section 01451 CONTRACTOR QUALITY CONTROL, the CQC Plan shall incorporate the qualifications, authority and responsibilities of all chemical quality management and support personnel. Chemical measurements including sampling and/or chemical parameter measurement will not be permitted to begin until after production and acceptance of the CQC Plan, and Government approval of the SAP.

3.2.2 Chemistry Elements of the CQC Plan

To cover contract related chemical measurements by the Contractor and all subcontractors, the CQC Plan shall include the following as a minimum.

3.2.2.1 Qualifications

Names, education, experience qualifications, authorities, and decision-making responsibilities of all chemical quality management and support personnel. The CQC Plan shall contain a copy of a letter from the project QC manager designating and authorizing a Chemical Quality Control Officer and chemical quality control organization staff.

3.2.2.2 Authority and Responsibility

A diagram, flow chart, or figure clearly depicting the chemical data quality management and support staff and the authority and responsibility of each for chemical sampling and analysis, procedures for corrective actions, deliverables and submittals, deviations and changes, chemical quality documentation, data validation, minimum data reporting requirements, and DQO for chemical parameter measurement by the Contractor and subcontractors. The contents of this section of the CQC Plan shall be included in the applicable "Project Organization" elements of the FSP and the QAPP.

3.3 SAMPLING AND ANALYSIS PLAN

The SAP shall be prepared in accordance with CDQC requirements and EM 200-1-3. The SAP shall be a single document that contains two distinct elements: FSP and QAPP. Sections of the FSP and QAPP shall be cross-referenced. The SAP shall confirm the Contractor's understanding of the contract requirements for chemical data quality control, and shall describe procedures for field sampling and sample submittal for analysis, field chemical parameter measurement, data documentation, data assessment and data reporting requirements. The SAP shall delineate the methods the Contractor intends to use to accomplish the chemical quality control items to assure accurate, precise, representative, complete, legally defensible and comparable data. The SAP shall describe all chemical parameter measurements for all matrices for all phases of the remediation contract. As a single interrelated document, the SAP shall be provided to field and laboratory personnel. The Contractor may propose original/innovative approaches to chemical parameter measurements for cost reduction and remediation efficiency by abbreviated sampling, contingency sampling and/or contingency analysis, indicator or tracer analysis, onsite analytical services, equivalency or screening methods. The SAP shall clearly identify the Contractor obtained laboratories. The Contractor shall furnish copies of the Government approved SAP to all laboratories and the Contractor's field sampling crew. The SAP shall address all levels of the investigation with enough detail to become a document, which may be used as an audit guide for field and laboratory work.

3.4 CHEMISTRY DATA PACKAGE

The chemistry data package shall be produced and provided through USACE CO to the USACE QA lab. The chemistry data package shall contain information to demonstrate that the project's DQO have been fulfilled. The QA function will compare QA sample results to corresponding primary sample results, will assess the Contractor's compliance with the SAP, and will recommend corrective action as necessary.

3.5 CONTROL OF CHEMICAL DATA QUALITY

Contractor chemical data quality control shall ensure that a quality control program is in place that assures sampling and analytical activities and the resulting chemical parameter measurement data comply with the DQO and the requirements of the SAP. The Contractor shall utilize the three-phase control system that includes a preparatory, initial and follow-up phase for each definable feature of work. The Contractor's three-phase chemical data control process shall ensure that data reporting requirements are achieved and shall be implemented according to Section 01451 CONTRACTOR QUALITY CONTROL. The three-phase chemical data control process shall be combined with that under Section 01451 CONTRACTOR QUALITY CONTROL.

3.6 ANALYTICAL TESTING LABORATORIES

The Contractor shall propose the analytical laboratories to be used for the primary samples analyses. Laboratory validation requirements shall be in accordance with paragraph Laboratory Validation Requirements. The Contractor may utilize its own laboratory or utilize subcontract laboratories to achieve the primary required sample analyses.

3.6.1 Laboratory Analytical Requirements

The Contractor shall provide the specified chemical analyses by the Contractor's laboratory. The Contractor shall provide chemical analyses to achieve the project DQO for all parameters specified by the methods (refer to Table 2). To give the USACE programs the greatest flexibility in the execution of its projects, the EPA SW-846 methods are generally the methods employed for the analytical testing of environmental samples. These methods are flexible and shall be adapted to individual project-specific requirements.

3.6.2 Laboratory Performance

The Contractor shall provide continued acceptable analytical performance and shall establish a procedure to address data deficiencies noted by review and/or quality assurance sample results. The Contractor shall provide and implement a mechanism for providing analytical labs with the SAP or QAPP portion of the SAP, for monitoring the lab's performance and for performing corrective action procedures.

3.7 CHEMICAL DATA FINAL REPORT

The CDFR shall be produced including a summary of quality control practices employed and all chemical parameter measurement activities after project completion. As a minimum, the CDFR shall contain the following:

- a. Summary of project scope and description.
- b. Summary of any deviations from the design chemical parameter measurement specifications.
- c. Summary of chemical parameter measurements performed as contingent measurements.

- d. Summary discussion of resulting data including achieving data reporting requirements.
- e. Summary of achieving project specific DQO.
- f. Presentation and evaluation of the data to include an overall assessment on the quality of the data for each method and matrix.
- g. Internal QC data generated during the project, including tabular summaries correlating sample identifiers with all blank, matrix spikes, surrogates, duplicates, laboratory control samples, and batch identifiers.
- h. A list of the affected sample results for each analyte (indexed by method and matrix) including the appropriate data qualifier flag (J, B, R, etc.), where sample results are negatively impacted by adverse quality control criteria.
- i. Summary of field and laboratory oversight activities, providing a discussion of the reliability of the data, QC problems encountered, and a summary of the evaluation of data quality for each analysis and matrix as indicated by the laboratory QC data and any other relevant findings.
- j. Conclusions and recommendations.
- k. Appendices containing: (1) Chemistry data package, and (2) Results of the Chemical Quality Assurance Report (CQAR). The CQAR is a Government produced document achieved through the inspection and analysis of QA samples and corresponding project sample data. The CQAR will include review of all QC parameters such as holding times, detection limits, method blanks, surrogate recoveries, matrix spikes and duplicates, and inter-laboratory and intra-laboratory data comparisons.

3.8 DOCUMENTATION

Documentation records shall be provided as factual evidence that required chemical data has been produced and chemical data quality has been achieved. The documentation shall comply with the requirements specified in paragraphs SAMPLING AND ANALYSIS PLAN, CHEMISTRY DATA PACKAGE, and CHEMICAL DATA FINAL REPORT.

3.9 NOTIFICATION OF NON-COMPLIANCE

The Contracting Officer will notify the Contractor of any detected noncompliance with the foregoing requirements. The Contractor shall take immediate corrective action after receipt of such notice.

4 FIELD INVESTIGATION

4.1 Field Sampling

The FSP shall contain necessary technical detail and direction for the field personnel to understand sampling and field measurement requirements. The FSP shall provide a comprehensive description and full detail for personnel to perform all onsite activities required to

attain project DQO, including: locations of samples, sampling procedures for onsite and offsite chemical analysis, summaries of analyses to be performed on samples, shipment of samples for offsite analyses, performance of onsite and offsite instrumental parameter measurements, data documentation and reporting requirements.

Soil samples from the UST/AST will be selected judgmentally by the field sampling team and analyzed for TPH (NWTPH-Dx). The field sampling team will determine visually or with field screening equipment the more suspect contaminated area for sampling. Documentation of the field activity will be provided in a field log. Soils samples will be collected using protocols consistent with Department of the Army guidance (USACE, 1994b).

The soil samples will be screened to remove woody debris and rocks.

Each sample jar will be labeled with a unique sample identification that will identify project site, date of collection, media, depth, and sequence.

4.1.1 Sample Packaging and Shipping

Sample packaging and shipping procedures are based on EPA specifications, USDOT regulations, and USACE ER 1110-1-263. All samples will be shipped as "Environmental Samples" and not as hazardous material. Ice will be placed in each cooler to maintain a temperature of 4C to meet sample preservation requirements. All samples will be delivered to the laboratory within 24 hours of collection

The following are general packaging procedures:

1. Sample labels with adhesive backing will be securely attached to each sample container.
2. Labeled sample containers will then be sealed into plastic bubble-wrap bags or Ziploc-type bags prior to being loaded into the sample coolers.
3. Insulated plastic or metal-clad plastic coolers will be used as shipping containers. The drain plugs shall be taped shut (using strapping tape) on the inside and outside. Several plastic bubble-wrap sheets shall be placed on the interior bottom and sides of the coolers for shock absorption. One to three inches of Styrofoam pellet packing material may also be placed in the bottom of the coolers for additional shock absorption at the discretion of the Sampling Team Site Manager. New, clean, heavy duty plastic garbage-type bags will be used as protective liners inside all coolers. Bagged sample containers will be placed within the liner.
4. Styrofoam pellets may also be placed between sample containers to protect the containers from breakage during shipment and handling.
5. All samples requiring refrigeration will be chilled to 4°C with the addition of four bags (gallon-size Ziploc type - double bagged) of cubed ice or block ice spalls.
6. The paperwork intended for the laboratory will be placed inside a plastic bag. The bag will be sealed and taped to the inside of the cooler lid. The original chain-of-custody form will be included in the paperwork sent to the laboratory. If samples are sent by air transport, the air bill will be completed before the samples are handed over to the carrier.
7. Two signed custody seals will be placed over the lid of the cooler, one on the right front and one on the upper left, and covered with clear plastic tape.
8. The cooler will be securely taped shut with strapping tape wrapped completely around the cooler at least once in a minimum of two locations.
9. "Up Arrow" symbols will be placed on all four sides of cooler.
10. The completed shipping label will be attached to the top of the cooler. The cooler will then be delivered to the overnight courier.

4.2 Analytical Methods

Analytical methods for each matrix type and analyte are listed in Table 1. EPA SW-846 methods will be used for each group of contaminants except for the use of Washington State approved methods for the detection and measurement of Total Petroleum Hydrocarbons in soil.

5 QUALITY ASSURANCE PROJECT PLAN

The QAPP shall contain necessary technical detail and direction for field and laboratory personnel to understand project sample analysis, quality control and data reporting requirements, analytical methods, required detection limits, QC requirements, and data validation and reporting requirements.

5.1 Minimum Results

The results for each sample shall contain the following information at a minimum. (Information need not be repeated if noted elsewhere in the data package).

- laboratory name and location (city and state)
- project name and unique ID number
- field sample ID number as written on custody form
- laboratory sample ID number
- matrix (soil, water, oil, etc.)
- sample description
- sample preservation or condition at receipt
- date sample collected
- date sample received
- date sample extracted or prepared
- date sample analyzed
- analysis time when holding time limit <48 hours
- method (and SOP) numbers for all preparation, cleanup, and analysis procedures employed
- preparation, analysis, and other batch numbers
- analyte or parameter
- method reporting limits adjusted for sample-specific factors (e.g., aliquot size, dilution /concentration factors, moisture content)
- method quantitation limits (low-level standard concentration)
- method detection limits
- analytical results with correct number of significant figures
- any data qualifiers assigned
- concentration units
- dilution factors – All reported data shall reflect any dilutions or concentrations. The dilution factor, if applicable, should be noted on the analytical report. If neat or diluted results are available, data from both runs should be recorded and reported.
- percent moisture or percent solids (all soils, sediments, sludges, etc. are to be reported on a dry weight basis)
- chromatograms, as needed
- sample aliquot analyzed
- final extract volume

- sample Management Records. These types of records include the documentation accompanying the samples (i.e., Original chain-of-custody record, shipping documents, laboratory notification sheets), records generated by the laboratory which detail the condition of the samples upon receipt at the laboratory (i.e., sample cooler receipt forms, any telephone conversation records, etc.), and any records generated to document sample custody, transfer, analysis, and disposal.

5.2 Laboratory Reporting Limits.

The laboratory may use a reporting limit (RL) expressed in terms of DL, QL, regulatory action level, or project-specific threshold limits, however, the laboratory's use of these terms must be well defined. In addition, the non-detect "ND," "U," or "<" reporting convention must be used.

The laboratory will, at a minimum, be required to have a Quantitation Limit which is no greater than 40% of the action levels shown in bolding and underlining in Table 2. It is preferred that the laboratory be able to meet the most restrictive of any of the values in that table for each analyte. However, this is not a strict requirement.

5.3 QA/QC Information.

The minimum data package must include the calibration, calibration verification, and internal laboratory QA/QC data with their respective acceptance criteria. The data package should also include the laboratory's method quantitation and reporting limits for project-specific parameters. The calibration data shall include a summary of the initial calibration curve, ICV, all calibration verification standards, and any performance standards analyzed in conjunction with the test method. All calibration deviations shall be discussed within the case narrative. The data package should correlate the method QC data with the corresponding environmental samples on a per preparation batch basis with batch numbers clearly shown. Method QC data must include all spike target concentration levels, the measured spike concentration and calculated recoveries; all measures of precision, including relative percent difference; and all control limits for bias, and precision. This would include laboratory performance information such as results for method blanks, recoveries for LCSs, and recoveries for QC sample surrogates; and matrix-specific information such as matrix duplicate (MD) RPDs, MS and MSD recoveries, MS/MSD RPDs, field sample surrogate recoveries, serial dilutions, and post-digestion spikes, etc. At a minimum, internal quality control samples should be analyzed and reported at rates specified in the specific methods. Any deviations from the method quality objectives should be noted. Also include any data review, non-conformance or corrective action forms within the data package.

5.4 Method Quality Objectives

Table 3. Summary of Method Quality Objectives for Method 6010. ICP metals

| Quality Control Element | Description of Element | Frequency of Implementation | Acceptance Criteria |
|---|--|---|---|
| Initial Calibration | Option 1- 1 std and blank, and a low-level check standard at MQL Option 2- 3 stds and blank | Daily | Option 1- Low-level check standard $\pm 20\%$ Option 2- $r > 0.995$ |
| Instrumental Precision | %RSD 3 integrations (exposures) | Each calibration and calibration verification standards (ICV/CCV) | %RSD $< 5\%$ |
| Initial Calibration Verification (ICV) | Mid-level (2 nd source) verification | After initial calibration | %Recovery $\pm 10\%$ |
| Initial Calibration Blank (ICB) | Interference-free matrix to assess analysis contamination | After initial calibration | Analytes $< MDL$ Check Sample ($\sim 2X$ MDL) |
| Interelement Check Standards (ICS) | ICS-A – interferents only ICS-B – interferents and target analytes | Beginning of analytical sequence | %Recovery $\pm 20\%$ for target analytes |
| Continuing Calibration Blank (CCB) | Interference-free matrix to assess analysis contamination | Every 10 samples and at end of analytical sequence | Analytes $< MDL$ Check Sample ($\sim 2X$ MDL) |
| Continuing Calibration Verification (CCV) | Mid-level verification | Every 10 samples and at end of analytical sequence | %Recovery $\pm 10\%$ |
| Method Blank (MB) | Interference-free matrix to assess overall method contamination | 1 per sample batch | Analytes $< MDL$ Check Sample ($\sim 2X$ MDL) |
| Laboratory Control Sample (LCS) | Interference-free matrix containing all target analytes | 1 per sample batch | %Rec = $80\% - 120\%$ Sporadic marginal failures: %Rec = $60\% - 140\%$ |

Summary of Method Quality Objectives for Method 8270 Semivolatiles

| QC Element | Target Analyte/Surrogate | Poor Performers/ Sporadic Marginal Failures ¹ |
|---------------------------------|---|--|
| Initial Calibration (9.2.2.5) | Instrument Evaluation: SPCCs: minimum RF values per method requirements CCCs: verify %RSD, 30% Primary Evaluation (all target analytes) : r, 0.995, %RSD, 15%, r ₂ , 0.990 Alternative Evaluation: Mean %RSD for all target analytes 15% | No allowance Alternative Evaluation: Maximum allowable %RSD for each target analyte, 40% |
| ICV (9.3) | %Rec = 70% - 130% | Sporadic Marginal Failures ¹ : %Rec = 50% - 150% |
| CCV (9.5 / 9.5.2 / 9.5.2.4) | Instrument Evaluation: SPCCs: minimum RF values per method requirements CCCs: verify %D, 30% Primary Evaluation (CCCs): %Drift, 20%, %D, 20% | Primary Evaluation (remaining target analytes): Qualitative, see text |
| MB (10.2.1 / 11.4.1) | Target Analytes: Analytes < MDL Check Sample (~2X MDL) | Common Lab Contaminants: Analytes < MQLs |
| LCS (10.2.2 / 11.4.2) | Water: %Rec = 60% - 120% (~15 analytes) = 45% - 135% (~30 analytes) = 20% - 150% (~15 analytes) Solids: %Rec = 60% - 120% (~20 analytes) = 45% - 135% (~25 analytes) = 30% - 150% (~15 analytes) | Sporadic Marginal Failures ¹ : Water: %Rec = 15% - 150% Solids: %Rec = 25% - 150% |
| MS (10.2.3 / 11.4.3 / 11.4.3.2) | Water: %Rec = 45% - 135% Solids: %Rec = 45% - 135% | Sporadic Marginal Failures ¹ : Water: %Rec = 15% - 150% Solids: %Rec = 20% - 150% |
| MSD/MD (10.2.4 / 11.4.4) | Water: RPD, 50% Solids: RPD, 60% | Sporadic Marginal Failures ¹ : Water: RPD, 60% Solids: RPD, 60% |

| QC Element | Target Analyte/Surrogate | Poor Performers/ Sporadic Marginal Failures1 |
|------------------------------|--|---|
| Surrogates (10.2.5 / 11.4.5) | %Interference-Free Matrix: Water: %Rec = 60% - 120% B/N cmpds %Rec = 45% - 135% A cmpds Solids: %Rec = 60% - 120% B/N cmpds %Rec = 45% - 135% A cmpds Project Sample Matrix: Water: %Rec = 45% - 135% B/N cmpds %Rec = 35% - 140% A cmpds Solids: %Rec = 45% - 135% B/N cmpds %Rec = 35% - 140% A cmpds | Sporadic Marginal Failures1: Water: %Rec = 15% - 150% Solids: %Rec = 20% - 150% |

Representativeness

Representativeness is the degree to which sample results represent the system under study. Sample representativeness will be maximized by using standard sampling techniques and preservation methods. Samples will be analyzed within method specific criteria. The temperature at which some samples arrive at the laboratory will be $4^{\circ}\text{C} \pm 2^{\circ}$.

Comparability

Comparability is the degree to which data from one study can be compared with data from other similar studies and for comparison of site data to reference or regulatory values. The strict adherence to established protocols and a data set relatively free of bias will fulfill the objective of comparability to other similar studies.

Completeness

Completeness is the amount of valid data obtained during the project compared to the amount of valid data expected. The goal for completeness for this project is 100%.

Table 1. Analytical methods and the number of samples for each matrix type

| Analyte | Analytical Method | Matrix | No. of Field Samples | No. of QC Samples ⁷ | No. of QA samples ⁷ | Container Preservation |
|--|---|-------------|--------------------------|--------------------------------|--------------------------------|--|
| Leachable Lead ⁶ | TCLP 1311 | Soil | 2 – per stockpile | | | 8 oz glass jar with Teflon lid. |
| Leachable Lead ¹ | TCLP 1311 | Bldg Debris | 2 | | | 8 oz glass jar with Teflon lid. |
| Total Lead ⁵ | SW – 6010 | Soil | 8 – per building | | | 4 oz glass jar with Teflon lid. Ship on ice @ 4°C |
| Total Petroleum Hydrocarbons, Diesel (extended) | NWTPH-Dx | Soil | 6 ³ | | | 8 oz glass jar with Teflon lid. Ship on ice @ 4°C |
| Extractable Petroleum Hydrocarbon (EPH) ² | EPH – if analytical results exceed MTCA Action levels | Soil | 1 – per location | | | 4 oz glass jar with Teflon lid. Ship on ice @ 4°C |
| Total Petroleum Hydrocarbons | NWTPH-HCID | Water | 1 – per occurrence of GW | | | 1-L amber glass jar. HCl pH < 2. Ship on ice @ 4°C |
| Semi-volatile Organic Compounds (SVOCs) ⁴ | 8270 - if GW encountered | Water | 1 – per UST excavation | | | 4 oz glass jar with Teflon lid. Ship on ice @ 4°C |

1 – Building demolition debris waste stream.

2 – If diesel soil results exceed MTCA method A action levels.

3 - Samples per excavation; 3 samples per stockpile;

4- If HCID analysis indicates diesel concentrations above 250 ug/L.

5- Sample within footprint/dripline of former building.

6- Collect two samples per lead soil stockpile that exceeds 250 ppm.

7- Collect QC/QA samples at the rate on 10 % per matrix/per analysis.

Table 2. Decision and advisory criteria. (Decision criteria are bolded and underlined.)

| Analyte | MTCA Residential Soil (mg/kg) | EPA R9 Residential Soil (mg/kg) | 40 CFR 261.24 |
|---------|----------------------------------|------------------------------------|---------------|
| Lead | <u>250</u> | 400 | |
| Diesel | <u>2000</u> | | |
| Oil | <u>2000</u> | | |

Decision and advisory criteria. (Decision criteria are bolded and underlined.)

| Analyte | MTCA Residential Water (ug/L) | EPA R9 Residential (ug/L) | 40 CFR 261.24 |
|-------------|----------------------------------|------------------------------|---------------|
| TPH | <u>1000</u> | | |
| Lead - TCLP | | | 5 mg/L |

This page intentionally blank

SECTION 01451

CONTRACTOR QUALITY CONTROL

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

| | |
|-------------|--|
| ASTM D 3740 | (1985) Evaluation of Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction |
| ASTM E 329 | (1990) Use in the Evaluation or Testing and Inspection Agencies as Used in Construction |

1.2 PAYMENT

Separate payment will not be made for providing and maintaining an effective Quality Control program, and all costs associated therewith shall be included in the applicable unit prices or lump-sum prices contained in the Bidding Schedule.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 GENERAL

The Contractor is responsible for quality control and shall establish and maintain an effective quality control system. The quality control system shall consist of plans, procedures, and organization necessary to produce an end product which complies with the contract requirements. The system shall cover all demolition operations, both on-site and off-site, and shall be keyed to the proposed demolition sequence.

3.2 QUALITY CONTROL PLAN

3.2.1 General

The Contractor shall furnish for review by the Government, not later than 15 days after the date of contract award the Contractor Quality Control (CQC) Plan proposed to implement the requirements of the Contract Clause entitled "Inspection of Construction." The plan shall identify personnel, procedures, control, instructions, test records and forms to be used. The Government will consider an interim plan for the first 30 days of operation. Demolition will be permitted to begin only after acceptance of the CQC Plan or acceptance of an interim plan applicable to the particular feature of work to be started. Work outside of the features of work included in an accepted interim plan will not be permitted to begin until acceptance of a CQC Plan or another interim plan containing the additional features of work to be started.

3.2.2 Content of the Basic CQC Plan

The Basic CQC plan shall be submitted to cover the intended CQC organization for the entire contract (encompassing all delivery orders) and shall include, as a minimum, the following to cover all demolition operations, both on-site and off-site, including work by subcontractors, fabricators, suppliers and purchasing agents:

- a. A description of the quality control organization, including a chart showing lines of authority and acknowledgment that the CQC staff shall implement the three phase control system for all aspects of the work specified. The staff shall include a CQC system manager who shall report to the project manager or someone higher in the Contractor's organization. Project manager in this context shall mean the individual with responsibility for the overall management of the project including quality and production.
- b. The name, qualifications (in resume format), duties, responsibilities, and authorities of each person assigned a QC function.
- c. A copy of the letter to the CQC System Manager signed by an authorized official of the firm which describes the responsibilities and delegates sufficient authorities to adequately perform the functions of the CQC System Manager including authority to stop work which is not in compliance with the contract. The CQC System Manager shall issue letters of direction to all other various quality control representatives outlining duties, authorities and responsibilities. Copies of these letters will also be furnished to the Government.
- d. Procedures for scheduling, reviewing, certifying, and managing submittals, including those of subcontractors, off-site fabricators, suppliers and purchasing agents. These procedures shall be in accordance with Section 01300 (01330) SUBMITTALS.
- e. Control, verification and acceptance testing procedures for each specific test to include the test name, specification paragraph requiring test, feature of work to be tested, test frequency, and person responsible for each test. (Laboratory facilities will be approved by the Contracting Officer.)
- f. Procedures for tracking preparatory, initial, and follow-up control phases and control, verification, and acceptance tests including documentation.
- g. Procedures for tracking deficiencies from identification through acceptable corrective action. These procedures will establish verification that identified deficiencies have been corrected.
- h. Reporting procedures, including proposed reporting formats. This shall include a copy of the Daily CQC report form.
- i. A list of the definable features of work for the demolition of a typical one story wood building. A definable feature of work is a task which is separate and distinct from other tasks and has separate control requirements. It could be identified by different trades or disciplines, or it could be work by the same trade in a different environment. Although each section of the specifications may generally be considered as a definable feature of work there are frequently more than one definable feature under a particular section. This list will be agreed upon during the coordination meeting.

3.2.3 Delivery Order Addendum CQC Plan

For each individual delivery order submit a CQC Addendum Plan, if necessary, within 10 days of delivery order NTP. Proposed changes to the Basic Plan or items requiring additional details or description required to implement the Basic CQC Plan or of a site specific nature shall be covered in the Addendum Plan. Any proposed changes to the basic CQC organization shall be approved before commencement of demolition.

3.2.4 Acceptance of Plan

Acceptance of the Contractor's plan is required prior to the start of demolition. Acceptance is conditional and will be predicated on satisfactory performance during the demolition. The Government reserves the right to require the Contractor to make changes in his CQC plan and operations including removal of personnel, as necessary, to obtain the quality specified.

3.2.5 Notification of Changes

After acceptance of the QC plan, the Contractor shall notify the Contracting Officer in writing a minimum of seven calendar days prior to any proposed change. Proposed changes are subject to acceptance by the Contracting Officer.

3.3 COORDINATION MEETING

After the Preliminary Conference, before start of demolition and prior to acceptance by the Government of the Quality Control Plan, the Contractor shall meet with the Contracting Officer or Authorized Representative and discuss the Contractor's quality control system. During the meeting, a mutual understanding of the system details shall be developed, including the forms for recording the CQC operations, control activities, testing, administration of the system for both on-site and off-site work, and the interrelationship of Contractor's Management and control with the Government's Quality Assurance. Minutes of the meeting shall be prepared by the Government and signed by both the Contractor and the Contracting Officer. The minutes shall become a part of the contract file. There may be occasions when subsequent conferences will be called by either party to reconfirm mutual understandings and/or address deficiencies in the CQC system or procedures which may require corrective action by the Contractor.

3.4 QUALITY CONTROL ORGANIZATION

3.4.1 CQC System Manager

The Contractor shall identify an individual within his organization at the site of the work who shall be responsible for overall management of CQC and have the authority to act in all CQC matters for the Contractor. This CQC System Manager shall be on the site at all times during demolition and will be employed by the Contractor, except as noted in the following. An alternate for the CQC System Manager will be identified in the plan to serve in the event of the system manager's absence. Period of absence may not exceed 2 weeks at any one time. The requirements for the alternate will be the same as for the designated CQC manager.

3.4.2 CQC Organizational Staffing

The Contractor shall provide a CQC staff which shall be at the site of work at all times during progress, with complete authority to take any action necessary to ensure compliance with the contract.

3.4.2.1 CQC Staff

Following are the minimum requirements for the CQC staff. These minimum requirements will not necessarily assure an adequate staff to meet the CQC requirements at all times during demolition. The actual strength of the CQC staff may vary during any specific work period to cover the needs of the work period. When necessary for a proper CQC organization, the Contractor will add additional staff at no cost to the Government. This listing of minimum staff in no way relieves the Contractor of meeting the basic requirements of quality work in accordance with contract requirements. All CQC staff members shall be subject to acceptance by the Contracting Officer.

3.4.2.2 CQC System Manager

The CQC system manager shall be an experienced person with a minimum of 3 years experience on similar type work. The CQC system manager shall be assigned no other duties. In addition to the above experience and education requirements the CQC System Manager shall have completed the course entitled "Construction Quality Management for Contractors" prior to start of field work. This one day course is periodically offered in Spokane, Boise, Portland, and Seattle. For further information contact the Construction Division Office in your area.

3.4.2.3 Supplemental Personnel

A staff shall be maintained under the direction of the CQC system manager to perform all CQC activities. The staff must be of sufficient size to ensure adequate QC coverage of all work phases, work shifts, and work crews involved in the demolition. These personnel may perform other duties, but must be fully qualified by experience and technical training to perform their assigned QC responsibilities and must be allowed sufficient time to carry out these responsibilities. The QC plan will clearly state tire duties and responsibilities of each staff member.

3.4.3 Organizational Changes

The Contractor shall obtain Contracting Officer's acceptance before replacing any member of the CQC staff. Requests shall include the names, qualifications, duties, and responsibilities of each proposed replacement.

3.5 SUBMITTALS

Submittals shall be as specified in Section 01300 (01330) SUBMITTALS. The CQC organization shall be responsible for certifying that all submittals are in compliance with the contract requirements. The Government will furnish copies of test report forms (See sample list at end of Section) upon request by the Contractor. The Contractor may use other forms as approved.

3.6 CONTROL

Contractor Quality Control is the means by which the Contractor ensures that the work, to include that of subcontractors and suppliers, complies with the requirements of the contract. The controls shall be adequate to cover all demolition operations, including both on-site and off-site fabrication, and will be keyed to the proposed demolition sequence. The controls shall include at least three phases of control to be conducted by the CQC system manager for all definable features of work, as follows:

3.6.1 Preparatory Phase

This phase shall be performed prior to beginning work on each definable feature of work and shall include:

- a. A review of each paragraph of applicable specifications.
- b. A review of the contract plans.
- c. A check to assure that all materials and/or equipment have been tested, submitted, and approved.
- d. A check to assure that provisions have been made to provide required control inspection and testing.
- e. Examination of the work area to assure that all required preliminary work has been completed and is in compliance with the contract.

- f. A physical examination of required materials, equipment, and sample work to assure that they are on hand, conform to approved shop drawing or submitted data, and are properly stored.
- g. A review or the appropriate activity hazard analysis to assure safety requirements are met.
- h. Discussion of procedures for constructing the work including repetitive deficiencies. Document tolerances and workmanship standards for that phase of work.
- i. A check to ensure that the portion of the plan for the work to be performed has been accepted by the Contracting Officer.
- j. The Government shall be notified at least 48 hours in advance of beginning any of the required action of the preparatory phase. This phase shall include a meeting conducted by the CQC system manager and attended by the superintendent, other CQC personnel (as applicable), and the foreman responsible for the definable feature. The results of the preparatory phase actions shall be documented by separate minutes prepared by the CQC system manager and attached to the daily QC report. The Contractor shall instruct applicable workers as to the acceptable level of workmanship required in order to meet contract specifications.

3.6.2 Initial Phase

This phase shall be accomplished at the beginning of a definable feature of work. The following shall be accomplished:

- a. A check of preliminary work to ensure that it is in compliance with contract requirements. Review minutes of the preparatory meeting.
- b. Verification of full contract compliance. Verify required control inspection and testing.
- c. Establish level of workmanship and verify that it meets minimum acceptable workmanship standards. Compare with sample panels is appropriate,
- d. Resolve all differences.
- e. Check safety to include compliance with and upgrading of the safety plan and activity hazard analysis. Review the activity analysis with each worker.
- f. The Government shall be notified at least 48 hours in advance of beginning the initial phase. Separate minutes of this phase shall be prepared by the CQC system manager and attached to the daily QC report. Exact location of initial phase shall be indicated for future reference and comparison with follow-up phases.
- g. The initial phase should be repeated for each new crew to work on-site, or any time acceptable specified quality standards are not being met.

3.6.3 Follow-up Phase

Daily checks shall be performed to assure continuing compliance with contract requirements, including control testing, until completion of the particular feature of work. The checks shall be made a matter of record in the CQC documentation and shall document specific results of inspections for all features of work for the day or shift. Final follow-up checks shall be conducted and all deficiencies corrected prior to the start of additional features of work which may be affected by the deficient work. The Contractor shall not conceal non-conforming work.

3.6.4 Additional Preparatory and Initial Phases

Additional preparatory and initial phases may be conducted on the same definable features of work as determined by the Government if the quality of on-going work is unacceptable; or if there are changes in the applicable QC staff or in the on-site production supervision or work crew; or if work on a definable feature is resumed after a substantial period of inactivity, or if other problems develop.

3.7 TESTS

3.7.1 Testing Procedure

The Contractor shall perform tests specified or required to verify that control measures are adequate to provide a product which conforms to contract requirements. The Contractor shall procure the services of a Corps of Engineers approved testing laboratory. A list of tests to be performed shall be finished as a part of the CQC plan. The list shall give the test name, frequency, specification paragraph containing the test requirements, the personnel and laboratory responsible for each type of test, and an estimate of the number of tests required. The Contractor shall perform the following activities and record and provide the following data:

- a. Verify that testing procedures comply with contract requirements.
- b. Verify that facilities and testing equipment are available and comply with testing standards.
- c. Check test instrument calibration data against certified standards.
- d. Verify that recording forms and test identification control number system, including all of the test documentation requirements, have been prepared.
- e. Results of all tests taken, both passing and failing tests, will be recorded on the Quality Control report for the date taken. Specification paragraph reference, location where tests were taken, and the sequential control number identifying the test will be given. Actual test reports may be submitted later, if approved by the Contracting Officer, with a reference to the test number and date taken. An information copy of tests performed by an off-site or commercial test facility will be provided directly to the Contracting Officer. Failure to submit timely test reports, as stated, may result in nonpayment for related work performed and disapproval of the test facility for this contract. Test results shall be signed by an Engineer Registered in the state where the tests are performed.

3.7.2 Testing Laboratories

Laboratory facilities, including personnel and equipment, utilized for testing soils, concrete, asphalt and steel shall meet criteria detailed in ASTM D 3740 and ASTM E 329, and be accredited by the American Association of Laboratory Accreditation (AALA), National Institute of Standards and Technology (NIST), National Voluntary Laboratory Accreditation Program (NVLAP), the American Association of State Highway and Transportation Officials (AASHTO), or other approved national accreditation authority. All personnel performing concrete testing shall be certified by the American Concrete Institute (ACI).

3.8 COMPLETION INSPECTION

At the completion of all work or any increment thereof established by a completion time stated in the Task Order, the CQC system manager shall conduct an inspection of the work and develop a "punch list" of items which do not conform to the approved plans and specifications. Such a list of deficiencies shall be included in the CQC documentation, as required by paragraph DOCUMENTATION below, and shall include the estimated date by which the deficiencies will be corrected. The CQC system manager or staff shall make a second inspection to ascertain that all deficiencies have been corrected and so notify the Government. These inspections and any deficiency corrections

required by this paragraph will be accomplished within the time stated for completion of the entire work or any particular increment thereof if the project is divided into increments by separate completion dates.

3.9 DOCUMENTATION

The Contractor shall maintain current records of quality control operations, activities, and tests performed, including the work of subcontractors and suppliers. These records shall be on an acceptable form, and shall be a complete description of inspections, the results of inspections, daily activities, tests, and other items, including but not limited to the following:

- a. Contractor/subcontractor and their area of responsibility.
- b. Operating plant/equipment with hours worked, idle, or down for repair.
- c. Work performed today, giving location, description, and by whom. When Network Analysts (NAS) is used, identify each phase of work performed each day by NAS activity number.
- d. Test and/or control activities performed with results and references to specifications/plan requirements. The control phase should be identified (Preparatory, Initial and Follow-up). List deficiencies noted along with corrective action.
- e. Material received with statement as to its acceptability and storage.
- f. Identify submittals reviewed, with contract reference, by whom, and action taken.
- g. Off-site surveillance activities, including actions taken.
- i. Job safety evaluations stating what was checked, results, and inspections or corrective actions.
- i. List instructions given/received and conflicts in plans and/or specifications.
- j. Contractors verification statement.
- k. Separate reports for each individual Task Order shall be submitted by the responsible CQC inspectors. The report shall contain a record of inspections for all work accomplished subsequent to the previous report. Separate reports for different phases of work may be submitted by the responsible CQC inspectors or the reports may be consolidated into one report if all CQC activities and results are covered and the responsible CQC inspectors are identified.
- l. These records shall indicate a description of trades working on the project; the number of personnel working; weather conditions encountered; and any delays encountered. These records shall cover both conforming and deficient features. The original and one copy of these records in report form shall be furnished to the Government daily within 24 hours after the date(s) covered by the report, except that reports need not be submitted for days on which no work is performed. As a minimum, one report shall be prepared and submitted for every seven days of no work and on the last day of a no work period. All calendar days shall be accounted for throughout the life of the contract. The first report following a day of no work shall be for that day only. Reports shall be signed and dated by the CQC system manager. The report from the CQC system manager shall include copies of test reports and copies of reports prepared by all subordinate quality control personnel.

3.10 SAMPLE FORMS

Sample Contractor Quality Control Report forms are enclosed at the end of this section.

3.11 NOTIFICATION OF NONCOMPLIANCE

The Contracting Officer will notify the Contractor of any detected noncompliance with the foregoing requirements. The Contractor shall, after receipt of such notice, immediately take corrective action. Such notice, when delivered to the Contractor at the site of the work, shall be deemed sufficient for the purpose of notification. If the Contractor fails or refuses to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to such stop work orders shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

STANDARD REPORT FORMS AND USE

| <u>Form Number</u> | <u>Form Title</u> | <u>Form Use</u> |
|---------------------------|--|--|
| NPD 300 | Transmittal of Material Samples | Form, to accompany any samples sent to NPD laboratory |
| NPD 326 | Compaction Test Data Sheet | Soil compaction tests. |
| DD 1206 | Sieve Analysis Data | Sieve analysis data sheet for soils. |
| NPD 320 | Mechanical Analysis Test Data | Sieve analysis data sheet and hydrometer data sheet for soils. |
| ENG 2087 | Gradation Curves | Gradation graph for soils and aggregates. (To include specification limits). |
| DD1205 | Soil Moisture Content | Moisture Content sheet for soils and/or Aggregates. |
| NPD 322 | Specific Gravity and Absorption Test Data Sheet | Specific gravity and absorption test for soil and aggregates. |
| DD 1209 | Atterberg Limits Determinations | Test and graph for Atterberg limits tests. |
| NPD 88 | Screen Analysis of Concrete Aggregates | Gradation test form for aggregates (self carboning). |
| NPD 357 | Mortar Strength of Fine Aggregate Data Sheet | Flexural and compressive strength test form for mortar. |
| NPS 57 | Statistical Evaluation of Concrete Compression Tests | Summary sheet of concrete tests. Form can be used for flexural strengths if revised to conform with proper days specified. A separate sheet is to be used for each mix design. |

Samples of all reports and report formats required by this section are attached and listed below:

1. Sample of Contractor Test Report format (Enclosure No.1).
2. Sample of Daily Construction Quality Control Report, (Corps of Engineers administered Task Orders) (Enclosure No. 2).

(Sample of Typical Contractor's Test Report)

TEST REPORT

STRUCTURE OR BUILDING _____

CONTRACT NO. _____

DESCRIPTION OF ITEM, SYSTEM, OR PART OF SYSTEM TESTED: _____

DESCRIPTION OF TEST: _____

NAME AND TITLE OF PERSON IN CHARGE OF PERFORMING TESTS FOR CONTRACTOR:

NAME:

TITLE:

SIGNATURE:

I HEREBY CERTIFY THAT THE ABOVE DESCRIBED ITEM, SYSTEM, OR PART OF SYSTEM HAS BEEN TESTED AS INDICATED ABOVE AND FOUND TO BE ENTIRELY SATISFACTORY AS REQUIRED IN THE CONTRACT SPECIFICATIONS.

SIGNATURE OF CONTRACTOR: _____

QUALITY CONTROL INSPECTOR:

DATE:

REMARKS: _____

(sample of typical Contractor's daily report)

DAILY CONSTRUCTION QUALITY CONTROL REPORT

Contract Number: _____ Date: _____ Rpt No. _____

Contract Title: _____ Location: _____

Weather: Clear ____ P.Cloudy ____ Cloudy ____ Rainfall ____ (____% of workday)

Temperature during workday: High _____ degrees F. Low _____ degrees F.

1. WORK PERFORMED BY CONTRACTOR/SUBCONTRACTOR(S):

| <u>Contractor Name</u> | <u>No. of Workers</u> | <u>Crafts/Hours</u> | <u>Work performed</u> |
|------------------------|-----------------------|---------------------|-----------------------|
| _____ | _____ | _____ | _____ |

2. EQUIPMENT DATA:

| <u>Type, Size, Etc.</u> | <u>Owned/Rented</u> | <u>Hours Used</u> | <u>Hours Standby</u> |
|-------------------------|---------------------|-------------------|----------------------|
| _____ | _____ | _____ | _____ |

3. QUALITY CONTROL INSPECTIONS AND RESULTS: (Include a description of preparatory, initial, and/or follow up inspections or meetings; check of subcontractors work and materials delivered to the site compared to submittals and/or specifications; comments on the proper storage of materials; include comments on corrective actions to be taken): _____

4. QUALITY CONTROL TESTING AND RESULTS (comment on tests and attach test reports): _____

5. DAILY SAFETY INSPECTIONS (Include comments on new hazards to be added to the Hazard Analysis and corrective action of any safety issues): _____

6. REMARKS (Include conversations with or instructions from the Government representatives; delays of any kind that are impacting the job; conflicts in the contract documents; comments on change orders; environmental considerations; etc.): _____

CONTRACTOR'S VERIFICATION: The above report is complete and correct. All material, equipment used, and work performed during this reporting period are in compliance with the contract documents except as noted above.

CONTRACTOR QC REPRESENTATIVE

SECTION 01500

FACILITIES AND TEMPORARY CONTROLS

PART 1 GENERAL

1.1 AVAILABILITY OF UTILITY SERVICES

1.1.1 Water

The Government will make available to Contractor, from existing outlets and supplies, reasonable amounts of potable water without charge. Contractor shall reasonably conserve potable water furnished. Contractor, at its own expense, shall install and maintain necessary temporary connections and distribution lines and shall remove the connections and lines prior to final acceptance of demolition.

1.1.2 Electricity

The Contractor shall be responsible for providing its own electricity.

1.2 SANITARY PROVISIONS

Contractor shall provide sanitary accommodations for the use of employees as may be necessary and shall maintain accommodations approved by the Contracting Officer and shall comply with the requirements and regulations of the State Health Department, County Sanitarian, or other authorities having jurisdiction.

1.3 TEMPORARY ELECTRIC WIRING

1.3.1 Temporary Power and Lighting

The Contractor shall provide power facilities in accordance with the safety requirements of the National Electric Code NFPA No.70 and the SAFETY AND HEALTH REQUIREMENTS MANUAL EM 385-1-1. The Contractor, or its delegated subcontractor, shall enforce the safety requirements of electrical extensions for the work of subcontractors. Work shall be accomplished by journeyman electricians.

1.3.2 Equipment

In addition to the requirements of SAFETY AND HEALTH REQUIREMENTS MANUAL, EM 385-1-1, temporary wiring conductors installed for operation of tools and equipment shall be either type TW or THW contained in metal raceways, or shall be hard usage or extra hard usage multiconductor cord. Temporary wiring shall be secured above the ground or floor in a workmanlike manner and shall not present an obstacle to persons or equipment. Open wiring may only be used outside of buildings, and then only in accordance with the provisions of the National Electric Code.

1.3.3 Submittals

Submit detailed drawings of temporary power connections. Drawings shall include, but not be limited to,
01500-1

main disconnect, grounding, service drops, service entrance conductors, feeders, GFCI's, and all site trailer connections.

1.4 FIRE PROTECTION

During the demolition period, the Contractor shall provide fire extinguishers in accordance with the safety requirements of the SAFETY AND HEALTH REQUIREMENTS MANUAL, EM 385-1-1, September 1996. The Contractor shall remove the fire extinguishers at the completion of demolition.

1.5 STAGING AREA

Contractor will be provided adequate open staging area as directed by the Contracting Officer. Area is unsecured, and Contractor shall make provisions for its own security.

Contractor shall be responsible for keeping staging area and office area clean. All loose debris and material subject to being moved by prevailing winds in the area shall be picked up or secured at all times.

If the area is not maintained in a safe and clean condition as defined above the Contracting Officer may have the area cleaned by others with the costs being deducted from the contractors payment.

1.6 PROJECT SAFETY FENCING

Prior to other on-site activities the Contractor shall furnish and erect temporary project safety fencing at each project site which shall enclose each building or buildings to be demolished and the associated work area. Location of fencing is subject to approval of the Contracting Officer. The safety fencing shall be a metal chain-link, a minimum of 6 feet in height, supported and securely attached to steel posts located on maximum 10-foot centers. The project safety fencing shall remain the property of the Contractor and shall be removed from the work site at completion of work.

1.7 DIGGING PERMIT

Before performing any onsite excavation, Contractor shall obtain a digging permit. The digging permit can be obtained at Building 2012, room 110, Phone- (252) 967-5237 on weekdays between 8a.m. and 3:30 p.m. Typically it will take a Contractor 3-5 working days to collect all signatures necessary for clearances prior to the permit being issued.

1.8 WORK NEAR COMMUNICATIONS CABLES

1.8.1 EXCAVATION NEAR COMMUNICATION CABLES

Digging within 3 feet of communication cables shall be performed by hand digging until the cable is exposed. The Contracting Officer shall be notified a minimum 3 days prior to digging within a 3-foot area near cable. The cable route will be marked by the Government prior to excavation in the area. A digging permit shall be obtained by the Contractor before performing any excavation. The Contractor shall be held responsible for any damage to the cable by excavation procedures. Once the cable is exposed, mechanical excavation may be used if there is no chance of damage occurring to the cable.

1.8.2 Reburial of Exposed Utilities

When existing utility lines are reburied a tape, detectable by pipe detector systems, shall be installed above the uncovered length of the utility at a depth of 12 inches below grade. Tape shall be a minimum 5 mil plastic tape with metallic tracer, minimum 3 inches wide, lettering on tape to show buried utility, and brightly colored.

1.8.3 Access to Communications Manhole or Handhole

No communications manhole or handhole shall be entered without first obtaining a fiber optic cable briefing. Coordinate through the Contracting Officer with USAISC, Fort Lewis, Outside Plant Branch, Cable Section, Bldg. 2682.

1.8.4 Cable Cuts or Damage

If a communications cable is out or damaged, the Contractor shall immediately notify the Contracting Officer (CO) and begin gathering personnel and equipment necessary to repair the cut, or damage. Contractor shall begin repairs within one hour of the cut or damage, unless notified otherwise, and continue repairs without interruption until full service is restored.

1.9 ELEVATED WORK AREAS

Workers in elevated work areas in excess of 6 feet above an adjoining surface require special safety attention. In addition to the provisions of SAFETY AND HEALTH REQUIREMENTS MANUAL, EM 385-1-1, September 1996, the following safety measures are required to be submitted to the Contracting Officers Representative. Prior to commencement of work in elevated work areas, the Contractor shall submit drawings depicting all provisions of his positive fall protection system including, but not limited to, all details of guardrails. Positive protection for workmen engaged in the installation or demolition of structural steel and steel joist shall be provided by safety nets, tie-offs, hydraulic man lifts, scaffolds or other required means. Decking crews must be tied-off or work over nets or platforms not over 6 feet below the work area. Walking on beams and/or girders and the climbing of columns is prohibited without positive protection. Perimeter guardrails shall be installed at floor, roof, or wall openings more than 6 feet above an adjoining surface and on roof perimeters. Rails shall be designed to protect all phases of elevated work including, but not limited to, roofing operations and demolition of gutters and flashing. Rails round roofs may not be removed until all work on the roof is complete and all traffic on or across the roof ceases. Rails shall be designed by a licensed engineer to provide adequate stability under any anticipated impact loading. As a minimum the rails shall consist of a top rail at a height of 42 inches, a mid-rail, and a toe board. Use of tie-offs, hydraulic man lifts, scaffolds, or other means of roof edge protection methods may be utilized on small structures such as family housing, prefabricated metal buildings, etc. If safety belts and harnesses are used, the positive fall protection plan will address fall restraint versus fall arrest. Body Belts will ONLY be used for fall restraint, they will not be used for fall arrest.

1.10 TRAFFIC CONTROL

The Contractor shall provide for movement of traffic through and around the demolition zone in a manner that is conducive to the safety of motorists, pedestrians, and workers. This shall include placement and maintenance of traffic control devices in accordance with the U.S. Department of Transportation, Federal Highway Administration publication, Manual on Uniform Traffic Control Devices. Streets (except dead end) may be closed to traffic temporarily by approved written request to the Contracting Officer at least 10 working days prior to street closure. Street closures shall at all times allow street access to any

occupied building from one direction. Excavations shall not remain open for more than 1 working day without approval.

1.11 UTILITIES NOT SHOWN

The Contractor can expect to encounter, within the limits of the entire project, utilities not shown on the drawings and not visible as to the date of this contract. If such utilities will interfere with demolition operations The Contractor shall immediately notify the Contracting Officer verbally and then in writing to enable a determination by the Contracting Officer as to the necessity for removal or relocation. If such utilities are removed or relocated as directed, the Contractor shall be entitled to equitable adjustment for any additional work or delay. The types of utilities the Contractor may encounter are waterlines, sewer lines (storm and sanitary), gas lines, fueling lines, steam lines, buried fuel tanks, septic tanks, other buried tanks, communication lines, and power lines. These utilities may be active or abandoned utilities.

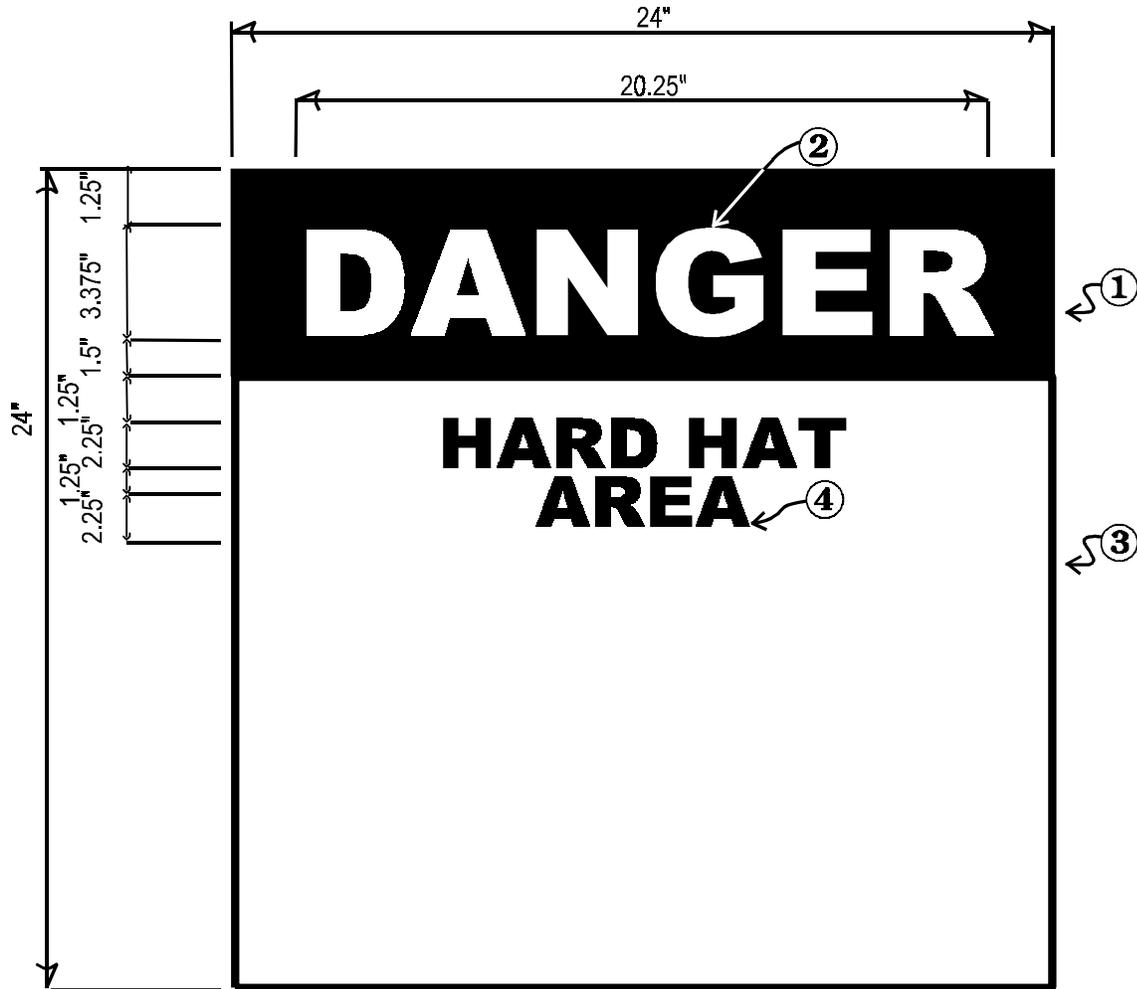
1.12 HOUSEKEEPING AND CLEANUP

Pursuant to the requirements of Clause CLEANING UP and Clause ACCIDENT PREVENTION, of the CONTRACT CLAUSES, the Contractor shall assign sufficient personnel to ensure compliance. The Contractor shall submit a detailed written plan for implementation of this requirement. The plan will be presented as part of the preliminary safety plan and will provide for keeping the total demolition site, structures, and accessways free of debris and obstructions at all times. Work will not be allowed in those areas that, in the opinion of the Contracting Officer, have unsatisfactory cleanup and housekeeping at the end of the preceding day's normal work shift. At least once each day all areas shall be checked by the Quality Control person of the Contractor and the findings recorded on the Quality Control Daily Report. In addition, the Quality Control person shall take immediate action to ensure compliance with this requirement. Housekeeping and cleanup shall be assigned by the Contractor to specific personnel. The name(s) of the personnel shall be available at the project site.

1.13 HARD HAT SIGNS

The Contractor shall provide 24 x 24 inch square Hard Hat Area signs at each entry to the project or work area as directed by the Contracting Officer. A minimum of two signs will be required. Signs shall be in accordance with the sketch at the end of this section.

PART 2 PRODUCTS AND PART 3 EXECUTION (NOT APPLICABLE)



- SIGN SHALL BE FABRICATED FROM .125 THICK 6061-T6 ALUMINUM PANEL
- COLOR
-
-
-
- **1.** SAFETY RED (SR)
- **2.** WHITE
- **3.** WHITE
- **4.** BLACK
- LETTERING SHALL BE HELVETICA BOLD TYPOGRAPHY.
- LETTERS AND BACKGROUND SHALL BE REFLECTIVE SHEETING MATERIAL.
- SIGNS SHALL BE POSTED AT 6' - 6"(BOTTOM SIGN TO GRADE) OR AS DIRECTED BY THE CONTRACTING OFFICER.
- LETTERING TO BE CENTERED ON PANEL.

This page intentionally blank

SECTION 01780

AS BUILT RECORDS AND DRAWINGS

PART 1 GENERAL

1.1 SUBMITTALS

Data listed in PART 3 of this section shall be submitted in accordance with section 01300(01330) SUBMITTALS. Due dates shall be as indicated in applicable paragraphs and all submittal, shall be completed before final payment made.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION

3.1 AS-BUILT FIELD DATA

3.1.1 General

The Contractor shall keep at the work site a complete set of task order instructions including data and drawings if any describing the features of work to be demolished and items to be restored and replaced to match original conditions. During demolition, this data shall be marked to show all deviations in actual work from the conditions shown or otherwise described. On drawings or details as applicable, the color red shall be used to indicate all additions and green to indicate all deletions. The drawings shall show the following information but not be limited thereto:

- a. The locations and description of any utility lines and other installations of any kind or description known to exist within the demolition area. The location includes dimensions to permanent features.
- b. Correct elevations if changes were made in site grading from the contract plans
- c. The topography and grades of all drainage affected as past of the project work.
- d. All site features restored or replaced in kind due to damage from adjacent demolition operations.
- e. All changes or modifications from the original and from the final inspection.

These deviations shall be shown in the same general detail utilized in the available drawings if any. Marking of the prints shall be pursued continuously during demolition to keep them up to date. This information shall be maintained in a current condition at all times until the completion of the work. The resulting field-marked prints and data shall be referred to and marked as "As-Built Field Data," and shall be used for no other purpose. They shall be made available for inspection by the Contracting Officer's representative whenever requested during demolition and shall be jointly inspected for accuracy and completeness by the Contracting Officer's representative and a responsible representative of the Contractor prior to submission of each monthly pay estimate.

3.1.2 Submittal of the As-Built Field Data

The As-Built Field Data shall be submitted to the Contracting Officer for review and approval a minimum of 7 calendar days prior to the date of final inspection. The Contractor shall make all corrections and return the data to the Contracting Officer within 10 calendar days of receipt.

3.2 PAYMENT

All costs incurred by the Contractor in the preparation and furnishing of as-built field data shall be included in the contract prices for the various items or work and no separate payment will be made for this work.

END OF SECTION

SECTION 01781

FORM 1354 CHECKLIST

PART GENERAL

1.1 Procedures

The form which is a part of this specification section shall be completed for any project (Task Order) having revisions to real property. The following page contains the basic instructions applicable to the form.

1.2 Submittal

This form shall be submitted for approval for the Initial task order. Failure to have this form completed and approved in time for the final inspection will result in delay of the inspection until the checklist is completed.

PARTS 2 AND3 (NOT USED)

INSTRUCTIONS FOR DD FORM 1354 CHECKLIST

The following checklist is only a guide to describe various parts of building demolition and associated site work. Alter this form as necessary or create your own document to give complete accounting of real property added or deleted for this contract. All items added, deleted replaced, or relocated on site 5 feet beyond the building perimeter must be accounted for completely. Attach a continuation sheet and use the checklist format to describe other work related to this particular project.

Costs for each item must include material, tax, installation, overhead and profit, bond and insurance costs. This form should be filled out as each item is installed or each phase of work is completed.

TOTAL FOR ALL ITEMS INCLUDING CONTRACT MODIFICATION COSTS ADDED TOGETHER SHOULD EQUAL THE TOTAL CONTRACT PRICE.

KEY TO ABBREVIATIONS

| | |
|-----|--------------------------------------|
| AC | - Acres |
| BL | - Barrels, Capacity |
| BTU | - British Thermal Unit |
| CY | - Cubic Yards |
| EA | - Each |
| GA | - Gallons, Capacity |
| HD | - Head |
| KV | - Kilovolt-Amperes, Capacity(KVA) |
| KW | - Kilowatts, Capacity |
| SE | - Seats |
| SF | - Square Feet |
| SY | - Square Yard |
| MB | - Million British Thermal Units |
| MI | - Miles |
| LF | - Linear Feet |
| KG | - Thousand Gallons Per Day, Capacity |
| TN | - Ton |
| # | - Number; how Many |

DD FORM 1354 CHECKLIST
Transfer of Real Property

CONTRACT NUMBER: _____

CONTRACT TITLE: Demolition of Buildings Phase VI

LOCATION: Fort Lewis, Washington

TASK ORDER NUMBER: _____

Building(s) No.: _____

1. DEMOLITION (Describe each item removed and the cost of Removal.)*

- Sitework Demolition
- Asbestos Abatement
- Fence Removal
- Power Disconnects
- Removal of UST's/AST's (List by Bldg. No.)
- Waterline Disconnections
- Sewerline Disconnections

2. SITE RESTORATION

- Topsoil
- Hydroseeding
- New work outside the 5-foot line (sidewalks, curbing, transformers, secondary Lines, etc.) Provide complete description, including costs for each item provided outside the 5-foot building line.

3. ASBESTOS REMOVAL: Furnish a description by building of the number of LF of Asbestos removed, number of SF of soil encapsulation, and number and size of tanks, etc. where asbestos was removed. Also, identify buildings by their numbers and use.

This page intentionally blank

SECTION 02070
ASBESTOS SURVEY

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

ENVIRONMENTAL PROTECTION AGENCY (EPA)

| | |
|-----------------------------------|---|
| 40 CFR 61 Subpart M | National Emission Standards Hazardous Air Pollutants (NESHAPS), Asbestos |
| 40 CFR 763 | Toxic Substances Control Act (TSCA); Asbestos Hazard Emergency Response Act (AHERA); Asbestos |
| Publication Number PB86-180148 | Asbestos in Buildings: Simplified Sampling Scheme for Friable Surfacing Materials |

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

| | |
|----------------------------|---|
| OSHA 3096 | Asbestos Standard for the Construction Industry |
| 29 CFR 1926 | Safety and Health Regulations for Construction |
| Publication Number 3096 | Asbestos Standard for the Construction Agency |

PUGET SOUND CLEAN AIR AGENCY (PSCAA)

| | |
|------------------------------|----------------------------|
| Regulation III, Article 4 | Asbestos Control Standards |
|------------------------------|----------------------------|

STATE OF WASHINGTON ADMINISTRATIVE CODES

| | |
|----------------|--|
| WAC 296-62-054 | Hazard Communication |
| WAC 296-62-071 | Respiratory Protection |
| WAC 296-62-077 | Part I-1-Asbestos, Tremolite, Anthophyllite and Actinolite |
| WAC 296-62-145 | Confined Spaces |

WAC 296-62-300

Hazardous Waste Operations and Emergency Response

WAC 296-65

Safety Standards for Asbestos Removal and Encapsulation

1.2 GENERAL REQUIREMENTS

The work includes inspection of buildings for the presence all asbestos containing materials (ACM). The asbestos surveys shall be performed by certified AHERA building inspectors and all work, including samples, shall be taken in accordance with the federal, state, local requirements as well as those provided in this specification. To avoid conflict of interest issues, the asbestos surveys shall be conducted by a Contractor that is independent of the Asbestos Abatement Contractor. The asbestos abatement surveys shall not be performed by the Contractor that will be involved with the removal of asbestos in the buildings.

1.3 SUBMITTALS

Government approval is required for submittals with a “GA” designation; submittals having an “FIO” designation are for information only. Submittals with a “MP” designation are submittals required to be submitted under The Management Plan which is specified in Section 01101: MANAGEMENT PLAN AND FIELD RSPORTS. The following shall be submitted in accordance with Section 01300(01330): SUBMITTAL PROCEDURE:

Asbestos Survey Report; FIO.

Submit within 10 Calendar days after completion of the Asbestos Survey to both to the COR and the Ft. Lewis ENRD (PUBLIC WORKS/ATTN:AFZH-PWC, BOX 339500 MS 17, Bldg. 2012, Ft. Lewis, WA 98433-9500). At a minimum the report shall provide the following information; Floor plan drawings showing location of ACM; A written description of the summary of findings; A table with a summary of quantities, location homogenous materials and type of ACM in the buildings (including exterior surfaces); Completed Building Homogeneous Materials Form(s) (Attachment A-1), and completed Sample Collection Form(s) (Attachment A-2), or equivalent; Raw Laboratory data from the samples taken that includes the signature, date, and accreditation number of the analyst(s); Signatures of the accredited AHERA building inspectors that performed the survey with certification numbers and expiration date. The Asbestos Survey Report shall also contain a certificate that indicates the laboratories used are currently accredited by the National Institute for Standards and Technology (NIST) under the National Voluntary Laboratory Accreditation Program (NVLAP) for bulk asbestos analysis using PLM. Copies of the training certificates of analyst(s) and AHERA building inspectors shall also be included. The header of each asbestos survey report shall indicate the number of the building surveyed along with the project and task order number.

1.4 TRAINING

1.4. AHERA Building Inspector

Contractor shall assure all building inspectors have completed an approved Asbestos Hazard

Emergency Response Act (AHERA) building inspector course, as described in 40 CFR 763 and 29 CFR 1926. Inspector certification and completion of refresher training along with the certification expiration date shall be submitted as an Attachment to the Asbestos Survey Report.

1.5 ASBESTOS SAMPLING REQUIREMENTS

1.5.1 Sample Collection

The Contractor shall collect or representative friable and non-friable suspect material samples in accordance with the sampling frequency specified in 40 CFR 763. The Building Homogeneous Materials Form (Attachment A-1) or an equivalent form and the Sample Collection Form (Attachment A-2) or an equivalent form shall be used during sample collection to document the homogeneous materials identified and where samples were taken during the survey. These completed forms shall be attached to the asbestos Survey report.

1.5.2 Suspended Ceilings

The Contractor shall remove suspended ceiling tiles to locate sprayed-on fire-proofing or acoustical material.

1.5.3 Floor Tiles

All 9-inch by 9-inch floor tiles shall be assumed as positive for asbestos. Therefore, 9- inch by 9- inch floor tiles shall not be sampled. Sampling of floor tiles (other than 9-inch by 9-inch tiles) will be conducted by selecting tiles that are damaged or out of sight, such as along a wall, in a closet, or in a corner. Floor tile mastic shall be collected as a separate sample. For multiple layers of floor tile, separate samples of each shall be collected. The Comments section of the Sample Collection Form (Attachment-2) shall be used to note which layer the sample represents.

1.5.4 Cement Asbestos Board (CAB)

The Contractor shall assume all CAB, also known as Transite siding, is positive for asbestos. The locations of the CAB and the quantity shall be noted in the Building Homogeneous Materials Form where the material shall be noted as assumed asbestos containing material.

1.5.5 Roofing Material

The Contractor shall sample and analyze all layers of the roofing materials down to the roof deck for asbestos content.

1.5.7 Decontamination of Sampling Equipment

All sampling equipment shall be decontaminated such that samples are not cross contaminated by cleaning samples tools with wet wipes after use.

1.5.8 Repair of Sampled Locations

Only sampled locations that can potentially release asbestos fibers into the atmosphere shall be repaired. Repair shall consist of sealing the exposed sampled location such that asbestos fibers will not be released into the environment. This shall include use of silicone caulk for exposed edges and EPA-accepted bridging encapsulant on ceiling tiles.

1.5.9 Chain of Custody

The Contractor shall fill out a Chain of Custody (COC) form provided by the laboratory. All sample bags shall be labeled at the time of sample.

1.5.10 Analytical Procedures

All suspect ACM bulk samples collected shall be analyzed by polarized light microscopy (PLM) using the Interim Method for determination of Asbestos in Bulk Insulation Samples (EPA Method 600/M4-82-020). At a minimum two laboratories shall be used: one for the regular samples, and another independent laboratory for Quality Control (QC) samples.

If a PLM sample results for a homogeneous material indicate that the material contains less than 1% asbestos or if the maximum quantity of asbestos was a trace amount, the samples may be reanalyzed (at the Contractors or Laboratories discretion) by the point-count method using PLM.

Plaster materials containing less than or equal to 10% asbestos shall be reanalyzed utilizing the point count method. If re-analysis determines that less than 1% asbestos is present, then the material will be considered non-ACM.

1.5.11 Chemical Quality Control

The AHERA building inspector shall collect at least one quality control (QC) sample for each 20 regular samples with a minimum of at least one QC sample per unit or building. These samples shall be collected by taking side-by-side samples. Care shall be taken to help ensure that all layers of the samples are evenly divided. The QC sample shall be analyzed by a second laboratory to confirm the results of the primary laboratory. The QC sample shall be assigned the same sample number as the original sample, except the QC sample number will end with a "Q." Information regarding QC samples will be documented on the Sample Collection Form (Attachment A-2), or equivalent.

Results from analysis of QC samples and related regular samples shall be compared by the Contractor. Samples which are not in agreement shall result in declaring the sample as containing the more conservative result (e.g., positive for asbestos).

1.5.12 Laboratory Qualifications

The contractor shall select laboratories that participate in the National Voluntary Laboratory Accreditation Program (NVLAP).

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.1 (NOT USED)

3.2 The Contractor shall use the form in Attachment A-1 or an equivalent. This form shall be used to document all the homogeneous materials identified during the building inspection. In the “comments” box the number of layers will be noted and preliminary quantity estimates.

3.3 Sample Collection Form

The Contractor shall use the form in Attachment A-2, or an equivalent. This form shall be used to, document all the samples collected per homogeneous material.

BUILDING HOMOGENEOUS MATERIALS FORM

Phase VI Building Demolition
 Fort Lewis, Washington
 Contract Number: _____
 Task Order: _____

Building Number: _____
 Date: _____

| |
|--------|
| NOTES: |
| |
| |
| |

| Mat # | Material Description | Comments | # of Samples |
|-------|----------------------|----------|--------------|
| | | | |

| Mat # | Material Description | Comments | # of Samples |
|-------|----------------------|----------|--------------|
| | | | |

| Mat # | Material Description | Comments | # of Samples |
|-------|----------------------|----------|--------------|
| | | | |

| Mat # | Material Description | Comments | # of Samples |
|-------|----------------------|----------|--------------|
| | | | |

| Mat # | Material Description | Comments | # of Samples |
|-------|----------------------|----------|--------------|
| | | | |

| Mat # | Material Description | Comments | # of Samples |
|-------|----------------------|----------|--------------|
| | | | |

| Mat # | Material Description | Comments | # of Samples |
|-------|----------------------|----------|--------------|
| | | | |

SAMPLE COLLECTION FORM

Phase VI Building Demolition
Fort Lewis, Washington
Contract Number: _____
Task Order Number: _____

Homogeneous Material Number: _____
Building Number: _____
Date: _____

| |
|-----------------------------|
| Material Description: _____ |
| Notes: _____ |
| _____ |

| | | |
|-----------------------|------------|------------------|
| Sample # _____ | Date _____ | Inspector: _____ |
| Room _____ | | |
| Sample Location _____ | | |
| Comments _____ | | |

| | | |
|-----------------------|------------|------------------|
| Sample # _____ | Date _____ | Inspector: _____ |
| Room _____ | | |
| Sample Location _____ | | |
| Comments _____ | | |

| | | |
|-----------------------|------------|------------------|
| Sample # _____ | Date _____ | Inspector: _____ |
| Room _____ | | |
| Sample Location _____ | | |
| Comments _____ | | |

| | | |
|-----------------------|------------|------------------|
| Sample # _____ | Date _____ | Inspector: _____ |
| Room _____ | | |
| Sample Location _____ | | |
| Comments _____ | | |

| | | |
|-----------------------|------------|------------------|
| Sample # _____ | Date _____ | Inspector: _____ |
| Room _____ | | |
| Sample Location _____ | | |
| Comments _____ | | |

| | | |
|-----------------------|------------|------------------|
| Sample # _____ | Date _____ | Inspector: _____ |
| Room _____ | | |
| Sample Location _____ | | |
| Comments _____ | | |

Inspector: _____
Technician: _____

This page intentionally blank

SECTION 02095-1
LEAD CONTAINING MATERIALS AND HAZARDS

PART 1 GENERAL

1.1 DESCRIPTION OF WORK

The work covered by this section includes the handling of lead based paint (LBP) materials which are encountered during renovation. This section outlines the procedures and equipment required to protect workers and occupants of public facilities at Fort Lewis and its sub-installations from exposure to lead dust and leaded debris. The work also includes the disposal of lead-contaminated debris.

1.2 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

CODE OF FEDERAL REGULATIONS (CFR)

| | |
|-----------------------|--|
| 29 CFR 1926 | Safety and Health Regulations for Construction |
| 29 CFR 1926.62 | Lead in Construction Standard |
| 40 CFR 260 | Hazardous Waste Management System: General |
| 40 CFR 261 | Identification and Listing of Hazardous Waste |
| 40 CFR 262 | Standards Applicable to Generators of Hazardous Waste |
| 40 CFR 263 | Standards Applicable to Transporters of Hazardous Waste |
| 40 CFR 264 | Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities |
| 40 CFR 265 | Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities |
| 40 CFR 268 | Land Disposal Restrictions |
| 40 CFR 745, Subpart L | (Final Rule, 29 August 1996) Lead; Requirements for Lead-Based Paint Activities in Target Housing and Child-Occupied Facilities |
| 49 CFR 172 | Hazardous Material Table, Special Provisions, Hazardous Material Communications, Emergency Response Information, and Training Requirements |

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD)

HUD Guidelines (June 1995) HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing

FORT LEWIS REGULATIONS (FTL)

FTL 200-1 (January 1997) Environmental Protection and Enhancement

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 701 (1989) Methods of Fire Test for Flame-Resistant Textiles and Films

WASHINGTON ADMINISTRATIVE CODE (WAC)

WAC 173-303 (October 1995) Dangerous Waste Regulations

WAC 296-155-176 (December 1993) Lead

1.3 DEFINITIONS

1.3.1 Accessible surface

Any protruding interior or exterior surface, such as an interior window sill, that a young child can mouth or chew.

1.3.2 Accredited laboratory

A laboratory that has been evaluated and approved by the National Lead Laboratory Accreditation Program (NLLAP) to perform lead measurement or analysis for lead based paint; an American Industrial Hygiene Association (AIHA) certified lab to perform air sample analysis, usually over a specific period of time. A federal or state certified laboratory is required for soil sample analysis.

1.3.3 Bare soil

Soil not covered with grass, sod, some other similar vegetation, or paving, including the sand in sandboxes.

1.3.4 Certified

The designation for contractors who have completed training and other requirements to allow them to safely undertake risk assessments, inspections, or abatement work. Risk assessors, inspectors, and abatement contractors must be certified by the appropriate local, state, or federal agency.

1.3.5 Certified Industrial Hygienist (CIH)

A person who possesses a current and valid Certificate in the Comprehensive Practice of Industrial Hygiene by the American Board of Industrial Hygiene

1.3.6 Cleaning

The process of using a HEPA vacuum and wet cleaning agents to remove leaded dust; the process includes the removal of bulk debris from the work area. OSHA prohibits the use of compressed air to clean lead-contaminated dust from a surface.

1.3.7 Clearance examination

Visual examination and collection of environmental samples by an inspector or risk assessor and analysis by an accredited laboratory upon completion of an abatement project, interim control intervention, or maintenance project that disturbs lead-based paint (or paint suspected of being lead-based). The clearance examination is performed to ensure that lead exposure levels do not exceed standards established by the EPA Administrator pursuant to Title IV of the Toxic Substances Control Act, and that any cleaning following such work adequately meets those standards.

1.3.8 Competent person

As defined in the OSHA Lead Construction Standard (29 CFR 1926.62), a person who is capable of identifying or predicting hazardous working conditions and work areas, and who has authorization to take prompt, corrective measures to eliminate the hazards. A competent person is not necessarily a risk assessor, inspector, or abatement project supervisor.

1.3.9 Compliance plan

A document that describes the types of tasks, workers, protective measures, tools, and other materials that may be employed in lead-based paint hazard control to comply with the OSHA Lead Exposure in Construction standard.

1.3.10 Containment

A process to protect workers and the environment by controlling exposures to the lead-contaminated dust and debris created during abatement.

1.3.11 Engineering controls

Measures other than respiratory protection or administrative controls that are implemented at the work site to contain, control, and/or otherwise reduce exposure to lead-contaminated dust and debris usually in the occupational health setting. The measures include process and product stabilization, isolation, and ventilation.

1.3.12 HEPA/wet wash/HEPA cycle

The cleaning cycle that begins with HEPA vacuuming, followed by a wet wash with trisodium phosphate detergent or another liquid cleaning agent, followed by a final pass with a HEPA vacuum over the surface.

1.3.13 High-Efficiency Particulate Air (HEPA)

A filter capable of removing particles of 0.3 microns or larger from air at 99.97 percent or greater efficiency.

1.3.14 Industrial Hygienist (IH)

A person having a college or university degree in engineering, chemistry, physics, medicine, or a related physical or biological science who, by virtue of special training, is qualified to anticipate, recognize, evaluate, and control environmental and occupational health hazards and the impact of those hazards on the community and workers; or an industrial hygienist meeting the Office of Personnel Management's qualification standard for work at the journeyman level. The IH will meet the Federal Office of Personnel Management 0690 IH qualification standard for work at the journeyman level.

1.3.15 Laboratory analysis

A determination of the lead content by atomic absorption spectroscopy, inductively coupled plasma emission spectroscopy, or laboratory-based K or L x-ray fluorescence, or an equivalent method.

1.3.16 Lead-based paint

Any paint, varnish, shellac, or other coating that contains lead equal to or greater than 1.0 mg/cm² as measured by XRF or laboratory analysis, or 0.5 percent by weight (5,000 ug/g, 5,000 ppm, or 5,000 mg/kg) as measured by laboratory analysis.

1.3.17 Lead-contaminated dust

This is defined as surface dust in public buildings that contains an area or mass concentration of lead in excess of the standard established by the EPA Administrator, pursuant to Title IV of the Toxic Substances Control Act. Until the EPA standards are set, the levels for lead dust in public buildings are based on the HUD recommended clearance and risk assessment standards for leaded dust. Note that Public Law 91-596, Sec 5 (a) states: Each employer will provide his employees a place free of recognized hazards. The Army recognizes that lead levels below 200 ug/ft² as safe for non-target facilities. OSHA also uses this level for many "clean" areas. Therefore, when the contractor turns over a renovated building back to the Army, it is expected that it will be free of hazardous lead dust levels. The levels for dust in public buildings for Fort Lewis are therefore: 200 ug/ft² on floors, 500 ug/ft² on interior windowsills, and 800 ug/ft² on window troughs.

1.3.18 Lead-contaminated soil

Bare soil on residential property that contains lead in excess of 250 mg/kg pursuant to the Washington State Model Toxics Control Act.

1.3.19 NLLAP requirements

Requirements, specified by the EPA National Lead Laboratory Accreditation Program (NLLAP), for accreditation for the lead analysis of paint, soil, and dust matrices by an EPA-recognized laboratory accreditation organization.

1.3.20 Pilot project

The Contractor shall demonstrate to the Government's satisfaction the Contractor's work practices, engineering controls, worker protection levels, are protective of human health and the environment. The pilot project involves TCLP building debris characterization testing, air sampling (personnel and area monitoring), wipe sampling, worksite preparation, and a variety of lead-based paint hazard control treatments.

1.3.21 Polyethylene plastic

All references to polyethylene plastic refer to 6-mil plastic sheeting or polyethylene bags (or double bags if using 4-mil polyethylene bags). Plastic used to contain waste should be capable of completely containing the waste and, after being properly sealed, should remain leak-tight with no visible signs of discharge during movement or relocation.

1.3.22 Renovation – Not Used

1.3.23 Target Housing – Not Used

1.3.24 Trained

Successful completion of a training course in a particular discipline. For lead hazard control work, the training course must be accredited by EPA or by an EPA-approved State program.

1.3.25 Worker

An individual who has completed training in an EPA accredited program to perform lead-based paint hazard control in housing.

1.3.26 Worksite

Any interior or exterior area where lead-based paint hazard control work takes place.

1.4 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section 01300 SUBMITTAL PROCEDURES.

1.4.1 Lead-Based Paint (LBP) Management Plan; G.

The Contractor shall determine the building waste stream and collect a representative waste stream sample for lead TCLP analysis (EPA SW 1311/6010). A mass balance of the waste stream is required in order to properly collect a representative sample. Costs of sampling and analysis to characterize the building waste stream shall be borne by the Contractor. The Contractor shall sample the waste stream of the each type of building demolished. Building types are assumed to be two story barracks/office, one story office, miscellaneous. The Contractor shall assume up to five (5) TCLP samples are required for this project.

Soil Sampling: The Contractor shall collect three (3) soil samples within the footprint of the former building following demolition. Samples shall be discrete surface samples (0-6) and analyzed for total lead (EPA SW 6010). The Contractor shall not perform site restoration until sample results are received and reviewed by the Government QA Representative. If soil sample results exceed >250 mg/kg, the Contractor shall notify the Government Representative.

The Contractor shall prepare a detailed LBP Management Plan that identifies the work procedures, health, and safety measures to be used in project. Any changes made to the procedures outlined in the LBP Management Plan after Government approval must be submitted in writing and approved by the Contracting Officer's Representative prior to implementation. The plan shall address the various sources of lead and the methods to be undertaken to abate the lead hazards to include the following key elements:

- 1.4.1.1 demolition methods to be used for this project.
- 1.4.1.2 Explanation of engineering controls that will be used, if applicable and an explanation and sketch of the control areas and barriers to be used to contain lead dust.
- 1.4.1.3 Means for notifying occupants (if building is occupied) of proposed work schedules.
- 1.4.1.4 Training certification for all workers as required by Federal, state, and local regulations (See Sections 1.5 and 1.6 of this Specification for specific requirements).
- 1.4.1.5 Equipment, tools, materials, and chemicals list. The equipment, tools and materials list shall include brand names, model, capacity, performance characteristics, quantities, and other pertinent information for all equipment and materials to be used on this project. For each chemical listed, include a Material Safety Data Sheet.
- 1.4.1.7 **Not Used**
- 1.4.1.8 Written Hazard Communication Program in accordance with 29 CFR 1926.59.
- 1.4.1.9 Written OSHA Compliance Plan. Chapter 9 of the HUD Guidelines provides a sample plan.

1.4.1.10 Emergency contingency procedures in accordance with 40 CFR 261. Procedures shall include, but not be limited to hazards that result from a breach of containment barriers; detection of unexpected lead levels above the clearance levels; and spilling of lead debris bags or containers. This section shall also contain an emergency telephone contact list.

1.4.1.11 Hazardous waste procedures in accordance with the requirement of 40 CFR 260, 40 CFR 261, 40 CFR 262, 40 CFR 264 and 40 CFR 268 and WAC 173-303. These procedures shall include, but not be limited to how the waste will be handled throughout the project; estimated quantities of wastes, by type, that are expected to be generated and disposed of. Ensure that Environmental Services (Jana Nelson) at 253-967-3268/4786 is notified for disposition of HW.

1.4.2 Sampling Results; G.

A daily log of the samples taken at the project site. The test results shall be reviewed by the Competent Person and submitted, in written form, to the COR every 2 weeks. The log shall list each sample location, sample result, sampling time and date, sample type (including personnel air sampling), analytical method used, analyst's name and company, and the Competent person's interpretation of the results. Results that exceed allowable limits shall be highlighted in the log in such a manner to make them easily distinguishable from monitoring results that do not exceed specified or regulatory limits. The Contracting Officer's Representative shall be notified immediately of any results that exceed allowable limits.

1.5 PERSONNEL QUALIFICATIONS

1.5.1 Competent Person: Certification that the Contractor's full-time on-site Competent Person meets the requirements of 29 CFR 1926.62 and is experienced in administration and supervision of LBP projects, including work practices, protective measures for building and personnel, disposal procedures, etc. This person shall have completed an EPA Accredited LBP Training course for Supervisors & Contractors and have had a minimum of 2 years on-the-job experience in lead abatement and/ or renovation within the last four years.

1.5.2 Risk Assessor: Certification that the Contractor's on-site Risk Assessor is experienced in performing risk assessments, identifying acceptable strategies for reducing LBP hazards, performing clearance testing and reevaluations, and documenting the successful completion of LBP work. The person shall have completed the EPA Accredited LBP Inspector/Risk Assessor Training course and have had a minimum of 2 years on-the-job experience of lead abatement and/or renovation within the past four years.

1.5.3 Testing Laboratory: The name, address, and telephone number of the independent testing laboratory selected to perform sampling and analysis for personal and environmental air samples, lead dust wipes, bulk sample analyses, and TCLP analysis. Documentation that the laboratory performing the analysis is an EPA National Lead Laboratory Accreditation Program (NLLAP) member and that it is rated proficient in the NIOSH/EPA Environmental Lead Proficiency Analytical Testing Program (ELPAT). Certification shall include accreditation for heavy metal analysis, list of experience relevant to analysis of lead in air, paint chips, and dust, and a Quality Assurance and Quality Control Program.

1.5.4 HM/HW Personnel and Training Requirements: Federal, state, and Army regulations require that individuals who perform functions associated with HM/HW activities be trained for the functions performed. Contractors that generate, store, or handle HM or HW shall appoint an Environmental Compliance Officer (ECO) and a Hazardous Waste Technician (HWT) in writing. The ECO/HWT may be the Contractor's Competent person. The ECO/HWT shall be responsible for assuring the requirements of this specification are met. The ECO/HWT shall be trained in accordance with Washington Department of Ecology regulations before being assigned as the ECO/HWT. The ECO/HWT shall also attend the Hazardous Materials Use, Storage and Disposal Training Course for ECOs/HWTs. The 8 hour course is available weekly from the Fort Lewis ENRD Hazardous Waste Management Section (HWMS) and shall be taken prior to the Contractor generating, storing, or handling HM or HW on the installation.

1.5.5 CIH: The Contractor's CIH shall be responsible for determining levels of personnel protection, establishing

the project air monitoring requirements (personal and area), assisting the project designer in determining engineering controls, reviewing, evaluating, and reporting of air sampling results.

1.6 OSHA WORKER TRAINING

Training certification shall be provided prior to the start of work involving LBP, for all of the Contractors' workers. Training shall meet the requirements of 29 CFR 1926.62. Training shall be provided prior to the time of job assignment and, at least, annually. Training may cover all abatement methods or focus only on those methods specified in the LBP Management Plan.

1.7 EQUIPMENT AND MATERIALS

1.7.1 POLYETHYLENE SHEET AND BAGS - GENERAL

Polyethylene sheet and bags shall be minimum 6 mils thick. Bags shall have pre-printed labels, and 5 inch (minimum) long plastic ties, pointed and looped to secure the filled bags. Polyethylene sheets shall be in roll sizes to minimize seams.

1.7.2 Polyethylene Sheet - Flame Resistant

Where a potential for fire exists, flame-resistant polyethylene sheets shall be provided. Polyethylene film shall be frosted or black and shall conform to the requirements of NFPA 701.

1.7.3 Polyethylene Sheet - Reinforced

Reinforced polyethylene sheet shall be provided where high skin strength is required such as where it constitutes the only barrier between the LBP control area and the outdoor environment. The sheet stock shall consist of translucent, nylon-reinforced or woven-polyethylene thread laminated between two layers of polyethylene film. Film shall meet flame resistant standards of NFPA 701.

1.7.4 TAPE AND ADHESIVE SPRAY – Not Used

1.7.5 CONTAINERS

Impermeable containers shall be used to receive and retain lead-contaminated material until disposal, if appropriate. Containers shall be labeled in accordance with EPA, DOT and OSHA standards.

1.7.6 VACUUM SYSTEMS

HEPA filtered vacuum systems shall be used during LBP operations which generate dust. The systems shall be suitably sized for the project, and filters shall be capable of removing particles as small as 0.3 micrometers at a minimum efficiency of 99.97 percent. The contractor shall provide a manufacturer's certification of NIOSH approval of High Efficiency Particulate Air (HEPA) filtration capabilities for all vacuum systems.

1.7.7 STORAGE OF MATERIALS

Materials shall be stored in a place and manner, which protects them from damage and contamination. During periods of cold weather, plastic materials shall be protected from the cold. No flammable or hazardous materials shall be stored inside any building or in vehicles left on Post overnight. Regularly inspect materials to identify damaged or deteriorating items. Damaged or deteriorated items shall not be used and shall be removed from the site as soon as they are discovered. Any materials, which become contaminated with LBP waste shall be disposed of consistent with the requirements of **40 CFR 268** and these specifications. Stored materials shall not present a hazard or an inconvenience to workers, visitors, and/or other occupants and employees of the building.

1.8 POSTED WARNINGS AND NOTICES

The following regulations, warnings, and notices shall be posted at the work site in accordance with 29 CFR 1926 Section.62.

1.8.1 REGULATIONS

Two copies of applicable Federal, state, and local regulations and USDOL/OSHA Booklet 3142 shall be maintained. One copy shall be posted at the work site and one copy shall be on file in the project office.

1.8.2 WARNING SIGNS

Warning signs shall be provided at building entrances and at each work area where worker exposure to lead is undetermined or where exposures are above the Permissible Exposure Limit (PEL) as defined by 29 CFR 1926.62. Warning signs shall be posted in each work area where worker exposure to lead is undetermined or where exposures are above the permissible exposure limit as defined in CFR 1926.62. Signs shall be located at a distance from the LBP control areas that will allow personnel to read the sign and take the necessary protective actions required before entering the LBP control area. Warning signs shall be in English and be of sufficient size to be clearly legible and display the following:

WARNING
LEAD WORK AREA
POISON
NO SMOKING OR EATING
AUTHORIZED PERSONNEL ONLY
RESPIRATORS AND PROTECTIVE CLOTHING ARE REQUIRED IN THIS AREA

After it has been determined that exposures are below the PEL a less restrictive sign may be used:

WARNING
LEAD WORK AREA
POISON
NO SMOKING NO EATING

PART 2 PRODUCTS

(NOT APPLICABLE)

PART 3 EXECUTION

3.1 DESCRIPTION OF WORK

Refer to project plans and specification for details on demolition locations.

3.2 OCCUPANT PROTECTION AND WORKSITE PREPARATION

The contractor shall utilize HUD *Guidelines*, Chapter 8, Resident Protection and Worksite Preparation, for all worksites that are target facilities.

3.3 SITE VISIT

The contractor shall visit and investigate the site, review the drawings and specifications, assess the amount of LBP, and become familiar with the conditions, which will affect the project.

3.4 LIABILITY INSURANCE FOR LBP

LBP liability insurance shall be obtained without additional expense to the Government. The Contractor shall assume full responsibility and liability for the compliance with Federal, state, and local regulations pertaining to training, work practices, hauling, disposal, and protection of workers, visitors to the site, and persons occupying areas adjacent to the site.

3.5 PROTECTION OF EXISTING WORK TO REMAIN

LBP, storage, transportation, and disposal work shall be performed without damaging or contaminating adjacent work and areas. Where such work or areas are damaged or contaminated, the Contractor shall restore work areas to the original condition.

3.6 COORDINATION WITH OTHER WORK

LBP and disposal work shall be coordinated with existing work and/or concurrent work being performed in adjacent areas.

3.7 PRECONSTRUCTION MEETING

The Contractor shall attend a preconstruction meeting prior to starting any work involving LBP. Items required to be submitted shall be submitted 20 calendar days prior to the meeting. The Contractor's LBP Management Plan will be reviewed for completeness, and where specified, for acceptance.

3.8 PILOT WORK PROJECT

Prior to beginning the full-scale project, the Contractor shall complete a pilot work project. The project shall demonstrate the specified procedures for the work required. The Contractor shall be responsible for all sampling and analysis to demonstrate their ability to perform the work on facilities typical of the entire project. The Contractor shall ensure that all changes made to their work procedures during the pilot project are submitted to the COR as written changes to their LBP Management Plan. The COR will evaluate the following during the pilot work project:

3.8.1 If personal air sample analyses indicate that the permissible exposure limits specified in 29 CFR 1926.62 have not been exceeded, then the Contractor's CIH may modify the respirator protection level accordingly.

3.8.2 After cleanup representative wipe samples shall be taken at key locations where components have been removed and where LBP has been disturbed to assist the CIH in determining correct PPE for future work.

3.8.3 Adequate samples of waste generated (solid components, ,) shall be collected for Toxicity Characteristic Leaching Procedure (TCLP) testing. An accredited laboratory shall perform the TCLP test.

3.8.4 Waste generated throughout the pilot project shall be properly containerized, according to applicable regulations, and disposed of per the results of the TCLP analysis.

3.9 WORK PROCEDURES

LBP work shall be performed in accordance with the accepted Contractor's LBP Management Plan as modified and approved, following the pilot project. Procedures and equipment required to limit occupational and environmental exposures during the project shall be in accordance with 29 CFR 1926.62, and as specified herein.

3.9.1 SAFETY AND HEALTH RESPONSIBILITIES

The Competent Person shall be present on the work site throughout the project and is responsible for coordination, safety, security and execution of the work. The Competent Person shall:

3.9.1.1 Ensure work is performed in strict accordance with specifications.

3.9.1.2 Ensure hazardous exposure to occupants and to the environment are adequately controlled.

3.9.2 ENGINEERING CONTROLS AND CONTAINMENT STRUCTURES

3.9.2.1 LBP Control Area

The LBP control area is where LBP work occurs and as such shall be considered contaminated, and shall be isolated to prevent LBP containing dust or debris from passing into adjacent rooms or open areas. The control area shall be decontaminated at the completion of the LBP and disposal work.

3.9.2.2 Boundary and Control Barrier Requirements

Physical boundaries shall be provided around exterior LBP control areas by roping off the area indicated in the LBP Management Plan.

3.9.3 FURNISHINGS – Not Used

3.9.4 WIPE SAMPLING – Not Used

3.9.4.1 Results

The Contractor shall have the results of the TCLP analysis within 5 working days after the completion of the sampling. Soil sample results shall be available within 30 calendar days. Samples results should be provided to the COR.

3.10. CERTIFICATION

The Contractor's CIH and Competent personal shall certify in writing that no site workers received an occupational exposure to lead while working on the project. If a site worker did receive an occupational exposure, this needs to be reported to the CO within 12 hours including what corrective measures are in-place to prevent a future occurrence. A written report of the incident will be submitted within 48 hours. The Contractor's LBP Management Plan will also be revised to reflect corrective measures.

3.10.2 DISPOSAL

3.10.2.1 Toxicity Characteristic Leaching Procedure (TCLP) Results

The results of the Pilot Project and/or TCLP analysis performed during work shall be used to determine disposal procedures.

3.10.2.2 Contaminated Waste

When the TCLP testing exceeds maximum allowable concentration (5 ug/L, all materials that could be contaminated with solid particles of paint shall be collected and handled as hazardous wastes. Containerized hazardous waste shall be labeled in accordance with WAC 173-303. The Contractor shall process manifests through PW Environmental and Natural Resources Division (ENRD), phone 253-967-3258 (Jana Nelson). The Contractor shall be responsible for the handling, storage and disposal of all Contaminated Waste.

3.10.2.3 Non-Contaminated Waste

Non-contaminated waste, scrap, and debris shall be disposed of in accordance with Section 01410 Environmental Protection. The Contractor shall be responsible for the disposal of Non-Contaminated waste off-post in an approved landfill.

3.10.2.4 DISPOSAL DOCUMENTATION

Written evidence shall be provided that the hazardous waste treatment, storage, or disposal facility is approved for lead disposal by the EPA and state or local regulatory agencies. One copy shall be submitted of the completed manifest; signed, and dated in accordance with 40 CFR 262.

END OF SECTION

This page intentionally blank

SECTION 02115

PETROLEUM UNDERGROUND STORAGE TANK REMOVAL

PART 1 GENERAL

The work covered by this section includes the removal and disposal of Aboveground Storage Tanks (AST's) and Underground Storage Tanks (UST's) including all associated piping, valves, vent tubes, contaminated soil and associated work described herein. Sampling of soils and ground water in accordance with the attached Sampling and Analysis Plan (SAP) for checking spills is also anticipated. It is expected that only heating oil contaminated substances will be encountered during demolition.

1.1 REFERENCES

The publications listed below form a part of this section to the extent referenced. The publications are referenced in the text by basic designation only.

AMERICAN PETROLEUM INSTITUTE (API)

- | | |
|----------------|--|
| API Publ 2217A | (1987) Guidelines for Work in Inert Confined Spaces in the Petroleum Industry |
| API Publ 2219 | (1986) Safe Operation of Vacuum Trucks in Petroleum Service |
| API RP 1604 | (1996) Closure of Underground Petroleum Storage Tanks |
| API RP 2003 | (1991) Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents |
| API Std 2015 | (1994) Safe Entry and Cleaning of Petroleum Storage Tanks |

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

- | | |
|-------------|--|
| ASTM D 1556 | (1990; R 1996) Density and Unit Weight of Soil in Place by the Sand-Cone Method |
| ASTM D 1557 | (1991) Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/cu. ft. (2,700 kN-m/cu. m.)) |
| ASTM D 2167 | (1994) Density and Unit Weight of Soil in Place by the Rubber Balloon Method |
| ASTM D 2487 | (1993) Classification of Soils for Engineering Purposes (Unified Soil Classification System) |
| ASTM D 2922 | (1996) Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth) |

ASTM D 3017 (1988; R 1993) Water Content of Soil and Rock in Place by Nuclear Methods (Shallow Depth)

CODE OF FEDERAL REGULATIONS (CFR)

40 CFR 261 Identification and Listing of
40 CFR 262 Standards Applicable to Generators of
40 CFR 264 Standards for Owners and Operators of Treatment, Storage, and Disposal Facilities
40 CFR 265 Interim Status Standards for Owners and Operators of Treatment, Storage, and Disposal Facilities
40 CFR 266 Standards for the Management of Specific s and Specific Types of Management Facilities
40 CFR 268 Land Disposal Restrictions
40 CFR 279 Standards for the Management of Used Oil
40 CFR 280 Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks (UST)

WASHINGTON ADMINISTRATIVE CODE (WAC)

173-360 Underground Storage Tank Statute and Regulations
173-340 Model Toxics Control Act (MTCA)
173-303 Dangerous Waste Regulations
Pub 91-30 Guidance for Remediation of Petroleum Contaminated Soils
Pub 90-52 Guidance for Site Checks and Site Assessments for Underground Storage Tanks

<http://www.epa.gov/nheerl/mtbe/files/nheerlmtbe.pdf>

1.2 MEASUREMENT AND PAYMENT (NOT USED)

1.3 SUBMITTALS

Government approval is required for submittals with a "GA" designation, submittals having an "FIO" designation are for information only. Submittals with a "MP" designation are submittals required to be submitted under the Management Plan which is specified in Section 01101: Management Plan and Field Reports. The following shall be submitted in accordance with SECTION 01330 SUBMITTAL PROCEDURES:

SD-01 Data

AST/UST Removal Work Plan; GA.

The Work Plan within 30 days after notice to proceed. The Contractor shall allow 30 days in the schedule for the Government's review and approval. No adjustment for time or money will be made for resubmittals required as a result of noncompliance.

SD-08 Statements

Qualifications; GA.

A document indicating that the Contractor meets the specified requirements.

SD-09 Reports

Backfill Material; GA. Tank Contents Verification; GA.
Contaminated Water Disposal; GA. Soil Examination, Testing, and Analysis;
GA.

Reports including the chain-of-custody records.

Backfilling; GA.

Copies of all laboratory and field test reports.

AST/UST Field Report; GA

The contractor shall submit two copies of the AST/UST Field Report to the Contracting Officer 15 calendar days after completion of the AST/UST removal. The AST/UST Field Report shall include the field notes, addendum to the AST/UST Removal Plan, laboratory analysis, permits, shipping and disposal papers, photographs, and checklists notifications required by environmental agencies and in accordance with the attached UST Reporting Requirements for Underground Storage Tanks.

Tank Closure Report; GA.

3 copies of the report for each UST site opened within 14 days of completing work at each site. Each report shall be labeled with contract number, project name, location and tank number; each report shall be indexed. A copy of the report shall be furnished to the Installation Environmental Coordinator. SEE Underground Storage Tank Reporting Requirements at end of this section.

SD-18 Records

Salvage Rights; FIO.

A record of the disposition of salvaged materials at the end of the contract.

1.4 QUALIFICATIONS

The Contractor shall have a minimum of 2 years of tank removal experience and shall be certified by the State of Washington for tank removal work.

1.4.1 Laboratory Services

For laboratory services the Contractor shall be validated in accordance with state certification requirements and Section 01450 CHEMICAL DATA QUALITY CONTROL.

1.4.2 Support Staff

The Contractor shall identify all staff involved for the various components, including personnel collecting and shipping samples. The qualifications of these staff members shall be detailed by the Contractor.

1.5 REGULATORY REQUIREMENTS

1.5.1 Permits and Licenses

The Contractor, as required or as directed by the Contracting Officer, shall obtain local, state, or federal permits and licenses that directly impact the Contractor's ability to perform the work prior to commencing removal operations.

1.5.2 Statutes and Regulations

Tank closures shall be carried out in accordance with 40 CFR 280 as well as the applicable local and Washington State regulations.

1.6 PROJECT/SITE CONDITIONS

The work shall consist of removal, decontamination and disposal of 500 and 1000 gallon above ground and/or underground storage tanks and associated piping and ancillary equipment. Contractor shall assume at minimum one tank per building. The tanks are constructed of steel and at the minimum one per building to be demolished. The tanks were used for storing heating oil. Residue remaining in the tank is considered a special waste. Existing native soils are predominantly glacial till. Available backfill material will need to be imported. The Contractor shall verify the actual conditions prior to submitting a bid.

1.6.1 Sequencing and Scheduling

The Contractor shall notify the Installation Environmental Coordinator and the Contracting Officer 30 days prior to tank removal. The Contractor shall be responsible for contacting the Implementation Agency (IA) in accordance with the applicable reporting requirements.

1.6.2 Work Plan

The Contractor shall develop, implement, maintain, and supervise as part of the work, a comprehensive plan for tank removal and related operations. As a minimum the plan shall include, but not be limited to, excavation, removal, and ultimate disposal of the tank, its contents, and any contaminated materials. The Work Plan shall be based on work experience, on the requirements of this specification, and on the following references:

- a. API RP 1604.
- b. API Std 2015.

- c. API RP 2003.
- d. API Publ 2217A.
- e. API Publ 2219.

No work at the site, with the exception of site inspections and mobilization, shall be performed until the Work Plan is approved. At a minimum, the Work Plan shall include:

- a. Discussion of the removal approach, tank cleaning, and tank cutting procedures.
- b. A Sampling and Analysis Plan prepared in accordance with Section: 01450 CHEMICAL DATA QUALITY CONTROL.
- c. Methods to be employed for product, sludge, vapor, and pumpable liquid removal; purging and inerting; and storage methods proposed for control of surface water.
- d. Treatment options.
- e. Identification of waste, tank and contaminated soil transporters and means of transportation.
- f. Treatment, disposal, and alternate facilities, and means of treatment, disposal or remediation.
- g. Borrow source.
- h. Spill prevention plan.
- i. Spill contingency plan.
- j. Decontamination procedures, shoring plan, and safety measures in accordance with Section 01351 SAFETY, HEALTH, AND EMERGENCY RESPONSE (HTRW/UST).

PART 2 PRODUCTS

2.1 BACKFILL MATERIAL

Backfill material shall be obtained from [the location indicated on the off-site. Backfill shall be classified in accordance with ASTM D 2487 as GW, GP, GM, GC, SW, SP, SM, SC, MH, CL, or CH and shall be free from roots and other organic matter, trash, debris, snow, ice or frozen materials. If off-site materials are used, soil classification test results shall be approved prior to bringing the material onsite. The testing frequency for backfill material shall be 1 per 1000 cubic yards or a minimum of 1 test. Non-contaminated material removed from the excavation shall be used for backfill in accordance with Paragraph BACKFILLING.

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

3.1.1 Safety Guidelines

Personnel shall abide by the safety guidelines specified in Section 01351 SAFETY, HEALTH, AND EMERGENCY RESPONSE (HTRW/UST).

3.1.2 Burning and Explosives

Use of explosives or burning debris will not be allowed.

3.1.3 Protection of Existing Structures and Utilities

The Contractor shall take all necessary precautions to avoid damage to existing structures, their appurtenances, monitoring wells, or utilities that may be affected by work activities. Any damage to utilities resulting from the Contractor's operations shall be repaired at no expense to the Government. The Contractor shall coordinate with the installation to locate underground utilities prior to beginning construction. Utilities encountered which were not previously shown or otherwise located shall not be disturbed without approval from the Contracting Officer.

3.1.4 Shoring

Shoring requirements shall be provided in accordance with Section 01351 SAFETY, HEALTH, AND EMERGENCY RESPONSE (HTRW/UST).

3.2 TANK CONTENTS VERIFICATION

Sampling and analysis shall be conducted in accordance with the approved Sampling and Analysis Plan and Section 01450 CHEMICAL DATA QUALITY CONTROL.

3.2.1 Sampling

Tank product, pumpable liquids, and sludge shall be sampled by the Contractor. If the data is not adequate, additional sampling and analysis to the extent required by the approved off-site permitted treatment, storage or disposal (TSD) facility receiving the material shall be the responsibility of the Contractor. Meeting all regulatory requirements, including the preparation of materials for transportation shall be the responsibility of the Contractor.

3.2.2 Analysis

Tank contents shall be tested by the Contractor for the parameters listed in the attached Sampling and Analysis Plan at the end of this section.

3.2.3 Characterization

All waste oil tank contents shall be characterized to determine if the tank contents must be disposed as a hazardous or special waste which would require tank contents to be disposed of in a special manner based on local, state, and Federal disposal regulations. Tank product, pumpable liquids, and sludge shall be characterized in accordance with 40 CFR 261 and 40 CFR 279. The waste contents determination and accompanying test results for

each phase present in the tank shall be submitted to the Contracting Officer. The Contractor shall be responsible for any additional requirements identified by the disposal facility. The tank contents shall not be removed until approval is given by the Contracting Officer.

3.3 CLEARING, GRUBBING AND REMOVALS

Areas designated for clearing and grubbing as required and directed by the Contracting Officer shall be cleared of all trees, stumps, down timber, brush, rubbish, roots larger than 3 inches in diameter, and matted roots prior to commencing operations. Concrete or asphalt pavement shall be saw cut at the limits of removal, broken and removed with the resulting debris disposed off Government Property. Chain link fence shall be removed and salvaged for reuse if needed by the government otherwise fencing will be disposed of off-site.

3.4 TOPSOIL

Topsoil shall meet the requirements in Section 02210(2300) GRADING AND SURFACE RESTORATION. Uncontaminated topsoil shall be stripped and stockpiled separately for reuse at a location approved by the Contracting Officer if it meets the requirements of clean fill given in Paragraph BACKFILLING. Additional topsoil in excess of that produced by excavation shall be obtained off-site. All areas disturbed by tank removal operations, other than areas to receive pavement or similar surface under this contract, shall be topsoiled. Topsoil shall be used wherever shown or stated in the Task Order Statement of Work.

3.5 PREPARATIONS FOR EXCAVATION

Before excavating, the Contractor shall drain product piping back to the tank or remove residual liquids trapped in the product lines and remove all product from the tank; and the tank shall be purged and vented in accordance with API RP 1604, and as specified herein.

3.5.1 Removal of Product, Pumpable Liquids, and Sludge

Tank product, pumpable liquids, and sludge shall be contained, and stored onsite, prior to disposal. Contaminated water shall be treated as specified. Tank product, pumpable liquids, and sludge shall be analyzed and segregated to recover reusable products by the Contractor prior to being transported to the treatment, storage and disposal (TSD) facility. Tank product, pumpable liquids, and sludge shall be removed and disposed of by the Contractor. No Government facilities shall be used for permanent storage or disposal of the wastes. Temporary storage on Government facilities will be allowed only until testing is complete, manifests (if necessary) are complete, and transportation is arranged. The Contractor shall be responsible for obtaining all required permits. Usable product shall be the property of the Government. The Contractor shall provide approved containers, vehicles, equipment, labor, signs, labels, placards and manifests and associated land disposal restriction notices and notifications, necessary for accomplishment of the work, including materials necessary for cleaning up spills that could occur from tank removal operations.

3.5.2 Contaminated Water Disposal

3.5.2.1 Sampling, Analysis, and Containment

Contaminated water shall be sampled and analyzed both prior to treatment in accordance with the attached Sampling and Analysis Plan (SAP) at the end of this section. Unless otherwise directed, onsite treatment is not authorized. Contaminated water produced from excavation operations and tank pumping treated onsite, shall be analyzed for pH; benzene, ethylbenzene, toluene, and xylene (BETX); total lead; oil and grease; total petroleum hydrocarbons (TPH); polynuclei aromatic hydrocarbons (PAHs) and also in accordance with the SAP. Sampling and analysis shall be performed prior to disposal for every 50,000 gallons of contaminated water treated. Analysis for contaminated water to be taken to an off-site treatment facility shall conform to the requirements of the treatment facility with documentation of all analyses performed furnished to the Contracting Officer in accordance with paragraph RECORDS. Contaminated water shall be contained, stored onsite, and analyzed prior to being transported to the approved treatment, storage and disposal facility and disposed of by the Contractor in accordance with applicable Federal and state disposal regulations. The Contractor shall provide approved containers, vehicles, equipment, labor, signs, labels, placards and manifests and associated land disposal notices and notifications, necessary for accomplishment of the work. Sampling and analyses of contaminated water and treated water and the Contractor and laboratory quality assurance program shall be in accordance with Section 01450 CHEMICAL QUALITY CONTROL.

3.5.2.2 Treatment

Contaminated water shall be treated off-site as approved by the Contracting Officer.

3.6 PURGING AND INERTING

After the tank and piping contents have been removed, but prior to excavation beyond the top of the tank, the Contractor shall disconnect all the piping except the piping needed to purge or inert the tank. Flammable and toxic vapors shall be purged from the tank or the tank made inert in accordance with API RP 1604, with the exceptions that filling with water shall not be used and, if dry ice is employed, the Contractor shall use a minimum of 3 pounds per 100 gallons of tank volume. The tank atmosphere shall be continuously monitored for combustible vapors if the tank is purged, or continuously monitored for oxygen if the tank is inerted.

3.7 EXCAVATION

Excavation areas, as well as work near roadways, shall be marked in accordance with Section 01351 SAFETY, HEALTH, AND EMERGENCY RESPONSE (HTRW/UST).

3.7.1 Exploratory Trenches

Exploratory trenches shall be excavated as necessary to determine the tank location, limits and the location of ancillary equipment.

3.7.2 Tank Excavation

Excavation around the perimeter of the tank shall be performed limiting the amount of potentially petroleum contaminated soil that could be mixed with previously uncontaminated soil. Petroleum contaminated soil shall be segregated in separate stockpiles. The Contractor shall maintain around the tank an excavation of sufficient size to allow workers ample room to complete the work, but also protect the workers from sliding or cave-ins. Sheet piling, bracing, or shoring shall be installed in the absence of adequate side slopes if there is a need for workers to enter the excavated area. Surface water shall be diverted to prevent direct entry into the excavation. Dewatering of the excavation may require a discharge permit by the State and shall be limited to allow adequate access to the tank and piping, to assure a safe excavation, and to ensure that compaction and moisture requirements are met during backfilling. Dewatering may result in the production of petroleum contaminated water and/or free product. Free product shall be recovered from the groundwater only as part of necessary dewatering.

3.7.3 Piping Excavation

Excavation shall be performed as necessary to remove tank piping and ancillary equipment in accordance with paragraphs: Shoring, Tank Excavation, and Open Excavations.

3.7.4 Open Excavations

Open excavations and stockpile areas shall be secured while awaiting confirmation test results from the soil beneath the tank. The excavation shall be backfilled as soon as possible after tank and contaminated soil removals have been completed and confirmation samples have been taken. The Contractor shall divert surface water around excavations to prevent water from directly entering into the excavation.

3.7.5 Stockpiles

Uncontaminated excavated soil and petroleum contaminated soil that is not state-regulated shall be stockpiled and used for backfill in the tank excavation prior to using borrow material or disposed of off-site. Excavated material that is regulated by the state which is visibly stained or exceeds state action levels for TPH, volatile and possibly semi-volatile hydrocarbons depending on the performance criteria for the field screening method shall be considered contaminated and shall be stockpiled, placed in containers such as drums, roll-offs or dumpsters for sampling in accordance with paragraph Stockpiled Material Sampling. Uncontaminated soil shall be stockpiled separately from the contaminated soil, a safe distance away from, but adjacent to, the excavation. Allowable stockpiles of contaminated soil shall be placed on an impermeable membrane a minimum of 10 mils thickness, and covered with a 10 mils sheet as specified. The membrane shall be placed to prevent the stockpiled soil from coming into contact with surface water run-off. The membrane or container cover shall prevent rain or surface water from coming into contact with the contaminated soil, as well as limit the escape of the volatile constituents from the stockpile.

3.8 REMOVAL OF PIPING, ANCILLARY EQUIPMENT, AND TANK

3.8.1 Piping and Ancillary Equipment

All piping and ancillary equipment shall be disconnected from the tank. The piping shall be removed completely (interior and exterior of the tank) to the exterior surface of the tank, where it shall be capped and abandoned in place as directed by the Contracting Officer. All tank ancillary equipment and piping connections shall be capped, except those connections necessary to inert the tank within the excavation zone. The piping exterior and ancillary equipment shall be cleaned to remove all soil and inspected for signs of corrosion and leakage. The Contractor shall ensure no spillage of the piping contents occurs, as specified in the Work Plan, and as required in paragraph SPILLS. If the soil under and around the tank pad is contaminated, the tank pad shall be removed and disposed of off-site at an approved hazardous waste facility. If not contaminated, the tank pad shall remain in place.

3.8.2 Tank

The tank shall be removed from the excavation and the exterior cleaned to remove all soil and inspected for signs of corrosion, structural damage, or leakage. All materials coming into contact with the tank, or in the vicinity of the excavation such as shovels, slings and tools shall be of the non-sparking type. After removal from the excavation, the tank shall be placed on a level surface adjacent to the tank excavation and secured with wood blocks to prevent movement.

3.8.3 Contaminated Soil, Tank and Piping Excavation Examination

After the tank has been removed from the ground, the adjacent and underlying soil shall be examined for any evidence of leakage. The soil shall be visually inspected for staining after removal of all obviously contaminated soil, then screened for the presence of volatile and/or semi-volatile contamination using a real time vapor monitoring instrument and/or immunoassay field kits. Uncontaminated soil or petroleum contaminated soil not regulated by the state as shall be stockpiled onsite per paragraph Stockpiles or transported off-site for disposal. Contaminated soil or suspected contaminated soil shall be containerized, or, if the site is a RCRA-designated CAMU, stockpiled until further disposition. The Contracting Officer shall determine the extent of the contaminated soil to be removed from each site but shall not exceed 250 cubic yards per site. The Contractor shall report any evidence indicating that the amount of contaminated soil may exceed the individual site limit specified, to the Installation's Environmental Coordinator and Contracting Officer the same day it is discovered. If minimal additional excavation is required, the Contracting Officer may allow the Contractor to proceed. If extensive contamination is encountered, the excavation shall be sampled and backfilled in accordance with paragraph BACKFILLING. After the known contaminated soil is removed, the excavation shall be sampled and analyzed in accordance with Section 01450 CHEMICAL DATA QUALITY CONTROL.

3.9 TANK CLEANING

3.9.1 Exterior

Soil shall be removed from the exterior of the tank, piping, and associated equipment to eliminate soil deposition on roadways during transportation to a temporary storage area, ensure markings will adhere to the surfaces, and simplify tank cutting. Soil shall be removed using non-sparking tools. Removed uncontaminated soil and soil not regulated by the state shall be recovered and used as backfill in the former tank excavation or disposed of offsite. Soil believed to be contaminated shall be removed and containerized, or stockpiled with other contaminated soil removed from the excavation.

3.9.2 Temporary Storage

If the tank is stored after the tank exterior is cleaned and ancillary equipment is removed, and prior to being cut into sections, the tank shall be labeled as directed in [API RP 1604](#), placed on blocks, and temporarily stored on a flat area adjacent to the excavation or in the area of the existing tank site. Prior to cleaning the tank interior the tank atmosphere shall be monitored for combustible vapors and purged or inerted if combustible vapors are detected.

3.9.3 Interior

The tank interior shall be cleaned using a high pressure (500 psi), low volume (less than 2 gpm) water spray or steam cleaned until all loose scale and sludge is removed, and contamination, in the form of a sheen, is no longer visible in the effluent stream. The interior surfaces of piping shall also be cleaned, to the extent possible, using the same method used for cleaning the tank. Contaminated water generated from interior cleaning operations (of both piping and tank) shall not exceed the following quantities for each UST cleaned:

| UST VOLUME (GALLONS) | PERCENT OF UST VOLUME |
|----------------------|----------------------------------|
| 1,000 or less | 5 |
| 10,000 or less | 5 or 100 gal., whichever is less |
| 20,000 or less | 1 or 150 gal., whichever is less |
| greater than 20,000 | 1 or 250 gal., whichever is less |

All contaminated water resulting from cleaning operations shall be collected and stored on site or discharged to the installation sanitary sewer after passing through an oil water separator. All contaminated water shall be handled in accordance with paragraph Contaminated Water Disposal. Cleaning shall be accomplished eliminating, to the greatest extent possible, the need for personnel to enter the tank. Cleaning shall be done using specially designed tank cleaning equipment which allows the tank to be cleaned prior to cutting into sections without requiring personnel to enter the tank or, if less specialized equipment is used, the tank shall be partially dissected to overcome confined space entry hazards. This work shall be accomplished in accordance with Section [01351 SAFETY, HEALTH, AND EMERGENCY RESPONSE \(HTRW/UST\)](#).

3.10 SOIL EXAMINATION, TESTING, AND ANALYSIS

3.10.1 Tank Excavation Sampling Procedures

After soil known to be contaminated has been removed or after soil excavation is complete, the excavation shall be sampled with procedures, number, location, and methodology in accordance with state regulations and Section 01450 CHEMICAL DATA QUALITY CONTROL. Samples may be obtained from the pits using a backhoe. Samples shall be collected every 50 feet along the pipe length. Sample preservation and analytical procedures shall conform to Section 01450 CHEMICAL DATA QUALITY CONTROL.

3.10.2 Stockpiled Material Sampling

Stockpiled contaminated soil shall be sampled and preserved in accordance with the approved Sampling and Analysis Plan, and Section 01450 CHEMICAL DATA QUALITY CONTROL. Sampling locations, number and specific procedures shall be as required by the State of Washington Department of Ecology and the disposal facility.

3.10.3 Analysis

Soil samples from the excavation and stockpiled material shall be tested in accordance with the approved Sampling and Analysis Plan, and Section 01450 CHEMICAL DATA QUALITY CONTROL for the following parameters: total petroleum hydrocarbon (TPH), benzene, ethylbenzene, toluene, xylene (BETX), toxicity characteristic leaching procedure (TCLP) and in accordance with the Sampling and Analysis Plan. Copies of all test results shall be provided to the Contracting Officer.

3.11 BACKFILLING

The tank area and any other excavations shall be backfilled as soon as possible after tank and contaminated soil removals have been completed and confirmation samples have been taken and only after the soil test results have been approved. Contaminated soil removal shall be complete after the bottom of the tank excavation is determined to have soil contamination levels below the state standards of 100 ppm TPH and approval by the Contracting Officer. The excavation shall be dewatered if necessary. Stockpiled material subjected to chemical confirmation testing shall be used as backfill if it is found to conform to the requirements of clean fill per appropriate state and local regulations. Backfill consisting of clean fill shall be placed in layers with a maximum loose thickness of 8 inches, and compacted to 90 percent maximum density for cohesive soils and 95 percent maximum density for cohesionless soils. Density tests shall be performed by an approved commercial testing laboratory or by facilities furnished by the Contractor. Test results shall be attached to contractor's Quality Control Report. A minimum of 1 density test shall be performed on each lift. Laboratory tests for moisture density relations shall be determined in accordance with ASTM D 1557, Method B, C, or D, or ASTM D 3017. A mechanical tamper may be used provided that the results are correlated with those obtained by the hand tamper. Field in-place density shall be determined in accordance with ASTM D 1556, ASTM D 2922, or ASTM D 2167.

3.12 DISPOSAL REQUIREMENTS

3.12.1 Treatment, Disposal, and Recycling

Disposal of wastes shall be in accordance with all local, State, and Federal solid and laws and regulations; the RCRA; Section 02120 TRANSPORTATION AND DISPOSAL OF HAZARDOUS MATERIALS; and conditions specified herein. This work shall include all necessary personnel, labor, transportation, packaging, detailed analyses (if required for disposal, manifesting or completing waste profile sheets), equipment, and reports. Product and pumpable liquids removed from the tank shall be recycled to the greatest extent practicable. The tanks removed shall be disposed of at a state approved facility. Each tank disposed of in this manner shall be manifested as required by the State of Washington to document delivery and acceptance at the disposal facility.

3.12.2 Tank and Ancillary Equipment Disposal

After the tank, piping, and ancillary equipment have been removed from the excavation and the tank cleaned, the tank shall be cut into sections with no dimension greater than 5 feet. Tank and piping sections shall be recycled or disposed of in a State approved off-site disposal facility or in a salvage yard at the Defense Reutilization and Marketing Office (DRMO). The tank shall be cut into sections prior to being taken off Government property. The Contractor shall not sell the tank intact. Ancillary equipment shall be recycled or disposed of at an approved off-site disposal facility or in a salvage yard at the DRMO. Piping shall be disconnected from the tank and removed or grouted full of a portland cement and water slurry consisting of 6 gallons of clean water per 94 pound sack of portland cement, thoroughly mixed and free of lumps, unless otherwise indicated.

3.12.3 Transportation of Wastes

Transportation shall be provided in accordance with Department of Transportation (DOT) Hazardous Material Regulations, State, and local requirements, including obtaining all necessary permits, licenses, and approvals. Evidence that a State licensed waste transporter is being used shall be included in the SUBMITTALS.

3.12.4 Salvage Rights

The Contractor shall retain the rights to salvage value of recycled or reclaimed product and metal not turned in to the DRMO or otherwise identified, so long as the requirements of 40 CFR 266 and 40 CFR 279, or the applicable State requirements are met. At the end of the contract, the Contractor shall provide documentation on the disposition of salvaged materials.

3.12.5 Records

Records shall be maintained of all waste determinations, including appropriate results of analyses performed, substances and sample location, the time of collection, and other pertinent data as required by 40 CFR 280, Section 74 and 40 CFR 262 Subpart D, and Section 01450 CHEMICAL DATA QUALITY CONTROL. Transportation, treatment, disposal methods and dates, the quantities of waste, the names and addresses of each transporter and the disposal or reclamation facility, shall also be recorded and available for inspection, as well as copies of the following documents:

- a. Waste analyses or waste profile sheets.

- b. Certifications of final treatment/disposal signed by the responsible disposal facility official.

3.12.6 Documentation of Treatment or Disposal

The wastes, other than recyclable or reclaimable product or metal, shall be taken to a treatment, storage, or disposal facility which has EPA or appropriate state permits waste identification numbers and complies with the provisions of the disposal regulations. Documentation of acceptance of special waste by the original return copy of the manifest, signed by the owner or operator of a facility legally permitted to treat or dispose of those materials shall be furnished to the Contracting Officer not later than 5 working days following the delivery of those materials to the facility; and a copy shall be included in the Tank Closure Report. A statement of agreement from the proposed treatment, storage or disposal facility and certified transporters to accept wastes shall be furnished in the Work Plan to the Contracting Officer not less than 14 days before transporting any wastes. If the Contractor selects a different facility than is identified in the contract Work Plan, documentation shall be provided for approval to certify that the facility is authorized and meets the standards specified in 40 CFR 264.

3.13 SPILLS

Immediate containment actions shall be taken as necessary to minimize effect of any spill or leak. Cleanup shall be in accordance with applicable Federal, State, local laws and regulations, and district policy at no additional cost to the Government. Refer to Section 02120 TRANSPORTATION AND DISPOSAL OF HAZARDOUS MATERIALS for spill response and reporting requirements.

3.14 TANK CLOSURE REPORT

Tank Closure Reports shall follow the format of the Washington State Independent Remedial Action Report (IRAR), Pub 90-52 Guidance for Site Checks and Site Assessments for Underground Storage Tanks to include the following information as a minimum:

- a. A cover letter signed by a responsible company official and Professional Engineer registered in the State of Washington certifying that all services involved have been performed in accordance with the terms and conditions of this specification.
- b. A narrative report describing what was encountered at each site, shall be submitted in accordance with Publications 90-52 and 94-18.
- c. Copies of all analyses performed for disposal.
- d. Copies of all waste analyses or waste profile sheets.
- e. Copies of all certifications of final disposal signed by the responsible disposal installation official.
- f. Information on who sampled, analyzed, transported, and accepted all wastes encountered, including copies of manifests, waste profile sheets, land disposal restriction, notification and certification forms, certificates of disposal, and other pertinent documentation.

- g. Copies of all analyses performed for confirmation that underlying soil is not contaminated, with copies of chain-of-custody for each sample. Analyses shall give the identification number of the sample used. Sample identification numbers shall correspond to those provided on the one-line drawings.
- h. Scaled one-line drawings showing tank locations, limits of excavation, limits of contamination, underground utilities within 50 feet, sample locations, and sample identification numbers.
- i. Progress Photographs. The Contractor shall take a minimum of 4 views of the site showing such things as the location of each tank, entrance/exit road, and any other notable site condition before work begins. After work has been started at the site, the Contractor shall photographically record activities at each work location daily. Photographs shall be 3 x 5 inches and shall include:
 - (1) Soil removal, handling, and sampling.
 - (2) Unanticipated events such as discovery of additional contaminated areas.
 - (3) Soil stockpile area.
 - (4) Tank.
 - (5) Site or task-specific employee respiratory and personal protection.
 - (6) Fill placement and grading.
 - (7) Post-construction photographs. After completion of work at each site, the Contractor shall take a minimum of four (4) views of the site. Prints shall illustrate the condition and location of work and the state of progress. The photographs shall be mounted and enclosed back-to-back in a double face plastic sleeve punched to fit standard three ring binders. Each color print shall show an information box, 1-1/2 x 3-1/2 inches. The information box for the 3 x 5 inch photographs shall be scaled down accordingly, or taped to the bottom of the photo. The box shall be typewritten and arranged as follows:

Project No.

Contract No.

Location

Contractor/Photographer

Photograph No.

Date/Time:

Description

Direction of View

- (8) Provide an electronic file in MS excel format containing the "basic tank info" fields listed below.

Basic Tank Info

| FieldTankID | Content | UST/AST | Capacity | Tank Status | Wall | Condition of tank |
|-------------|---------|---------|----------|-------------|------|-------------------|
| tank one | | | | | | |

tank two etc...

| TANKID | SampleDate | SampleID | Contaminant | Sampler | Location | Lab | Concentration | Value | Qualifier | Units |
|---------|------------|----------|-------------|---------|----------|---------------|---------------|-------|-----------|-------|
| 04076-2 | 25-Aug-97 | 170-S-4 | Diesel | | sidewall | Anatek...etc. | 100 mg/kg | 100 | ND..etc | mg/kg |

| ProjectName | ProjectStatus | Contractor | Contract | IJO# |
|--|---------------|------------|-----------------------|------|
| UST Removal, Cleaning, and Disposal Corrective Action, Ft. Lewis | Completed | | DACW67-90-D-0014/0002 | |

| | |
|--|--|
| | |
|--|--|

**U.S. Army Corps of Engineers
Seattle District
Underground Storage Tank Reporting Requirements
October 2000**

Reporting Requirements Prior to Closure

A notice of intent to close or install an UST shall be submitted to the appropriate regulatory agency (public health department, Department of Ecology, etc.) a minimum of 30 days prior to the start of construction activities. Regulatory approval is required prior to the start of construction. A copy of the 30 day notice can be obtained at: <http://www.ecy.wa.gov/programs/tcp/ust-lust/electrnc.html>.

Non-Release Reporting

A closure and site assessment checklist must be submitted within 30 days to the appropriate regulatory agency. The requirements for a site assessment report are contained in the Washington Department of Ecology Guidance for Site Checks and Site Assessments for Underground Storage Tanks publication 90-52, section 8.2.2. At a minimum the report shall include:

- A site map indicating the location of the UST and sample locations;
- Soil characteristics;
- Sample results;
- Apparent groundwater in the excavation;
- A summary of field activities;
- A description of the sampling data quality;
- A table showing constituents, sample results, and detection limits;
- Conclusions as to whether a release has occurred.

Release Reporting

In accordance with WAC 173-360-372, a release report must be provided to the appropriate regulatory agency within 24 hours. This requirement is applicable to all regulated USTs and non-regulated tanks larger than 1,100 gallons (WAC 173-360-110 2h).

Written reports

Within 20 days after an UST release, a status report shall be forwarded to the appropriate agency. Reporting requirements are included in WAC 173-340-450(5).

Within 90 days a site characterization report shall be submitted (WAC 173-340-450(5)b). The format for the site characterization report shall conform to the Guidance on Preparing Independent Remedial Action Reports (IRAR) (Department of Ecology Publication 94-18, March 1994). Supporting documentation should include;

- Sample analysis results for excavation, stockpiled soils, groundwater
- Disposal certificates for UST and any investigation derived wastes generated
- Disposal certificates from disposal facilities (landfills, treatment-storage-disposal (TSD) facilities, thermal treatment units, etc.)
- Contractor file notes
- Drawings indicating sample depth and locations

An example of an IRAR is included below. In addition to a hard copy of the IRAR, the contractor shall submit an electronic version in MS word (Office 97 or newer version) on CD. The CD report format shall also contain an Excel spreadsheet with the data fields listed below.

Non-Regulatory Reporting Requirements

In addition to the above reporting requirement, UST removal contractors are to submit an excel spreadsheet with the complete information for the following data fields:

Microsoft Excel - UST excel report format.xls

File Edit View Insert Format Tools Data Window Help

Arial 10 B I U

C13

| 1 | Basic Tank Info | | | | | | | | | | |
|----|-----------------|---|---------------|-------------|---------------------------|-------------|---------------|-------------------|-------|-----------|-------|
| 2 | BUILDING | FieldTankID | Content | UST/AST | Capacity | Tank Status | Wall | Condition of tank | | | |
| 3 | | tank one | | | | | | | | | |
| 4 | | tank two etc... | | | | | | | | | |
| 5 | | | | | | | | | | | |
| 6 | TANKID | SampleDate | SampleID | Contaminant | Sampler | Location | Lab | Concentration | Value | Qualifier | Units |
| 7 | 04076-2 | 25-Aug-97 | 170-S-4 | Diesel | | sidewall | Anatek...etc. | 100 mg/kg | 100 | ND..etc | mg/kg |
| 8 | | | | | | | | | | | |
| 9 | ProjectType | ProjectName | ProjectStatus | Contractor | Contract | UO# | | | | | |
| 10 | | UST Removal, Cleaning, and Disposal Corrective Action, Ft. Lewis | Completed | | DACW67-90-D- 0014/0002 | | | | | | |
| 11 | | | | | | | | | | | |
| 12 | | | | | | | | | | | |
| 13 | | | | | | | | | | | |
| 14 | | | | | | | | | | | |
| 15 | | | | | | | | | | | |
| 16 | | | | | | | | | | | |
| 17 | | | | | | | | | | | |
| 18 | | | | | | | | | | | |
| 19 | | | | | | | | | | | |
| 20 | | | | | | | | | | | |
| 21 | | | | | | | | | | | |
| 22 | | | | | | | | | | | |
| 23 | | | | | | | | | | | |
| 24 | | | | | | | | | | | |
| 25 | | | | | | | | | | | |
| 26 | | | | | | | | | | | |
| 27 | | | | | | | | | | | |
| 28 | | | | | | | | | | | |
| 29 | | | | | | | | | | | |

Sheet1 Sheet2 Sheet3

Draw AutoShapes

Start | Inbox - Microsoft Outlook | Microsoft Word - UST Rep... | Microsoft Excel - UST... | 08:37

Forward a separate file with cover letter to Fort Lewis-DPW UST coordinator.

Independent Remedial Action Report

Underground Storage Tank Closure

September 2000

Prepared by:



U.S. Army USACE of Engineers
Seattle District
4735 E. Marginal Way South
Seattle, WA 98134

CONTENTS

| | |
|--|----------|
| 1. PROJECT SUMMARY | 1 |
| 2. SITE DESCRIPTION / LOCATION..... | 2 |
| 2.1 General Site Information..... | 2 |
| 2.2 USACE Contact..... | 2 |
| 2.3 Site Soil Types and Groundwater Characteristics..... | 2 |
| 2.4 Prior Investigations | 2 |
| 3. SITE CHARACTERIZATION AND REMEDIAL ACTIONS | 3 |
| 3.1 UST Closure and Site Assessment..... | 3 |
| 3.2 Release Information | 3 |
| 3.3 Selection of Cleanup Standards | 3 |
| 3.4 Site Characterization and Explanation of Remedial Actions Taken..... | 3 |
| 3.5 Sampling and Analysis Data Assessment and Quality Assurance..... | 5 |
| 3.6 General Sampling and Analysis PARCC Parameters | 5 |
| 3.6.1 Reporting Limits..... | 5 |
| 3.6.2 Precision..... | 5 |
| 3.6.3 Accuracy | 5 |
| 3.6.4 Representativeness | 5 |
| 3.6.5 Comparability | 6 |
| 3.6.6 Completeness | 6 |
| 4. GROUNDWATER INVESTIGATIONS..... | 7 |
| 5. INSTITUTIONAL CONTROLS..... | 7 |
| 6. REGULATORY RECORDS/PERMITS | 7 |
| 7. PCS MANAGEMENT AND HANDLING PRACTICES..... | 7 |
| 8. CONCLUSION AND RECOMMENDATIONS..... | 7 |

TABLES

| | |
|---|---|
| Table 1. UST Decommissioning Information..... | 3 |
|---|---|

Table 2. Results of Chemical Analysis 4

FIGURES

Figure 1. Facility Location Map

Figure 2. Underground Storage Tank Site Location Map

Figure 3. Sample Locations

APPENDICES

Appendix A. UST Site Assessment Checklists

Appendix B. USACE Quality Assurance Report

Appendix C. Disposal Receipts

REFERENCES CITED

PROJECT SUMMARY

This report presents the Independent Remedial Action for the closure of two underground storage tanks (USTs) at _____. The decommissioning was conducted under the direction of the U.S. Army Corps of Engineers (USACE), Seattle District which has the authority to conduct remedial actions under the Department of Defense's (DOD) Defense Environmental Restoration Program (DERP), on Formerly Used Defense Sites (FUDS). This report was prepared according to Washington State Department of Ecology guidance for an Independent Remedial Action under MTCA Chapter 70.105D RCW.

During the December 1998 UST closure project, two USTs were closed-in-place. The confirmation sampling indicated no concentration of petroleum-contaminated soil (PCS) above MTCA Method A soil cleanup levels.

Groundwater was not encountered during the UST closure.

The USACE recommends that the UST site at _____ be granted a status of no further action.

SITE DESCRIPTION / LOCATION

General Site Information

The _____ is located in _____ County _____. See Figures _____.

The site was used (description of site use). The USTs are believed to have been _____ fuel storage for the generator. The only above ground manifestations of the two USTs are two fill pipes and one vent pipe, each of which appears to have been cut off approximately 1½ feet above ground.

USACE Contact

The responsible-party contact representing (Fort Lewis, USACE, other agency) _____ at the following address:

Mailing address with contact information

Site Soil Types and Groundwater Characteristics

Site soil consisted of a sandy silt to a depth of approximately six feet, the limit of the investigation.

Groundwater was not encountered.

Prior Investigations

LIST PRIOR INSPECTIONS, REPORTS, INVESTIGATIONS

SITE CHARACTERIZATION AND REMEDIAL ACTIONS

UST Closure and Site Assessment

_____ contracted by the USACE, decommissioned the USTs in 1998. Table 1 contains information on the two USTs that were under investigation.

Table 1. UST Decommissioning Information

| UST No. | Date Closed-in-place | Location | UST Size (gal) | UST Contents |
|---------|----------------------|--|----------------|--------------|
| 1 | 15 Dec 1998 | Perpendicular and adjacent to the southwest side of generator bunker | 500 | Diesel fuel |
| 2 | 15 Dec 1998 | Perpendicular and adjacent to the southwest side of generator bunker | 500 | Diesel fuel |

Release Information

Based on site observation and results of analytical data, no evidence of a release was found.

Selection of Cleanup Standards

The cleanup levels used for this project were based on the MTCA Method A.

Site Characterization and Explanation of Remedial Actions Taken

In order to minimize the visual and structural impacts of the remedial action at this historically significant site, USACE chose to close the USTs in place by filling the USTs and associated piping with an inert material and capping the pipes. Placing a cap on the pipes was the only visual change in the site. This plan was submitted to State of Washington Office of Archaeology and Historic Preservation. On August 14, 1998 USACE received an *opinion of no effect* for the remedial action.

_____ arrived at the site on December 14, 1998. _____ exposed the USTs by removing approximately two feet of overburden soil. The overburden was stockpiled nearby. A Hanby kit¹ was used to field screen stockpiled soil. Results indicated no contamination above the instrument's detection limit. Four soil samples were collected from the soil stockpile and six confirmation samples were collected from soil underlying the USTs for laboratory analysis. The USTs were filled with an inert foam product. The soil from the stockpile was used to backfill the excavation.

Table 2 contains a summary of the analytical results for samples collected from the site. Figure 3 illustrates sample locations.

¹ Hanby Environmental Laboratory Procedures, Inc., 1721 East Avenue, Katy, TX 77493, (281) 391-4257.

Table 2. Results of Chemical Analysis

| Tank Site | Sample Type | Sample Number | Date Sampled | NWTPH-HCID (mg/kg) | Action Taken |
|---------------------|--------------------|----------------------|---------------------|-------------------------------|---------------------|
| Tank Stockpile | Soil | FCSP1-12148-1 | December 14, 1998 | ND | None required |
| Tank Stockpile | Soil | FCSP2-12148-2 | December 14, 1998 | ND | None required |
| Tank Stockpile | Soil | FCSP3-12148-3 | December 14, 1998 | ND | None required |
| Tank Stockpile (QC) | Soil | FCSP3-12148-4 | December 14, 1998 | ND | None required |
| Tank Stockpile (QA) | Soil | FCSP3-12148-5 | December 14, 1998 | ND | None required |
| Tank 1 center floor | Soil | FC1B-12148-6 | December 14, 1998 | ND | None required |
| Tank 1 east floor | Soil | FC1E-12148-7 | December 14, 1998 | ND | None required |
| Tank 2 center floor | Soil | FC2B-12148-8 | December 14, 1998 | ND | None required |
| Tank 2 east floor | Soil | FC2EW-12148-9 | December 14, 1998 | ND | None required |
| Tank 1 west floor | Soil | FC1WW-12148-10 | December 14, 1998 | ND | None required |
| Tank 2 west floor | Soil | FC2WW-12148-11 | December 14, 1998 | ND | None required |

Table 2 Notes:

Contractor's laboratory is On-Site Environmental, Redmond, WA.

ND Results indicate a concentration less than laboratory's Practical Quantitation Limit (PQL): Gasoline-44, Diesel fuel-88, Heavy Oil-180

QA laboratory is Department of the Army, Corps of Engineers Quality Assurance Branch, Omaha, NE

ND Results indicate a concentration less than QA laboratory's Reporting Limit: Gasoline-10, Diesel fuel-10, Heavy Oil-50

Sampling and Analysis Data Assessment and Quality Assurance

Soil data collected met the data quality objectives outlined in the management plan developed by _____, the remediation contractor. Data from On-Site Environmental, the project laboratory, were reviewed and qualified by the contractor prior to submittal to USACE Seattle District. Analytical data generated during the remedial action was also subjected to chemical quality assurance review by USACE Quality Assurance staff. The data generated by the primary project laboratory was verified and found to be usable for the intended purpose. Appendix B contains the USACE Quality Assurance Report.

General Sampling and Analysis PARCC Parameters

The following assessment summarizes the precision, accuracy, representativeness, comparability and completeness (PARCC) of the environmental data collected for the UST closure.

Analytical work was performed according to the EPA SW-846 methods and total petroleum hydrocarbon method acceptable to the Washington Department of Ecology. Sample detection limits met the project specific requirements of the individual methods. Surrogate recoveries for samples, duplicates, standards, and blanks were consistent and within the prescribed limits.

1.1.1 Reporting Limits

Soil detection limits were acceptable for comparison of reported concentrations to MTCA Method A levels that formed the bases for the UST release confirmation.

1.1.2 Precision

Precision is defined as the degree of agreement between or among independent, similar or repeated measures. While true precision cannot be measured, it can be expressed in terms of analytical variability. Analytical variability is measured as the relative percent difference (RPD) between laboratory replicates and between the matrix spikes (MS) and matrix spike duplicate (MSD) analyses. In the case of Washington TPH methods, a sample duplicate is used for verification of method precision rather than MS/MSD. The laboratory quality control results indicated conformance with project objectives.

1.1.3 Accuracy

Accuracy is the amount of agreement between a measured value and the true value. It is measured as the percent recovery of MS, MSD, blank spikes, blank spike duplicates, organic surrogate compounds and reference materials. In the case of Washington TPH methods, a blank spike is used for verification of method accuracy rather than an MS/MSD. Accuracy results for this project was within levels indicated by project DQOs.

1.1.4 Representativeness

Representativeness is the degree to which sample results represent the system under study. Use of standard sampling techniques and preservation procedures maximized sample representativeness. Environmental sampling was performed according to the plans specifically developed for the action undertaken. The number of representative samples collected for each effort was determined according to the procedures prescribed by Washington State Department of Ecology. The samples were placed in contaminant-free sampling containers, and shipped to the laboratory in accordance with the procedures developed by USACE in compliance with EPA

SW-846 method requirements. The chain of custody and laboratory cooler receipt records indicated that the integrity of the samples was preserved from the point of sampling until the time of analysis. Project primary samples were analyzed within holding times.

1.1.5 Comparability

Comparability is the degree to which data from one study can be compared with data from other similar studies and for comparison of site data to reference values. In general, standardized analytical and sampling methods were used. The Total Petroleum Hydrocarbons (TPH) methods as carried out by the USACE contractor and his laboratory followed specific USACE guidance for standardized petroleum hydrocarbon analysis and followed the methods implemented by the State of Washington (NWTPH Methods after 1997). The data are expected to be comparable for the purposes of site assessment and closure. The USACE quality assurance report (Appendix C) found the results to be comparable between the project and quality assurance (QA) laboratory.

1.1.6 Completeness

Completeness is the amount of usable data obtained during a project compared to the amount of valid data expected to be needed for site decisions. The quality of the analytical results was assessed and found to meet the data quality objectives (DQOs). The final data completeness is regarded as 100% for usable data for this site.

GROUNDWATER INVESTIGATIONS

Groundwater was not encountered during UST decommissioning procedure. Groundwater was not sampled in connection with the UST decommissioning. No risk to groundwater is expected.

INSTITUTIONAL CONTROLS

Based on review of analytical data, no contaminated soil remains at the site. No institutional controls are necessary at this site.

REGULATORY RECORDS/PERMITS

The UST Site Assessment Checklists, found in Appendix A, were reported with the 1999 Field Report written by _____. The Field Report is included in this document in Attachment 2.

PCS MANAGEMENT AND HANDLING PRACTICES

No petroleum contaminated soil was encountered at the site. No PCS was handled or transported in connection with this project.

CONCLUSION AND RECOMMENDATIONS

Based on analysis of the data collected, no impacted soil with concentrations above MTCA Method A cleanup criteria exists at the UST site.

The USACE recommends that the UST site at the location be granted a status of no further action.

Figures

Figure 1. Facility Location Map

Figure 2. Underground Storage Tank Site Location Map

Figure 3. Sample Locations

Appendix A

UST Site Assessment Checklists

Appendix B
USACE Quality Assurance Report

Appendix C

Disposal Receipts

This page intentionally blank

SECTION 02120

CHARACTERIZATION HANDLING TRANSPORTATION AND DISPOSAL OF WASTE

PART 1 GENERAL

1.1 REFERENCES

The publications listed are incorporated by reference in this specification. Some state standards and CERCLA specific rules may not apply to all delivery orders. The publications are referred to in the text by basic designation only.

CODE OF FEDERAL REGULATIONS (CFR)

| | |
|------------|---|
| 40 CFR 61 | National Emission Standards for Hazardous Air Pollutants |
| 40 CFR 261 | Identification and Listing of Hazardous Waste |
| 40 CFR 262 | Standards Applicable to Generators of Hazardous Waste |
| 40 CFR 263 | Standards Applicable to Transporters of Hazardous Waste |
| 40 CFR 264 | Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities |
| 40 CFR 265 | Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities |
| 40 CFR 266 | Standards for the Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities |
| 40 CFR 268 | Land Disposal Restrictions |
| 40 CFR 270 | EPA Administered Permit Programs: The Hazardous Waste Permit Program |
| 40 CFR 279 | Standards for the Management of Used Oil |
| 40 CFR 300 | National Oil and Hazardous Substances Pollution Contingency Plan |
| 40 CFR 302 | Designation, Reportable Quantities, and Notification |
| 40 CFR 761 | Polychlorinated Biphenyls (PCB's) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions |

| | |
|---|--|
| 49 CFR 107 | Hazardous Materials Program Procedures |
| 49 CFR 172 | Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements |
| 49 CFR 173 | Shippers - General Requirements for Shipments and Packaging |
| 49 CFR 178 | Specifications for Packaging |
| STATE OF WASHINGTON ADMINISTRATIVE CODE (WAC) | |
| WAC-173-303 | Dangerous Waste Regulations |

1.2 SUBMITTALS

Government approval is required for submittals with a “GA” designation; submittals having an “FIO” designation are for information only. The following shall be submitted in accordance with Section 01300(01330) SUBMITTAL PROCEDURES:

Waste Management Plan; GA

The Contractor shall submit the Waste Management Plan as a Section of the Corporate Management Plan (See Specification Section 01101: MANAGEMENT PLAN AND FIELD REPORTS). Prior to start of work, a plan detailing the manner in which wastes shall be sampled, analyzed, identified, labeled and managed. The plan shall discuss how the following issues will be addressed and provide the requested information: Waste Analysis; On-site Hazardous Waste Management, Off-site Hazardous Waste Management; Non-Hazardous Waste Management; Applicable EPA ID numbers; Asbestos Waste Management; Waste Minimization Practices; Record keeping; List of Emergency Contacts; Solid waste management and Site Security. All subcontractors shall comply with the Contractor’s Waste Management Plan. The Contractor shall coordinate with the Fort Lewis Environmental Services (967-3268), for Specific Fort Lewis Hazardous materials management.

Recordkeeping; GA.

Contractor shall maintain all information necessarily to file state annual or EPA biennial reports for all hazardous waste transported, treated, stored, or disposed of under this contract. The Contractor shall not forward these data directly to the regulatory agency but to the Contracting Officer at the specified time. The submittal shall contain all the information necessary for filing of the formal reports in the form and format required by the governing Federal or state regulatory agency. A cover letter shall accompany the data to include the contract number, Contractor name, and project location. Original documents shall be forwarded to the Fort Lewis Environmental Services offices through the Contracting Officer.

Exception Reports: GA

In the event that a manifest copy documenting receipt of hazardous waste at the treatment, storage and disposal facility is not received within 35 days of shipment initiation, the Contractor shall prepare and submit an exception report to the Contracting Officer within 37 days of shipment initiation.

Qualifications: GA.

Submit as a Section of the Waste Management Plan copies of the current certificates of registration issued to the Contractor and/or subcontractors or written statements certifying exemption from these requirements

Certificates of Disposal: GA.

Submit as a Section of the Final Report which is detailed in Specification Section 01101: MANAGEMENT PLANS AND FIELD REPORTS. Certificates documenting the ultimate disposal of hazardous wastes, polychlorinated biphenyls (PCB's), and/or asbestos within 180 days of initial shipment. Receipt of these certificates will be required for final payment.

Shipping Documents: GA.

Submit all transportation related shipping documents to the Contracting Officer including draft hazardous waste manifests, draft land disposal restriction notifications, draft asbestos waste shipment records, draft manifests for PCBs, draft bill of lading for hazardous materials, lists of corresponding proposed labels, packages, marks, and placards to be used for shipment, waste profiles, and supporting waste analysis documents, as applicable, shall be submitted for review a minimum of 14 days prior to anticipated pickup.

Packaging assurances shall be furnished prior to transporting hazardous material; "generator copies" of hazardous waste manifests, land disposal restriction notifications, asbestos waste shipment records, "generator copies" of manifests used for initiating shipment of PCB's, used oil invoices/shipment records, bill of lading supporting waste analysis documents shall be furnished when shipments are originated. Receipt copies of asbestos waste shipment records at the designated disposal facility shall be furnished not later than 35 days after acceptance of the shipment.

Notices of Non-Compliance and Notices of Violation; F10

Submit notices of non-compliance or notices of violation by a Federal, state or local regulatory agency issued to the Contractor in relation to any work performed under this contract. The Contractor shall immediately provide copies of such notices to the Contracting Officer. The Contractor shall also furnish all relevant documents regarding the incident and any information requested by the Contracting Officer, and shall coordinate its response to the notice with the Contracting Officer or his/her designated representative prior to submission to the notifying authority. The Contractor shall also furnish a copy to the Contracting Officer all documents submitted to the regulatory authority, including the final reply to the notice and all other materials, until the matter is resolved.

1.3 QUALIFICATIONS

1.3.1 Hazardous Waste Specialist

The Contractor shall designate, by position and title one person to act as the Hazardous Waste Specialist (HWS) for this contract. The HWS shall serve as the single point of contact for all environmental regulatory matters and shall have overall responsibility for total environmental compliance at the site including but not limited to accurate identification and classification of hazardous waste and hazardous materials; determination of proper shipping names; identification of marking, labeling, packaging and placarding requirements; completion of waste profiles, hazardous waste manifests, asbestos waste shipment records, PCB manifests, bill of lading, exception and discrepancy reports; and all other environmental documentation. The HWS shall have, at a minimum, one year of specialized experience in the management and transportation of hazardous waste in addition to the requirements for 49 CFR 172 and DOT Dockets HM-126F and HM-181.

1.3.2 Training

The Contractor's employees transporting hazardous materials or preparing hazardous materials for transportation shall be trained, tested, and certified in accordance with 49 CFR 172 and DOT Dockets HM-126 and HM-181.

1.3.3 Certification

The Contractor and/or subcontractors transporting hazardous materials shall possess a current certificate of registration issued by the Research and Special Programs Administration (RSPA), U.S. Department of Transportation, when required by 49 CFR 107, Subpart G.

1.4 LAWS AND REGULATIONS REQUIREMENTS

Work shall meet or exceed the minimum requirements established by applicable Federal, state, and local laws and regulations. These requirements are amended frequently and the Contractor shall be responsible for complying with amendments, as they become effective. In the event that compliance exceeds the scope of work or conflicts with specific requirements of the contract, the contractor shall notify the Contacting Officer immediately.

1.5 DEFINITIONS

- a. Hazardous Material. A substance or material which has been determined by the Secretary of Transportation to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce, and which has been so designated pursuant to the Hazardous Materials Transportation Act, 49 U.S.C. Appendix Section 1801 et seq. The term includes materials designated as hazardous materials under the provisions of 49 CFR 172, Sections 101 and 102 and materials which meet the defining criteria for hazard classes and divisions in 49 CFR 173. EPA designated hazardous wastes are also hazardous materials.

- b. Hazardous Waste. A waste which meets criteria established in RCRA or specified by the EPA in 40 CFR 261 or which has been designated as hazardous by a RCRA authorized state program.

PART 2 PRODUCTS

2.1 WASTE ANALYSIS

The Contractor shall detail how they plan to characterize known and unknown wastes encountered. For Unknown waste they shall detail waste sampling procedures, waste analysis procedures, and waste identification and labeling. For known waste the contractor shall detail label confirmation and/or identification, waste sampling procedures, and waste analysis. All waste sampling and analysis shall be performed in accordance with 40 CFR 261, 40 CFR 264, and applicable state regulations. The Sampling and Analysis Plan required for submittal in Specification Section 02081(02115) shall be included in the Waste Management Plan and shall address waste sampling and analysis.

2.2 MATERIALS

The Contractor shall provide all of the materials required for the packaging, labeling, marking, placarding and transportation of hazardous wastes and hazardous materials in conformance with Department of Transportation standards. Details in this specification shall not be construed as establishing the limits of the Contractor's responsibility.

2.2.1 Packaging

The Contractor shall provide bulk and non-bulk containers for packaging hazardous material/wastes consistent with the authorizations referenced in the Hazardous Materials Table in 49 CFR 172, Section 101, Column 8. Bulk and non-bulk packaging shall meet the corresponding specifications in 49 CFR 173 referenced in the Hazardous Materials Table, 49 CFR 172, Section 101. Each packaging shall conform to the general packaging requirements of Subpart B of 49 CFR 173, to the requirements of 49 CFR 178 at the specified packing group performance level, to the requirements of special provisions of column 7 of the Hazardous Materials Table in 49 CFR 172, Section 101, and shall be compatible with the material to be packaged as required by 40 CFR 262. The Contractor shall also provide other packaging related materials such as materials used to cushion or fill voids in overpacked containers, etc. Sorbent materials shall not be capable of reacting dangerously with being decomposed by, or being ignited by the hazardous materials being packaged. Additionally, sorbents used to treat free liquids to be disposed of in landfills shall be non-biodegradable as specified in 40 CFR 264 Section 314.

2.2.2 Markings

The Contractor shall provide markings for each hazardous material/waste package, freight container and transport vehicle consistent with the requirements of 49 CFR 172, Subpart ED and 40 CFR 262.32 (for hazardous waste); 40 CFR 761.45 (for PCB's); 40 CFR 61.149(d) (for asbestos). Markings must be capable of withstanding, without deterioration or substantial color change, a 180-day exposure to conditions reasonably expected to be encountered during container storage and transportation.

2.2.3 Labeling

The Contractor shall provide primary and subsidiary labels for hazardous materials/wastes consistent with the requirements in the Hazardous Materials Table in 49 CFR 172.101, Column 6. Labels shall meet design specifications required by 49 CFR 172, Subpart E including size, shape, color, printing, and symbol requirements. Labels shall be durable and weather resistant and capable of withstanding, without deterioration or substantial color change, a 180-day exposure to conditions reasonably expected to be encountered during container storage and transportation.

2.2.4 Placards

For each off-site shipment of hazardous material/waste, the Contractor shall provide primary and subsidiary placards consistent with the requirements of 49 CFR 172, Subpart F. Placards shall be provided for each side and each end of bulk packaging, freight containers, transport vehicles, and rail cars requiring such placarding. Placards may be plastic, metal, or other material capable of withstanding, without deterioration, a 30-day exposure to open weather conditions and shall meet design requirements specified in 49 CFR 172, Subpart F.

2.2.5 Spill Response Materials

The Contractor shall provide spill response material, including, but not limited to, containers, adsorbent, shovels, and personal protective equipment. Spill response materials shall be available at all times in which hazardous materials/wastes are being handled or transported. Spill response materials shall be compatible with the type of material being handled.

2.3 EQUIPMENT AND TOOLS

The Contractor shall provide miscellaneous equipment and tools necessary to handle hazardous materials and hazardous wastes in a safe and environmentally sound manner

PART 3 EXECUTION

3.1 ON-SITE HAZARDOUS WASTE MANAGEMENT

These paragraphs apply to Government owned waste only. Contractors are prohibited by 10 U.S.C. 2692 from storing contractor owned waste on site for any length of time. The Contractor shall be responsible for ensuring compliance with all Federal, state and local hazardous waste laws and regulations and shall verify those requirements when preparing reports, waste shipment records, hazardous waste manifests, or other documents. The Contractor shall identify, hazardous wastes using criteria set forth, in 40 CFR 261 or all applicable state and local laws, regulations, and ordinances. When accumulating hazardous waste on-site the Contractor shall comply with generator requirements in 40 CFR 262 and any applicable state or local law or regulations. On-site accumulation times shall be restricted to applicable time frames referenced in 40 CFR 262, Section .34 and any applicable state or local law or regulation. Accumulation start dates shall commence when waste is first generated (i.e. containerized or otherwise collected for discard). The Contractor shall only use containers in good condition and compatible with the waste to be stored. The Contractor shall be responsible for ensuring containers are closed except when adding or removing waste. The Contractor shall be responsible for immediately marking all hazardous waste containers with the words “hazardous waste” and other information required by 40 CFR 262, Section .32 and any applicable state or local law or regulation as soon as the waste is containerized. An additional marking shall be placed on containers of “unknowns” designating the date sampled and the suspected hazard. The Contractor shall be responsible for inspecting containers for signs of deterioration and shall be responsible for responding to any spills or leaks. The Contractor shall inspect all hazardous waste areas weekly and shall provide written documentation of the inspection. Inspection logs will contain date and time of inspection, name of individual conducting the inspection, problems noted, and corrective actions taken.

3.1.1 Waste Classification

The Contractor, in consultation with the waste generator, shall identify all waste codes applicable to each hazardous waste stream based on requirements in 40 CFR 261 or any applicable state or local law or regulation. The Contractor shall also identify all applicable treatment standards in 40 CFR 268 and state land disposal restrictions and shall make a determination as to whether or not the waste meets or exceeds the standards. Waste profiles, analyses, classification and treatment standards information shall be submitted to Contracting Officer for review and approval.

3.1.2 NOT USED

3.1.3 Waste Management

The contractor shall prepare a plan detailing the treatment the manner in which hazardous and non-hazardous wastes shall be managed. At a minimum the following items related to waste management shall be discussed in the Corporate Management Plan, The Task Order Work Plan, or the Final Report (See Specification Section 01101: MANAGEMENT PLANS AND FIELD REPORTS) as applicable.

3.1.3.1 Types of wastes anticipated to be managed. This should include a discussion of processes which are generating the waste, the volumes anticipated, and the EPA/state waste codes associated with the waste. See 40 CFR 261 subpart C and D for EPA waste codes.

3.1.3.2 The regulatory status of the waste. In other words, whether the waste is subject to large quantity generator, small quantity generator or conditionally exempt small quantity generator standards. See 40 CFR 262.34.

3.1.3.3 The locations in which wastes will be accumulated will be discussed. This should discuss whether these are 90/180 day accumulation areas, satellite accumulation points, or permitted storage areas. Preferably a map indicating the precise location should be included. See 40 CFR 262.34

3.1.3.4 Inspection requirements. This should discuss what will be inspected, how often it will be inspected, who will conduct the inspection, what the inspection log will contain, and the where the inspection records will be retained, See 40 CFR 262.34, 40 CFR 265.174, and 40 CFR 265.195.

3.1.3.5 Contingency Planning. Large quantity generators are required to have a contingency plan. Small quantity generators are required to post certain information. See 40 CFR 262.34 and 40 CFR 265 Subparts C and D.

3.1.3.6 Marking requirements. This should discuss what type of hazardous waste markings are to be utilized during accumulation. See 40 CFR 262.32.

3.1.3.7 Container types. This should discuss the types of containers used to accumulate hazardous wastes. Compatibility with the waste being stored should be considered as well as whether the containers will meet packaging requirements for off-site transport. See 49 CFR 171.178.

3.1.3.8 Treatment requirements. This should discuss how wastes will be treated to meet land disposal restrictions. See 40 CFR 268.40. If elementary neutralization is being performed to render waste non-hazardous, a statement should be included which indicates the activity is being performed under a permit exclusion. See 40 CFR 270.1(c)(2)(v).

3.1.3.9 Disposal requirements. This should discuss whether wastes and/or treatment residues will be disposed of in a Subtitle C, hazardous waste disposal facility or in a Subtitle D, nonhazardous waste disposal facility.

3.1.3.10 Proposed treatment, storage or disposal facilities (TSDFs). This should provide the name, address, telephone number, and EPA ID number of the TSDFs proposed to be utilized for the waste.

3.1.3.11 LDR forms. This should provide copies of the LDR forms from the proposed receiving facilities.

3.1.3.12 Recycling facilities. If waste is to be recycled under an exemption, there should be a discussion on how the waste is to be recycled and the exemption (if any) being utilized. The name, address, and phone number of the facility proposed for recycling should be provided.

3.2 OFF-SITE HAZARDOUS WASTE MANAGEMENT

The Contractor shall use RCRA Subtitle C permitted facilities which meet the requirements of 40 CFR 264 or facilities operating under interim status which meet the requirements of 40 CFR 265. Off-site treatment, storage, and/or disposal facilities with significant RCRA violations or compliance problems (such as facilities known to be releasing hazardous constituents into ground water, surface water, soil, or air) shall not be used.

3.2.1 Description of TSD Facility and Transporter

The Contractor shall provide the Contracting Officer with EPA ID numbers, names, locations (address), and telephone numbers of TSD facilities and transporters. This information shall be contained in the Hazardous Waste Management Plan for approval prior to waste disposal.

3.2.2 Status of Facility

Facilities receiving hazardous waste must be permitted in accordance with 40 CFR 270 or operating under Interim status in accordance with 40 CFR 265 requirements or must be permitted by an authorized state program. Additionally, prior to using a TSD Facility, the Contractor shall contact the EPA Regional Off-site Coordinator specified in 40 CFR 300, Section 440, to determine the facilities status and document all information necessary to satisfy the requirements of the EPA Off-Site policy and furnish this information to the Contracting Officer.

3.2.3 Packaging Certification

Prior to shipment of any hazardous material off-site, the Contractor's HWS shall provide written certification to the Contracting Officer that hazardous materials have been properly packaged, labeled, and marked in accordance with Department of Transportation and EPA requirements. The contractor's HWS shall have completed the training requirements specified in 49 CFR 172.

3.2.4 Transportation

The Contractor shall use manifests for transporting hazardous wastes as required by 40 CFR 263 or any applicable state or local law or regulation. Transportation shall comply with all requirements in the Department of Transportation referenced regulations in the 49 CFR series. The Contractor shall acquire manifests in accordance with the hierarchy established in 40 CFR 262, Section .21. The Contractor shall prepare hazardous waste manifests for each shipment of hazardous waste shipped off-site. Manifests shall be completed using instructions in 40 CFR 262, Subpart B and any applicable state or local law or regulation. Manifests and waste profiles shall be submitted to Contracting Officer for review and approval. The Contractor shall prepare land disposal restriction notifications as required by 40 CFR 268 or any applicable state or local law or regulation for each shipment of hazardous waste. Notifications shall be submitted with the manifest to the Contracting Officer for review and approval.

3.2.5 Treatment and Disposal of Hazardous Wastes

The hazardous waste shall be transported to an approved hazardous waste treatment, storage, or disposal facility within 90 days of the accumulation start date on each container. The Contractor shall ship hazardous wastes only to facilities which are properly permitted to accept the hazardous waste or operating under interim status. The Contractor shall ensure wastes are treated to meet land disposal treatment standards in 40 CFR 268 prior to land disposal. The Contractor shall propose TSD facilities via submission of the Hazardous Waste Management Plan, subject to the approval of the Contracting Officer.

3.3 HAZARDOUS MATERIALS MANAGEMENT

The Contractor, in consultation with the generator shall evaluate prior to shipment of any material off-site whether the material is regulated as a hazardous waste in addition to being regulated as a hazardous material; this shall be done for the purpose of determining proper shipping descriptions, marking requirements, etcetera, as described below.

3.3.1 Identification of Proper Shipping Names

The Contractor shall use 49 CFR 172, Section 101 to identify proper shipping names for each hazardous material (including hazardous wastes) to be shipped off-site. Proper shipping names shall be submitted to the Contracting Officer in the form of draft shipping documents for review and approval.

3.3.2 Packaging, Labeling; and Marking

The Contractor shall package, label, and mark hazardous materials/wastes using the specified materials and in accordance with the referenced authorizations. The Contractor shall mark each container of hazardous waste of

418L (110 gallons) or less with the following:

“HAZARDOUS WASTE -Federal Law Prohibits Improper Disposal.

If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency.

Generator’s name _____ Manifest Document Number_____.”

3.3.3 Shipping Documents

The Contractor shall ensure that each shipment of hazardous material sent off-site is accompanied by properly completed shipping documents.

3.3.3.1 PCB Waste Shipment Documents

The Contractor shall prepare hazardous waste manifests for each shipment of PCB waste shipped off-site. Manifests will be completed using instructions in 40 CFR 761, Sections .207 and .208 and all other applicable requirements. Documents shall be submitted to Contracting Officer for review and approval.

3.3.3.2 Asbestos Waste Shipment Documents

The Contractor shall prepare waste shipment records as required by 40 CFR 61 for shipments of asbestos. Waste shipment records shall be submitted to the Contracting Officer for review and approval. Waste shipment records shall be signed by the Contractor.

3.3.3.3 Other Hazardous Material Shipment Documents

The Contractor shall prepare a bill of lading for each shipment of hazardous material which is not accompanied by a hazardous waste manifest or asbestos waste shipment record which fulfills the shipping paper requirements. The bill of lading shall satisfy the requirements of 49 CFR 172, Subpart C, (and 40 CFR 279 if shipping used oil) and any applicable state or local law or regulation, and shall be submitted to the Contracting Officer for review and approval. For laboratory samples and treatability study samples, the Contractor shall prepare bills of lading and other documentation as necessary to satisfy conditions of the sample exclusions in 40 CFR 261, Section .4(d) and (e) and any applicable state or local law or regulation. Bill of ladings requiring shipper’s certifications shall be signed by the Contractor.

3.4 OBTAINING EPA ID NUMBERS

The Contractor shall complete EPA Form 8700-12, Notification of Hazardous Waste Activity, and submit to the Contracting Officer for review and approval if not provided by the facility. The Contractor shall allow a minimum of 30 days for processing the application and assigning the EPA ID number. Shipment shall be made not earlier than one week after receipt of the EPA ID number.

3.5 SPECIAL REQUIREMENTS FOR ASBESTOS WASTES

The Contractor shall only accept waste with asbestos containing material (ACM) that is packaged and labeled in accordance with 40 CFR 61 and 29 CFR 1926.1101. The Contractor shall complete the waste shipment record and dispose of the ACM at the landfill that has been approved in the Management Plan.

3.6 WASTE MINIMIZATION

The Contractor shall minimize the generation of hazardous waste to the maximum extent practicable. The Contractor shall take all necessary precautions to avoid mixing clean and contaminated wastes. The Contractor shall identify and evaluate recycling and reclamation options as alternatives to land disposal. Requirements of 40 CFR 266 shall apply to: hazardous wastes recycled in a manner constituting disposal; hazardous waste burned for energy recovery; lead-acid battery recycling; and hazardous wastes with economically recoverable precious metals.

3.7 RECORDKEEPING

The Contractor shall be responsible for maintaining adequate records to support information provided to the Contracting Officer regarding exception reports, annual reports, and biennial reports. The Contractor shall be responsible for maintaining asbestos waste shipment records for a minimum of 3 years from the date of shipment or any longer period required by any applicable law or regulation or any other provision of this contract.

3.8 NOT USED

3.9 EMERGENCY CONTACTS

The Contractor shall be responsible for complying with the emergency contact provisions in 49 CFR 172, Section .604. Whenever the Contractor ships hazardous materials, the Contractor shall provide a 24-hr emergency response contact and phone number of a person knowledgeable about the hazardous materials being shipped and who has comprehensive emergency response and incident mitigation information for that material, or has immediate access to a person who possesses such knowledge and information. The phone must be monitored on a 24-hour basis at all times when the hazardous materials are in transportation including during storage incidental to transportation. The Contractor shall ensure that information regarding this emergency contact and phone number are placed on all hazardous materials shipping documents. The Contractor shall designate an emergency coordinator and post the following information at areas in which hazardous wastes are managed:

- a. The name of the emergency coordinator.
- b. Phone number through which the emergency coordinator can be Contacted on a 24 hour basis.
- c. The telephone number of the local fire department
- d. The location of fire extinguishers and spill control materials.

3.10 SOLID WASTE MANAGEMENT

The Contractor shall use facilities which meet the requirements in 40 CFR 257 for Solid Waste Disposal Facilities or facilities which meet the criteria for municipal solid waste landfills listed in 40 CFR 258. Off-site treatment, storage, and/or disposal facilities with significant RCRA violations or compliance problems (such as facilities known to be releasing hazardous constituents into ground water, surface water, soil or air) shall not be used.

3.11 SECURITY

The Contractor shall comply with all local security requirements and to be responsible for assuring all accumulation areas used for storage of waste designated for disposal is secure.

PAGE

Attachment A
SAMPLE OFF-SITE POLICY CERTIFICATION MEMO

Project/Contract #: _____

Waste Stream: _____

Primary TSD Facility, EPA ID # and Location: _____

Alternate TSD Facility, EPA ID # and Location: _____

| <u>EPA Region</u> | <u>Primary Contact</u> | <u>Secondary Contact</u> |
|-------------------|------------------------|--------------------------|
| I | (617) 573-5755 | (617) 573-1754 |
| II | (212) 264-9504 | (212) 264-2638 |
| III | (215) 597-1057 | (215) 597-8338 |
| IV | (404) 347-7603 | (404) 347-7603 |
| V | (312) 353-7921 | (312) 886-4445 |
| VI | (214) 655-2282 | (214) 655-2281 |
| VII | (913) 551-7816 | (913) 551-7667 |
| VIII | (303) 293-1823 | (303) 293-1506 |
| IX | (415) 744-2129 | (415) 744-2114 |
| X | (206) 553-6646 | (206) 553-1061 |

EPA representative contacted: _____

EPA representative phone number: _____

Date contacted: _____

Comment: _____ The above EPA representative was contacted on _____. As of that date the above sites were considered acceptable in accordance with the Off-Site Policy in 40 CFR 300.440.

Signature: _____

Date: _____

Phone number: _____

This page intentionally blank

SECTION 02220
DEMOLITION

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

DEPARTMENT OF TRANSPORTATION REGULATIONS

| | |
|------------|--|
| 49 CFR 107 | Hazardous Materials Program Procedures |
| 49 CFR 172 | Hazardous Materials Table. Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements |
| 49 CFR 173 | Shippers - General Requirements for Shipments and Packagings |
| 49 CFR 178 | Specifications for Packagings |

FORT LEWIS REGULATION

| | |
|-----------|--|
| FTL 200-1 | Environmental Protection and Enhancement |
|-----------|--|

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)

| | |
|--------------------------|-----------------------------------|
| 29 CFR 1926.1101 | Asbestos in Construction Standard |
| 29 CFR 1926.62 | Lead in Construction Standard |
| 29 CFR 1926 Subpart T | Demolition |

PUGET SOUND CLEAN AIR AGENCY (PSCAA)

| | |
|------------------------------|----------------------------|
| Article 4, Regulation III | Asbestos Control Standards |
|------------------------------|----------------------------|

STATE OF WASHINGTON ADMINISTRATIVE CODES

| | |
|----------------|------------------------|
| WAC 296-62-054 | Hazard Communication |
| WAC 296-62-071 | Respiratory Protection |

| | |
|----------------|---|
| WAC 296-62-077 | Part-I-Asbestos, Tremolite, Anthophilite and Actinolite |
| WAC 296-62.145 | Confined Spaces |
| WAC 296-62-300 | Hazardous Waste Operations and Emergency Response |
| WAC 296-65 | Safety Standards for Asbestos Removal and Encapsulation |
| WAC 296-155 | Safety Standards for Construction Work |

U S ARMY CORPS OF ENGINEERS

EM-385-1-1 (Sept 96) Safety and Health Requirements Manual

APPLICABLE PUBLICATIONS

(Oct 1996) Pierce County: Recycling Haulers and Markets

(January 1996) King County: Contractors' Guide to Handling Waste
Solid Waste Recycling Guide

96-503 (May 1996) Department of Ecology: Environmental Handbook for
Washington Construction Contractors

OSHA 3096 (1995) Asbestos Standard for the Construction Industry

OSHA 3142 (1993) Lead in Construction

1.2 GENERAL REQUIREMENTS

The work includes demolition, salvage of identified items and materials, and removal of resulting rubbish and debris and restoration of the site to match existing conditions. Complete building demolition includes (but is not limited to) fencing the site, obtaining all permits, capping all utilities, an asbestos survey, asbestos abatement, demolition, debris loading, debris hauling, debris disposal, site restoration (includes grading and hydroseeding or gravel), and submittal of the final report and 1354 checklist for each Task Order. Demolition shall not proceed until an asbestos survey has been conducted on the building and the asbestos survey report has been approved by the COR (see Specification Section 02070 ASBESTOS SURVEY). Except as allowed by regulations, removal of all asbestos containing materials (ACM) shall also be completed (see Specification Section 02080(13280) ASBESTOS ABATEMENT). Any ACM encountered during building demolition shall be removed in accordance with Specification Section 02080(13280) ASBESTOS ABATEMENT. All hazardous materials in the building shall also be removed prior to demolition. Removal and disposal of underground and aboveground heating oil storage tanks specified under Specification Section 02081(02115) UNDERGROUND/ABOVE GROUND STORAGE TANK REMOVAL may be performed in parallel with building demolition.

1.3 SUSMITTALS

Government approval is required for submittals with a “GA” designation; submittals having an “FIO” designation are for information only. Submittals with “MP” designation are required to be submitted under the Management Plan which is specified in Section 01101: MANAGEMENT PLAN AND FIELD REPORTS. The following shall be submitted in accordance with Section 01300(01330) SUBMITTAL PROCEDURES:

Demolition Waste Management Plan; MP

This plan shall provide the procedures proposed for the accomplishment of the demolition work and management of the resulting wastes. The procedures shall provide for safe conduct of the work and include procedures and methods to provide necessary supports, lateral bracing and shoring when required, careful removal and disposition of materials specified to be salvaged, protection of property which is to remain undisturbed, coordination with other work in progress, and timely disconnection of utility services. The procedures shall include a detailed description of the methods and equipment to be used for each operation, and the sequence of operations. The waste management section shall include a description of how all the wastestreams will be handled and transported. The plan shall also include the following information:

1. Landfill locations: The name of the landfill(s) where waste~~te~~h will be disposed of, the amount of solid waste disposed of and the applicable landfill tipping fee(s), and the projected cost of disposing of all Project waste in the landfill(s).
2. Alternatives to Landfilling: A list of and the quantities of the waste materials from the Project that will be separated for reuse, salvage, or recycling. The name of the recycling facility(ies), the cost to turn in recyclables, the amount and type of commodities turned in for recycling.
3. Materials Handling Procedure: A description of the means of transportation of the recyclable material (whether materials will be site-separated and self-hauled to designated centers, or whether mixed materials will be collected by a waste hauler and removed from the site) and hauler and destination of materials.
4. Names and the Environmental Compliance Officer (ECO) and a Hazardous Waste Technician (HWT) as indicated in Specification Section 01061(01355): ENVIRONMENTAL PROTECTION.

Addendums; GA

Addendums to the Demolition/Waste Management Plan shall be submitted. Only one submittal of a Demolition/Waste Management Plan is required where addendums are required as changes to the Demolition/Waste Management Plan occur. Addendums shall include all applicable site-specific information and note all changes in the staff involved with the building demolition. The applicable building and permit numbers shall be noted in the addendums. The addendums to Demolition/Waste Management Plan shall include site specific descriptions. The plan shall all also provide required documentation of new disposal facilities, new transportation practices, other temporary waste storage facilities and changes in wastestream management.

Notice of Intent for Construction Activity; FIO.

See Specification Section 1061(01355): ENVIRONMENTAL PROTECTION.

PSCAA Application to Perform a Demolition; FIO

The completion of the Puget Sound Clean Air Agency (PSCAA) Notice of intent to Demolish (NOD) form as provided PSCAA in accordance with Regulation III, Article 4, Section 4.03. Submittal of the draft NOD to the Contracting Officer and ENRD must be in sufficient time to allow for review and revision with ultimate submittal to PSCAA at least 10 days before commencing demolition activities. Amendments to the permits shall also be provided to the Contracting Officer and ENRD. Contractor shall be responsible for determining fee basis and paying all filing fees. See Specification Section 01061(01355): ENVIRONMENTAL PROTECTION.

Notice of Demolition Completion; FIO.

A final report documenting demolition activities and disposal location for each category of waste shall be submitted to the Contracting Officer and ENRD within 30 days of task order completion.

1.4 DUST CONTROL

The amount of dust resulting from demolition shall be controlled to prevent the spread of dust to occupied portions of the construction site and to avoid creation of a nuisance in the surrounding area. In general, no visible dust emissions shall be allowed. In accordance with local regulations, the use of “ best available control technology ” to control dust generated during demolition shall be used. Care should be taken when using water during objectionable or unsafe conditions such as ice, flooding or stormwater pollution.

1.5 PROTECTION

1.5.1 Protection of Personnel

See Specification Section 01110(01351) HUMAN HEALTH AND SAFETY REQUIREMENTS.

1.5.2 Fencing.

All sites shall be completely fenced using a six-foot-high temporary chainlink fence. This shall be done prior to any work on the building and maintained until the site has been restored.

1.5.3 Protection of Existing Property

Before beginning any demolition work, the Contractor shall survey the site and examine the drawings and specifications to determine the extent of the work. The Contractor shall take necessary precautions to avoid damage to existing items to remain in place, to be reused, or to remain the property of the Government; any damaged items shall be repaired or replaced as approved by the Contracting Officer. The Contractor shall coordinate the work of this section with all other work and shall construct and maintain shoring, bracing, and supports as required. The Contractor shall ensure that structural elements are not overloaded and shall be responsible for increasing structural supports or adding new support as may be required as a result of any cutting, removal or demolition work performed under this contract.

1.5.4 Protection From the Weather

The interior of buildings to remain and salvageable materials and equipment shall be protected from the weather at all times.

1.5.5 Environmental Protection

Soil samples shall be taken along the building dripline prior to demolition in accordance with the Sampling and Analysis Plan attached to Specification Section 02080(13280). See Specification Section 01061(01355) ENVIRONMENTAL PROTECTION.

1.6 Burning

No onsite burning will be allowed.

1.7 USE OF EXPLOSIVES

Use of explosives is prohibited.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.1 EXISTING STRUCTURES.

Existing structures shall be removed to grade. Interior walls, other than retaining walls and partitions, shall be removed to 1.5 meters (5 feet) below grade. Basement slabs shall be broken up to permit drainage where the pieces shall be no longer than 1 square yard. Basement foundations walls shall be removed at a minimum of 5 feet below surface grade. Sidewalks, curbs, gutters and street light bases shall be removed within the 5-foot building tine.

3.2 UTILITIES

The existence and approximate locations of utilities shall be determined from available records. Additional utilities including water services and sanitary sewer laterals to the buildings may be encountered. The location of utilities in the area is approximate and may vary from the locations indicated. The Contractor shall take the necessary precautionary measures to protect utilities encountered during the work, whether they are shown or indicated on the drawings or revealed during the course of the work here under. Failure by the Government to show or indicate the existence and location of utilities on the drawings shall not relieve the Contractor from the responsibility to make a prudent independent review and perform a reasonable exploratory investigation of the site of work to ascertain the existence and location of utilities and appurtenances. If the review and investigation is not done the Contractor will be liable for any damage to such utilities resulting from the Contractor's operations. Existing utilities shall be removed or capped as specified. When utility lines, other than water services and sanitary sewer laterals are encountered that are not indicated on the drawings, the Contracting Officer shall be notified prior to further work in that area. Abandon all lines in place after capping.

3.2.1 Water Service

The Contractor shall locate, excavate and cap (at main) all water services to the buildings scheduled for demolition. The Contractor shall provide permanent leak-proof closure for disconnected water lines at the main. The Contractor shall be responsible for coordinating with PW to turn off water prior to disconnecting any water service. Trenches shall be backfilled by imported gravel and sand fill material. Backfill material shall be placed in layers and compacted as specified in Specification Section 02210(2300) GRADING. The Contractor shall not backfill the piping excavation until permitted by the Contracting Officer. The Contractor shall assume at least one water line per building.

3.2.2 Sanitary Sewer Laterals

The Contractor is required to locate and cap (at main and the 5 foot-line) all sanitary sewer laterals to all buildings scheduled for demolition, The Contractor shall assume one sanitary sewer line per building.

3.2.2 Steam and Condensate Pipes

Steam and condensate pipes shall be capped at the 5 foot line and at the main and abandoned in place.

3.2.4 Building Electrical, Fire Alarm, Telephone, Communication and Other Systems

Outside buildings, remove these utilities to the nearest pole. Recycle all metals.

3.2.5 Aboveground and Underground Storage tank (AST/UST) Removal.

Removal of AST/UST systems shall be accomplished in accordance with Specification Section 02081(02115): ABOVEGROUND/UNDERGROUND STORAGE TANK REMOVAL.

3.3 FILLING

Holes, open basements and other hazardous openings shall be filled in accordance with Specification Section 02210(02300) GRADING AND SURFACE RESTORATION.

3.4 TRANSPORTATION DISPOSITION OF MATERIAL

Title to material and equipment to be demolished, except Government salvage and historical items, is vested in the Contractor upon receipt of notice to proceed. The Government will not be responsible for the condition, loss or damage to such property after notice to proceed.

3.4.1 Hazardous Materials

All hazardous materials located in the structures to be demolished shall be removed prior to demolition. Disposal shall consist of the Contractors designated Environmental Compliance Officer (ECO) coordinating with the COR and the ~~Environmental Services (ES)Base Hazardous Waste Management Section (HWMS)~~. See Specification Section 01061(01355): ENVIRONMENTAL PROTECTION for further requirements. The expected types of hazardous materials present consists of (1) PCB light ballasts, PCB transformers and PCB contaminated concrete slabs; (2) Lighting (PCB's di-(2-ethylhexyl)phthalate (DEHP's), mercury vapors), (3) Hot water heaters, oil furnaces, water tanks, transformer, and air compressors (PCBs, DEHP's, mercury, oils and heavy metals, asbestos). (4) Fire Alarm/Control Equipment (heavy metals, low level radioactive materials). (5) Mercury Thermostats (mercury) and (6)

Cooling equipment (Ozone-depleting substances, oils, heavy metals, PCB's, and DEHP's). The Government will accept these items for hazardous waste disposal only. The Government reserves the right to not accept certain materials for hazardous waste disposal.

3.4.1.1 Freon (Ozone-depleting substances). All freon gases from equipment located in the structures as ~~refrigeration~~refrigeration shall be removed by an EPA certified refrigeration technician to perform the work, ~~and recycled or disposed of appropriately.~~ All Class I Ozone Depleting Substances (ODS) shall be turned in to Environmental Services (ES). Class I ODS must remain under government control; either for redistribution on the installation, or turn-in to the DoD Reserve.

3.4.1.2 PCB light ballasts. Light ballasts suspected of containing PCB's shall be visually inspected for the presence of a "NON-PCB" label. Light ballast which do not have such label indicating "NON-PCB" shall be assumed to contain PCB and disposed of on post, as a hazardous waste the Contractor shall coordinate disposal of the light ballasts with the Fort Lewis Office of Environmental Services (253) 967-4786.

3.4.2 Whole Building Demolition Debris

All Asbestos Containing Material (ACM) shall be removed in accordance with Specification Section 02080(13280): ASBESTOS ABATEMENT. Metal components such as ductwork, furnace/boilers, piping, or siding shall be removed to the extent feasible as scrap materials for reuse/recycling. Hazardous materials, as described in paragraph 3.4.1 Hazardous Materials, shall also be removed prior to demolition. All remaining material shall comprise a single wastestream when the building is demolished and shall be disposed of all together at a municipal solid waste landfill (RCRA subtitle D permitted). Rail service from Fort Lewis may be used for Transportation. All DOT Transportation requirements for solid waste shall be met.

3.4.3 Historical Items

See Specification Section 01061(01355): ENVIRONMENTAL PROTECTION.

3.5 CLEAN UP

See Specification Section 01061(01355): ENVIRONMENTAL PROTECTION.

3.6 PERMITS

Contractor shall be responsible for obtaining all permits. A Digging permit will need to be obtained from the base. More permit requirements are in Specification Section 01061(01355): ENVIRONMENTAL PROTECTION. All permit applications must indicate the following address as the building owner: Ft. Lewis Public Works; ATTN: AFZH-PWC MS 17; Box 339500 (BLDG. 2012); Fort Lewis, WA 98433-9500.

- End of Section -

This page intentionally blank

SECTION 02300

GRADING AND SURFACE RESTORATION

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN SOCIETY FOR TESTING AND MATERIALS

| | |
|-------------|---|
| ASTM C 94 | (1983) Ready Mixed Concrete |
| ASTM C 309 | Liquid Membrane-Forming Compound for Curing Concrete |
| ASTM D 1557 | (1978) Moisture-Density Relations of Soils and Soil Aggregate Mixtures Using 10-lb. (4.54-kg) Rammer and 18 in. (457-mm) Drop |
| ASTM D 2487 | (1985) Classification of Soils for Engineering Purposes |

WASHINGTON STATE DEPARTMENT OF TRANSPORTATION AND WASHINGTON STATE CHAPTER OF AMERICAN PUBLIC WORKS ASSOCIATION

Standards for Road, Bridge, and Municipal Construction

1.2 DEFINITIONS

1.2.1 Satisfactory Materials

Materials classified in ASTM D 2487 as GW, GP, SW and SP and free from roots and other organic matter, trash, debris, and frozen materials and stones larger than 6 inches in any dimension are satisfactory. Materials classified as CL, ML, SM, GP-GM, GM, or GC are also satisfactory provided they contain moisture contents suitable for the intended use.

1.2.2 Unsatisfactory Materials

Materials which do not comply with the requirements for satisfactory materials are unsatisfactory. Materials classified in ASTM D 2487 as Pt, OH and OL are unsatisfactory. Unsatisfactory materials also include man-made fills, refuse, or backfills from previous construction or having moisture content which are not suitable for the intended use.

1.2.3 Degree of Compaction

Degree of compaction is a percentage of the maximum density obtained by the test procedure presented in ASTM D 1557, Method D, abbreviated below as a percent of laboratory maximum density.

1.3 DESCRIPTION

Grading and surface restoration covers the work necessary to replace all pavement, curbs and gutters, sidewalks, parking areas, lawns and other site features. Restoration also includes improving demolished building foot prints and removed sidewalk and roadway areas to match adjacent lawn and paving conditions. The work shall include grading, paving and ground cover. Turf is covered under SECTION 02935(02921) Turf.

PART 2 MATERIALS

2.1 BORROW MATERIAL

Borrow material shall be selected to meet requirements and conditions of the particular fill for which it is to be used.

2.1.1 Selection

Borrow material shall be imported from sources located off post. Use of any Fort Lewis borrow pit will not be permitted.

2.2 CRUSHED ROCK BASE

Crushed rock base shall be manufactured from ledge rock, talus or gravel. The materials shall be uniform in quality, free from wood, roots, bark and other extraneous materials and shall meet the following requirements, or equivalent:

1. Los Angles Wear, 500 Rev 35 % max.
2. Degradation Factor 15mm
3. Crushed rock base shall meet the following requirements for grading and quality when placed in the hauling vehicle for delivery to the site:

| <u>Passing</u> | <u>% by Weight</u> |
|--------------------|--------------------|
| 1 ¼ " Sq. Sieve | 100 |
| 5/8 " Sq. Sieve | 50 to 80 |
| 1/4 " Sq. Sieve | 30 to 50 |
| U.S. No.40 sieve | 3 to 18 |
| U.S. No. 200 sieve | 7.5 max. |
| Sand Equivalent | 40 min. |

4. Not less than 75 percent of crushed rock base materials retained on U.S. No.10 sieve shall have at least one (1) fractured face produced by mechanical crushing.

2.3 ASPHALT CONCRETE

Asphalt Concrete mix shall be Class B conforming to Washington State Department of Transportation and Washington State Chapter of American Public Works Association "Standards for Road, Bridge, and Municipal Construction".

2.4 PORTLAND CEMENT CONCRETE

Cement concrete for pavement, sidewalk, curbs and gutters and miscellaneous construction shall conform to ASTM C-94, Alternate 3, and shall have a design mix proportioned for 3,000 pounds per square inch compressive strength at 28 days. Concrete mix shall contain no less than 5-1/2 sacks of cement per cubic yard.

2.5 CURING COMPOUND

Curing compound shall be approved commercial grade conforming to ASTM C 309, Type I.

PART 3 EXECUTION

3.1 EXCAVATION AND BACKFILL

Excavations shall be performed as needed to demolish the buildings and remove the foundations and other site

improvements indicated or specified. Satisfactory borrow material shall be transported to and placed in fill areas within the limits of the work. All unsatisfactory material including any soil which is disturbed by the Contractor's operations or softened due to exposure to the elements and/or contractor applied water and surplus material shall be removed from site. Backfill material shall be placed in layers of 8-inch loose thickness compacted to the densities specified below.

3.1.1 Finished Excavation and Backfill

All areas covered by the project including excavated and filled sections and adjacent transition areas mid areas disturbed by equipment operations, shall be uniformly smooth-graded. The finished surface shall be reasonably smooth, compacted, and free from irregular surface changes. The degree of finish shall be that ordinarily obtainable from blade-grader operations except as otherwise specified. The surface of areas to be turfed shall be finished to a smoothness suitable for the application of turfing materials. For subgrade areas to be paved, soft or otherwise unsatisfactory material shall be replaced with satisfactory borrow material.

3.1.2 Compaction of Backfill

Each layer of backfill under pavements, shoulders and sidewalks shall be compacted to at least 95 percent of the maximum modified Proctor density test per ASTM D 1557. Backfill under non-paved areas shall be compacted to 85 percent of the modified Proctor density test.

3.1.3 Protection of Backfill Areas

Newly graded areas shall be protected from traffic and from erosion, and any settlement or washing away that may occur from any cause, prior to acceptance, shall be repair and grades reestablished to the required elevations and slopes. All work shall be conducted in accordance with the environmental protection requirements of the contract.

3.1.4 Conservation of Topsoil

Where approved by the COR, the topsoil in areas subject to disturbance by project operations may be removed to a depth of 6 inches without contamination with subsoil and stockpiled convenient to areas for later application and restoration of the surface. Topsoil shall be removed to fill depth and stored separate from other excavated materials, and piled free of roots, stones, and other undesirable materials. Any surplus of topsoil from excavations and grading shall be disposed of at the Contractor's expense.

3.2 SURFACE RESTORATION

Replace all bituminous pavement damaged under this contract including streets, driveways, and walks with asphalt concrete regardless of original type. Replace all concrete pavement including sidewalks, curbs and gutters and parking areas.

3.2.1 Non-paved Areas

Ensure non-paved areas disturbed or covered by the Contractor's operations have a minimum depth of 4 inches of topsoil suitable for turfing operations, either from existing on-site materials or off-site source. Spread topsoil evenly as required to provide suitable area for Turfing operation and to blend into existing lawn areas.

3.2.1.1 Areas Requiring Topsoil

On areas to receive topsoil, the compacted subgrade soil shall be scarified to a 2 inch depth for bonding of topsoil with subsoil. Topsoil then shall be spread evenly to a thickness of 4 inches and graded to the elevations and slopes required to match adjacent areas and drainage patterns. Topsoil shall not be spread when frozen or excessively wet or dry. Material required for topsoil in excess of that produced by excavation within the grading limits shall be obtained from off-site areas.

3.2.1.2 Restoration of Turfed Areas

Replace all damaged turf and restore graded areas in accordance with Section 02935(02921), TURF.

3.2.2 Pavements and Shoulder Areas

3.2.2.1 Base Course

Place base course under all asphalt and portland cement pavements to be replaced. Mix and place sufficient base course on the subgrade to obtain a thickness of 9 inches after compaction. Compact with vibratory or impact equipment to obtain 95% compaction of the standard density test determined by the compaction control test for granular materials. Place leveling material as needed for proper matching with the adjacent existing pavement. Leveling course shall be compacted as specified above.

3.2.2.2 Asphalt Concrete

Place the asphalt concrete on minimum 4 inch thick base course to depth of not less than 2 inches or the depth of the adjacent existing pavement, whichever is greater, but not more than 6 inches. Spread and level the asphalt concrete with hand tools or by use of a mechanical spreader, depending upon the area to be paved. Bring the asphalt concrete to the proper grade and compact by rolling with power rollers capable of producing 200 to 200 pounds per square inch or by the use of hand tampers where rolling is impossible or Impractical. Overlap and make sufficient passes over the entire area to remove all roller marks and to produce a finished surface flush with the existing surface and conforming to grade and crown of adjacent pavement. Asphalt concrete shall not be placed when it's wet or the temperature is below 40 degrees F.

3.2.2.3 Portland Cement Concrete

Portland cement concrete pavement shall be placed over minimum 4-inch thick base course. Pavement replaced shall be the same thickness as that removed, but shall not be less than 6 inches. Handle, place, vibrate finish and cure concrete in accordance with Washington State Department of Transportation and Washington State Chapter of American Public Works Association "Standards for Road, Bridge, and Municipal Construction. Apply curing compound to the finished concrete immediately after finishing. Protect the newly placed concrete from traffic for 7 days.

END OF SECTION

SECTION 02821

FENCING

1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

| | |
|-------------------|--|
| ASTM A 121 | (1992a) Zinc-Coated (Galvanized) Steel Barbed Wire |
| ASTM A 153/A 153M | (1998) Zinc-Coated (Hot Dip) on Iron and Steel Hardware |
| ASTM A 392 | (1996) Zinc-Coated Steel Chain-Link Fence Fabric |
| ASTM A 491 | (1996) Aluminum-Coated Steel Chain-Link Fence Fabric |
| ASTM A 824 | (1995) Metallic-Coated Steel Marcellled Tension Wire for Use With Chain Link Fence |
| ASTM C 94 | (1998) Ready-Mixed Concrete |
| ASTM F 883 | (1997) Padlocks |
| ASTM F 900 | (1994) Industrial and Commercial Swing Gates |
| ASTM F 1043 | (1998a) Strength and Protective Coatings on Metal Industrial Chain-Link Fence Framework |
| ASTM F 1083 | (1997) Specification for Pipe, Steel, Hot-Dipped Zinc-Coated (Galvanized) Welded, for Fence Structures |
| ASTM F 1184 | (1994) Industrial and Commercial Horizontal Slide Gates |

1.2 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals having an "FIO" designation are for information only. The following shall be submitted in accordance with Section: SUBMITTALS

SD-13 Certificates

Chain Link Fence; FIO.

Statement, signed by an official authorized to certify on behalf of the manufacturer, attesting that the chain link fence and component materials meet the specified requirements.

2 PRODUCTS

Products shall conform to the following:

2.1 CHAIN LINK FENCE FABRIC

ASTM A 392, Class 1, zinc-coated steel wire with minimum coating weight of 2.0 ounces of zinc per square foot of coated surface, or **ASTM A 491**, Type I, aluminum-coated steel wire. Fabric shall be fabricated of 9 gauge wire woven in 2 inch mesh. Fabric height shall be as shown. Fabric shall be twisted and barbed on the top selvage and knuckled on the bottom selvage.

2.2 GATES

ASTM F 900 and **ASTM F 1184**. Gate shall be the type and swing shown. Gate frames shall conform to strength and coating requirements of **ASTM F 1083** for Group IA, steel pipe, with external coating Type A, nominal pipe size (NPS) 1-1/2. Gate fabric shall be as specified for chain link fabric. Gate leaves more than 8 feet wide shall have either intermediate members and diagonal truss rods or shall have tubular members as necessary to provide rigid construction, free from sag or twist. Intermediate braces shall be provided on all gate frames with an electro-mechanical lock. Gate fabric shall be attached to the gate frame by method standard with the manufacturer except that welding will not be permitted. Latches, hinges, stops, keepers, rollers, and other hardware items shall be furnished as required for the operation of the gate. Latches shall be arranged for padlocking so that the padlock will be accessible from both sides of the gate. Stops shall be provided for holding the gates in the open position. For high security applications, each end member of gate frames shall be extended sufficiently above the top member to carry three strands of barbed wire in horizontal alignment with barbed wire strands on the fence.

2.3 POSTS

2.3.1 Metal Posts for Chain Link Fence

ASTM F 1083, zinc-coated. Group IA, with external coating Type A steel pipe. Group III, **ASTM F 1043** steel H-section may be used for line posts in lieu of line post shapes specified for the other classes. Sizes shall be as shown on the drawings if any. Line posts and terminal (corner, gate, and pull) posts selected shall be of the same designation throughout the fence. Gate post shall be for the gate type specified subject to the limitation specified in **ASTM F 900** and **ASTM F 1184**.

2.4 BRACES AND RAILS

[ASTM F 1083](#), zinc-coated, Group IA, steel pipe, size NPS 1-1/4. Group IC steel pipe, zinc-coated, shall meet the strength and coating requirements of [ASTM F 1043](#). Group II, formed steel sections, size 1-21/32 inch, conforming to [ASTM F 1043](#), may be used as braces and rails if Group II line posts are furnished.

2.5 WIRE

2.5.1 Tension Wire

Tension wire shall be Type I or Type II, Class 2 coating, in accordance with [ASTM A 824](#).

2.6 ACCESSORIES

Ferrous accessories shall be zinc or aluminum coated. Truss rods shall be furnished for each terminal post. Truss rods shall be provided with turnbuckles or other equivalent provisions for adjustment. Barbed wire shall be 2 strand, 12-1/2 gauge wire, zinc-coated, Class 3 in accordance with [ASTM A 121](#) or aluminum coated Type I in accordance with [ASTM A 585](#). Barbed wire shall be four-point barbed type steel wire. Barbed wire support arms shall be the single arm type and of the design required for the post furnished. Tie wire for attaching fabric to rails, braces, and posts shall be 9 gauge steel wire and match the coating of the fence fabric. Miscellaneous hardware coatings shall conform to [ASTM A 153/A 153M](#) unless modified.

2.8 CONCRETE

[ASTM C 94](#), using 3/4 inch maximum size aggregate, and having minimum compressive strength of 3000 psi at 28 days. Grout shall consist of one part portland cement to three parts clean, well-graded sand and the minimum amount of water to produce a workable mix.

2.9 PADLOCKS

[ASTM F 883](#), Type PO1, Grade 2 Size 1-3/4 inch. Padlocks shall be keyed alike and each lock shall be furnished with two keys.

PART 3 EXECUTION

3.1 EXCAVATION

Post holes shall be cleared of loose material. Waste material shall be spread where directed. The ground surface irregularities along the fence line shall be eliminated to the extent necessary to maintain a 1 inch clearance between the bottom of the fabric and finish grade.

3.2 POST INSTALLATION

3.2.1 Posts for Chain Link Fence

Posts shall be set plumb and in alignment. Except where solid rock is encountered, posts shall be set in concrete to the depth indicated on the drawings if any. Where solid rock is encountered with no overburden, posts shall be set to a minimum depth of 18 inches in rock. Where solid rock is covered with an overburden of soil or loose rock, posts shall be set to the minimum depth indicated on the drawing unless a penetration of 18 inches in solid rock is achieved before reaching the indicated depth, in which case depth of penetration shall terminate. All portions of posts set in rock shall be grouted. Portions of posts not set in rock shall be set in concrete from the rock to ground level. Posts set in concrete shall be set in holes not less than the diameter shown on the drawings. Diameters of holes in solid rock shall be at least 1 inch greater than the largest cross section of the post. Concrete and grout shall be thoroughly consolidated around each post, shall be free of voids and finished to form a dome. Concrete and grout shall be allowed to cure for 72 hours prior to attachment of any item to the posts. Group II line posts may be mechanically driven, for temporary fence construction only, if rock is not encountered. Driven posts shall be set to a minimum depth of 3 feet and shall be protected with drive caps when being set. For high security fences, fence post rigidity shall be tested by applying a 50 pound force on the post, perpendicular to the fabric, at 5 feet above ground; post movement measured at the point where the force is applied shall be less than or equal to 3/4 inch from the relaxed position; every tenth post shall be tested for rigidity; when a post fails this test, further tests on the next four posts on either side of the failed post shall be made; all failed posts shall be removed, replaced, and retested at the Contractor's expense.

3.3 RAILS

3.3.1 Top Rail

Top rail shall be supported at each post to form a continuous brace between terminal posts. Where required, sections of top rail shall be joined using sleeves or couplings that will allow expansion or contraction of the rail.

3.3.2 Bottom Rail

The bottom rail shall be bolted to double rail ends and double rail ends shall be securely fastened to the posts. Bolts shall be peened to prevent easy removal. Bottom rail shall be installed before chain link fabric.

3.4 BRACES AND TRUSS RODS

Braces and truss rods shall be installed as indicated and in conformance with the standard practice for the fence furnished. Horizontal (compression) braces and diagonal truss (tension) rods shall be installed on fences over 6 feet in height. A center brace or 2 diagonal truss rods shall be installed on 12 foot fences. Braces and truss rods shall extend from terminal posts to line posts. Diagonal braces shall form an angle of approximately 40 to 50 degrees with the horizontal. No bracing is required on fences 6 feet high or less if a top rail is installed.

3.5 TENSION WIRES

Tension wires shall be installed along the top and bottom of the fence line and attached to the terminal posts of each stretch of the fence. Top tension wires shall be installed within the top 1 foot 4 inches of the installed fabric. Bottom tension wire shall be installed within the bottom 6 inches of the installed fabric. Tension wire shall be pulled taut and shall be free of sag.

3.6 CHAIN LINK FABRIC

Chain link fabric shall be installed on the side of the post indicated. Fabric shall be attached to terminal posts with stretcher bars and tension bands. Bands shall be spaced at approximately 15 inch intervals. The fabric shall be installed and pulled taut to provide a smooth and uniform appearance free from sag, without permanently distorting the fabric diamond or reducing the fabric height. Fabric shall be fastened to line posts at approximately 15 inch intervals and fastened to all rails and tension wires at approximately 24 inch intervals. Fabric shall be cut by untwisting and removing pickets. Splicing shall be accomplished by weaving a single picket into the ends of the rolls to be joined. The bottom of the installed fabric shall be 1 plus or minus 1/2 inch above the ground. For high security fence, after the fabric installation is complete, the fabric shall be exercised by applying a 50 pound push-pull force at the center of the fabric between posts; the use of a 30 pound pull at the center of the panel shall cause fabric deflection of not more than 2-1/2 inches when pulling fabric from the post side of the fence; every second fence panel shall meet this requirement; all failed panels shall be resecured and retested at the Contractor's expense.

3.7 BARBED WIRE SUPPORTING ARMS AND BARBED WIRE

3.7.1 General Requirements

Barbed wire supporting arms and barbed wire shall be installed as indicated and as recommended by the manufacturer. Supporting arms shall be anchored to the posts in a manner to prevent easy removal with hand tools. Barbed wire shall be pulled taut and attached to the arms with clips or other means that will prevent easy removal.

3.8 GATE INSTALLATION

Gates shall be installed at the locations shown. Hinged gates shall be mounted to swing as indicated. Latches, stops, and keepers shall be installed as required. Padlocks shall be attached to gates or gate posts with chains. Hinge pins and hardware shall be welded or otherwise secured to prevent removal. For farm style fencing, standard metal gate assemblies with frame and fittings necessary for complete installation or wood gates shall be furnished as shown.

**** END OF SECTION ****

This page intentionally blank

SECTION 02921

TURF

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic description only.

COMMERCIAL ITEM DESCRIPTIONS (CID)

CID A-A-1909 (Basic; Notice 1) Fertilizer

STATE OF WASHINGTON DEPARTMENT OF AGRICULTURE

Rules for seed certification.

1.2 GENERAL REQUIREMENTS

Turf areas shall include footprints of all buildings scheduled for demolition, removed sidewalks, driveways, interior gravel/earth roads, concrete pads, fuel tanks and all other lawn areas damaged by the Contractor's operations.

1.3 SUBMITTALS

The following shall be submitted in accordance with Section 01300 (01330) SUBMITTALS:

SD-13 Certificates

Certificates of compliance certifying that materials meet the requirements specified, prior to the delivery of materials. Certified copies of the reports for the following materials shall be included:

- a. Seed: For mixture, percent pure live seed, minimum percent germination and hard seed maximum percent weed seed content, maximum percent other crop mid/or meet, date tested and state certification.
- b. Fertilizer: For Chemical analysis, composition percent.

1.4 INSPECTION

Seed and fertilizer shall be inspected upon arrival at the job site by the Contracting officer for conformity to type and quality in accordance with the paragraph MATERIALS. Unacceptable materials shall be removed from the job site.

PART 2 PRODUCTS

2.1 MATERIALS

2.1.1 Seed

State-certified seed of the latest season's crop shall be provided in original sealed packages bearing the producers

guaranteed analysis for percentages of mixture, purity, germination, hard seed, weed seed content and inert material. Seed shall be in the following proportions by weight:

| | |
|-----------------------|-----|
| Colonial Bentgrass | 10% |
| Red Fescue | 40% |
| Blue Grass | 40% |
| English Perennial Rye | 10% |

2.1.2 Fertilizer

Fertilizer shall be commercial grade, free flowing, and uniform in composition, conforming to CID A-A-1909 and containing the following proportions by weight:

| | |
|--------------------------|-----|
| Total Available Nitrogen | 10% |
| Available Phosphorus | 20% |
| Available Potassium | 20% |

Fertilizer shall be balanced with the inclusion of trace minerals and nutrients

2.1.3 Topsoil (Off-Site Source)

Topsoil delivered to site from off-site source shall be a two-way mix, consisting of 2/3 sand and 1/3 organic matter by volume. Organic matter shall be bark mulch, sawdust, or manure composted a minimum of 6 months and without a strong odor. Topsoil shall be a fertile, agricultural soil capable of sustaining vigorous plant growth taken from a drained site; free of subsoil rocks, clay or impurities, plants, weeds and roots. All additional topsoil required for surface restoration shall be obtained from off-site source.

2.1.4 Water

Water shall be the responsibility of the Contractor unless otherwise noted. Water shall not contain elements toxic to plant life.

PART 5 EXECUTION

3.1 SEEDING

3.1.1 Seeding Time

Seed shall be sown from April 1 to May 30 for spring planting and from August 15 to October 20 for fall planting.

3.1.2 Turfing Conditions

Turf operations shall be performed only during periods when beneficial results can be obtained. When drought, frozen ground, excessive moisture or other unsatisfactory conditions prevail, the work shall be stopped when directed. When special conditions warrant a variance to the turf operations, proposed times shall be submitted to and approved by the Contracting Officer.

3.2 SITE PREPARATION

3.2.1 Grading

The Contracting Officer shall verify that elevations are matching to the surrounding lawn areas and the rough grading, addition of topsoil where required and smooth grading, has been completed in accordance with SECTION

02210 (02300) GRADING AND SURFACE RESTORATION.

3.2.2 Fertilizer

Fertilizer shall be applied at the rate of 10 pounds per 1000 square feet. Fertilizer shall be incorporated into the soil to a minimum depth of 4 inches or may be incorporated as part of the tillage or hydroseeding operation.

3.2.3 Tillage

Soil areas to be seeded on gentle slopes shall be thoroughly tilled to a depth of 4 inches by scarifying, disking, harrowing or other approved methods. On slopes steeper than 3-horizontal to 1-vertical the soils shall be tilled to a depth of 2 inches by scarifying with heavy rakes or other method.

3.2.4 Finished Grading

3.2.4.1 Preparation

Turf areas compacted by construction operations shall be completely pulverized by tillage and smooth graded. Turf areas shall be filled as needed. Drainage patterns shall be maintained. Finished grade shall match adjoining turf areas. Turf areas shall be smooth graded and blended to existing areas.

3.2.4.2 Lawn Area Debris

Lawn areas shall have debris and stones larger than 1 inch in any dimension removed from the surface.

3.2.4.3 NOT USED

3.2.4.4 Protection

Finished graded areas shall be protected from damage by vehicular or pedestrian traffic and erosion.

3.3 SEEDING

3.3.1 General

Prior to seeding, any previously prepared seedbed areas compacted or damaged by interim rain, traffic or other cause, shall be reworked to restore the ground condition previously specified. Seeding operations shall not take place when the wind velocity will prevent uniform seed distribution.

3.3.2 Equipment Calibration

The equipment to be used and the methods of turfing shall be subject to the inspection and approval of the Contracting officer prior to commencement of turfing operations. Immediately prior to the commencement of turfing operations the Contractor shall conduct turfing equipment calibration tests in the presence of the Contracting officer.

3.3.3 Hydroseeding

Seed shall be applied at a rate of 4 pounds per 1,000 square feet or 175 pounds per acre. Seed and fertilizer shall be added to water and thoroughly mixed at the rates specified above. Wood cellulose fiber mulch shall be added at the rates recommended by the manufacturer but not to exceed 2000 pounds per acre after the seed, fertilizer and water have been thoroughly mixed, to produce a homogeneous slurry. Slurry shall be uniformly applied under pressure over the entire area. The hydroseeded area shall not be rolled.

3.3.4 Water

Watering shall be started within 7 days after completing the seeded area. Water shall be applied at a rate of 1-1/2 inches of water per week and at sufficient intervals to ensure moist soil conditions to a minimum depth of 1 inch. Run-off and puddling shall be prevented.

3.4 RESTORATION AND CLEAN UP

3.4.1 Restoration

Existing turf areas, pavements and facilities that have been damaged by turfing operation shall be restored to original condition at the Contractor's expense.

3.4.2 Clean Up

Excess and waste material shall be removed from the planting operation and shall be disposed of off site. Adjacent paved areas shall be cleaned.

3.5 PROTECTION OF TURFED AREAS

Immediately after turfing, the area shall be protected against traffic or other use by erecting barricades and providing signage as required, or as directed by the Contracting Officer.

3.6 TURF ESTABLISHMENT PERIOD

3.6.1 Commencement

The Turf establishment Period for establishing a healthy stand of turf shall begin on the first day of work under this contract and shall end three (3) months after the last day of turfing operations required by this contract. Written calendar time period shall be furnished to the Contracting Officer for the Turf Establishment Period. When there is more than one turf establishment period describe the boundaries of the turfed area covered for each period. All areas seeded shall be mowed at least once prior to acceptance

3.6.2 Satisfactory Stand of Turf

All existing areas, identified on the drawings as "lawn" or "grass" damaged by the Contractor's operations shall be considered lawn areas

A satisfactory stand of turf from the seeding operation for a lawn area is defined as a minimum of 150 grass plants per square foot. Bare spots shall be no larger than 6 inches square. The total bare spots shall not exceed 2 percent of the total seeded area.

3.6.3 Maintenance during Establishment Period

3.6.3.1 Mowing

Lawn areas shall be mowed to a minimum height of 1-1/2 inches when the average height of the turf becomes 3 inches. Clippings shall be removed when the amount of cut turf is heavy enough to damage the turfed areas.

3.6.3.2 Watering

Watering shall be applied at a rate of 1-1/2 inches of water per week and at sufficient intervals to obtain a moist soil condition to a minimum depth of 1 inch. Frequency of watering and quantity of water shall be adjusted in accordance with the growth of the turf and the occurrence of natural rainfall. Run-off, puddling and wilting shall be prevented.

SECTION 13280

ASBESTOS ABATEMENT
Fort Lewis, Washington

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

- ANSI Z9.2 (1979; R 1991) Fundamentals Governing the Design and Operation of Local Exhaust Systems
- ANSI Z87.1 (1989; Errata; Z87.1a) Occupational and Educational Eye and Face Protection
- ANSI Z88.2 (1992) Respiratory Protection

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

- ASTM C 732 (1995) Aging Effects of Artificial Weathering on Latex Sealants
- ASTM D 522 (1993a) Mandrel Bend Test of Attached Organic Coatings
- ASTM D 1331 (1989; R 1995) Surface and Interfacial Tension of Solutions of Surface-Active Agents
- ASTM D 2794 (1993) Resistance of Organic Coatings to the Effects of Rapid Deformation (Impact)
- ASTM D 4397 (1996) Polyethylene Sheeting for Construction, Industrial, and Agricultural Applications
- ASTM E 84 (1996a) Surface Burning Characteristics of Building Materials
- ASTM E 96 (1995) Water Vapor Transmission of Materials
- ASTM E 119 (1995a) Fire Tests of Building Construction and Materials
- ASTM E 736 (1992) Cohesion/Adhesion of Sprayed Fire-Resistive Materials Applied to Structural Members
- ASTM E 1368 (1997) Visual Inspection of Asbestos Abatement Projects

CODE OF FEDERAL REGULATIONS (CFR)

| | |
|-------------|--|
| 29 CFR 1910 | Occupational Safety and Health Standards |
| 29 CFR 1926 | Safety and Health Regulations for Construction |
| 40 CFR 61 | National Emissions Standards for Hazardous Air Pollutants |
| 40 CFR 763 | Asbestos |
| 42 CFR 84 | Approval of Respiratory Protective Devices |
| 49 CFR 107 | Hazardous Materials Program Procedures |
| 49 CFR 171 | General Information, Regulations and Definitions |
| 49 CFR 172 | Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements |
| 49 CFR 173 | Shippers - General Requirements for Shipments and Packagings |

COMPRESSED GAS ASSOCIATION (CGA)

| | |
|-----------|---|
| CGA G-7 | (1990) Compressed Air for Human Respiration |
| CGA G-7.1 | (1989) Commodity Specification for Air |

ENGINEERING MANUALS (EM)

| | |
|------------|--|
| EM 385-1-1 | (1996) Safety and Health Requirements Manual |
|------------|--|

ENVIRONMENTAL PROTECTION AGENCY (EPA)

| | |
|------------------|--|
| EPA 340/1-90-018 | (1990) Asbestos/NESHAP Regulated Asbestos Containing Materials Guidance |
| EPA 340/1-90-019 | (1990) Asbestos/NESHAP Adequately Wet Guidance |
| EPA 560/5-85-024 | (1985) Guidance for Controlling Asbestos-Containing Materials in Buildings |

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

| | |
|----------|--|
| NFPA 701 | (1996) Methods of Fire Test for Flame-Resistant Textiles and Films |
|----------|--|

NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH (NIOSH)

NIOSH Pub No. 84-100

(1984; Supple 1985, 1987, 1988 & 1990) NIOSH
Manual of Analytical Methods

UNDERWRITERS LABORATORIES (UL)

UL 586

(1996) High-Efficiency, Particulate, Air
Filter Units

1.2 DEFINITIONS

- a. Adequately Wet: A term defined in 40 CFR 61, Subpart M, and EPA 340/1-90-019 meaning to sufficiently mix or penetrate with liquid to prevent the release of particulate. If visible emissions are observed coming from asbestos-containing material (ACM), then that material has not been adequately wetted. However, the absence of visible emissions is not sufficient evidence of being adequately wetted.
- b. Aggressive Method: Removal or disturbance of building material by sanding, abrading, grinding, or other method that breaks, crumbles, or disintegrates intact asbestos-containing material (ACM).
- c. Amended Water: Water containing a wetting agent or surfactant with a surface tension of at least 29 dynes per square centimeter when tested in accordance with ASTM D 1331.
- d. Asbestos: Asbestos includes chrysotile, amosite, crocidolite, tremolite asbestos, anthophyllite asbestos, actinolite asbestos, and any of these minerals that have been chemically treated and/or altered.
- e. Asbestos-Containing Material (ACM): Any materials containing more than one percent asbestos.
- f. Asbestos Fiber: A particulate form of asbestos, 5 micrometers or longer, with a length-to-width ratio of at least 3 to 1.
- g. Authorized Person: Any person authorized by the Contractor and required by work duties to be present in the regulated areas.
- h. Building Inspector: Individual who inspects buildings for asbestos and has EPA Model Accreditation Plan (MAP) "Building Inspector" training; accreditation required by 40 CFR 763, Subpart E, Appendix C.
- i. Certified Industrial Hygienist (CIH): An Industrial Hygienist certified in the practice of industrial hygiene by the American Board of Industrial Hygiene.
- j. Class I Asbestos Work: Activities defined by OSHA involving the removal of thermal system insulation (TSI) and surfacing ACM.
- k. Class II Asbestos Work: Activities defined by OSHA involving the removal of ACM which is not thermal system insulation or surfacing material. This includes, but is not limited to, the removal of

asbestos- containing wallboard, floor tile and sheeting, roofing and siding shingles, and construction mastic. Certain "incidental" roofing materials such as mastic, flashing and cements when they are still intact are excluded from Class II asbestos work. Removal of small amounts of these materials which would fit into a glovebag may be classified as a Class III job.

- l. Class III Asbestos Work: Activities defined by OSHA that involve repair and maintenance operations, where ACM, including TSI and surfacing ACM, is likely to be disturbed. Operations may include drilling, abrading, cutting a hole, cable pulling, crawling through tunnels or attics and spaces above the ceiling, where asbestos is actively disturbed or asbestos-containing debris is actively disturbed.
- m. Class IV Asbestos Work: Maintenance and custodial construction activities during which employees contact but do not disturb ACM and activities to clean-up dust, waste and debris resulting from Class I, II, and III activities. This may include dusting surfaces where ACM waste and debris and accompanying dust exists and cleaning up loose ACM debris from TSI or surfacing ACM following construction.
- n. Clean room: An uncontaminated room having facilities for the storage of employees' street clothing and uncontaminated materials and equipment.
- o. Competent Person: In addition to the definition in 29 CFR 1926, Section .32(f), a person who is capable of identifying existing asbestos hazards as defined in 29 CFR 1926, Section .1101, selecting the appropriate control strategy, has the authority to take prompt corrective measures to eliminate them and has EPA Model Accreditation Plan (MAP) "Contractor/Supervisor" training; accreditation required by 40 CFR 763, Subpart E, Appendix C.
- p. Contractor/Supervisor: Individual who supervises asbestos abatement work and has EPA Model Accreditation Plan "Contractor/Supervisor" training; accreditation required by 40 CFR 763, Subpart E, Appendix C.
- q. Critical Barrier: One or more layers of plastic sealed over all openings into a regulated area or any other similarly placed physical barrier sufficient to prevent airborne asbestos in a regulated area from migrating to an adjacent area.
- r. Decontamination Area: An enclosed area adjacent and connected to the regulated area and consisting of an equipment room, shower area, and clean room, which is used for the decontamination of workers, materials, and equipment that are contaminated with asbestos.
- s. Demolition: The wrecking or taking out of any load-supporting structural member and any related razing, removing, or stripping of asbestos products.

- t. Disposal Bag: A 6 mil thick, leak-tight plastic bag, pre-labeled in accordance with 29 CFR 1926, Section .1101, used for transporting asbestos waste from containment to disposal site.
- u. Disturbance: Activities that disrupt the matrix of ACM, crumble or pulverize ACM, or generate visible debris from ACM. Disturbance includes cutting away small amounts of ACM, no greater than the amount which can be contained in 1 standard sized glovebag or waste bag, not larger than 60 inches in length and width in order to access a building component.
- v. Equipment Room or Area: An area adjacent to the regulated area used for the decontamination of employees and their equipment.
- w. Employee Exposure: That exposure to airborne asbestos that would occur if the employee were not using respiratory protective equipment.
- x. Fiber: A fibrous particulate, 5 micrometers or longer, with a length to width ratio of at least 3 to 1.
- y. Friable ACM: A term defined in 40 CFR 61, Subpart M and EPA 340/1-90-018 meaning any material which contains more than 1 percent asbestos, as determined using the method specified in 40 CFR 763, Subpart E, Appendix A, Section 1, Polarized Light Microscopy (PLM), that when dry, can be crumbled, pulverized, or reduced to powder by hand pressure. If the asbestos content is less than 10 percent, as determined by a method other than point counting by PLM, the asbestos content is verified by point counting using PLM.
- z. Glovebag: Not more than a 60 by 60 inch impervious plastic bag-like enclosure affixed around an asbestos-containing material, with glove-like appendages through which material and tools may be handled.
- aa. High-Efficiency Particulate Air (HEPA) Filter: A filter capable of trapping and retaining at least 99.97 percent of all mono-dispersed particles of 0.3 micrometers in diameter.
- bb. Homogeneous Area: An area of surfacing material or thermal system insulation that is uniform in color and texture.
- cc. Industrial Hygienist: A professional qualified by education, training, and experience to anticipate, recognize, evaluate, and develop controls for occupational health hazards.
- dd. Intact: ACM which has not crumbled, been pulverized, or otherwise deteriorated so that the asbestos is no longer likely to be bound with its matrix. Removal of "intact" asphaltic, resinous, cementitious products does not render the ACM non-intact simply by being separated into smaller pieces.
- ee. Model Accreditation Plan (MAP): USEPA training accreditation requirements for persons who work with asbestos as specified in 40 CFR 763, Subpart E, Appendix C.

- ff. Modification: A changed or altered procedure, material or component of a control system, which replaces a procedure, material or component of a required system.
- gg. Negative Exposure Assessment: A demonstration by the Contractor to show that employee exposure during an operation is expected to be consistently below the OSHA Permissible Exposure Limits (PELs).
- hh. NESHAP: National Emission Standards for Hazardous Air Pollutants. The USEPA NESHAP regulation for asbestos is at 40 CFR 61, Subpart M.
- ii. Nonfriable ACM: A NESHAP term defined in 40 CFR 61, Subpart M and EPA 340/1-90-018 meaning any material containing more than 1 percent asbestos, as determined using the method specified in 40 CFR 763, Subpart E, Appendix A, Section 1, Polarized Light Microscopy, that, when dry, cannot be crumbled, pulverized or reduced to powder by hand pressure.
- jj. Nonfriable ACM (Category I): A NESHAP term defined in 40 CFR 61, Subpart E and EPA 340/1-90-018 meaning asbestos-containing packings, gaskets, resilient floor covering, and asphalt roofing products containing more than 1 percent asbestos as determined using the method specified in 40 CFR 763, Subpart F, Appendix A, Section 1, Polarized Light Microscopy.
- kk. Nonfriable ACM (Category II): A NESHAP term defined in 40 CFR 61, Subpart E and EPA 340/1-90-018 meaning any material, excluding Category I nonfriable ACM, containing more than 1 percent asbestos, as determined using the methods specified in 40 CFR 763, Subpart F, Appendix A, Section 1, Polarized Light Microscopy, that when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.
- ll. Permissible Exposure Limits (PELs):
 - (1) PEL-Time weighted average (TWA): Concentration of asbestos not in excess of 0.1 fibers per cubic centimeter of air (f/cc) as an 8 hour time weighted average (TWA), as determined by the method prescribed in 29 CFR 1926, Section .1101, Appendix A, or the current version of NIOSH Pub No. 84-100 analytical method 7400.
 - (2) PEL-Excursion Limit: An airborne concentration of asbestos not in excess of 1.0 f/cc of air as averaged over a sampling period of 30 minutes as determined by the method prescribed in 29 CFR 1926, Section .1101, Appendix A, or the current version of NIOSH Pub No. 84-100 analytical method 7400.
- mm. Regulated Area: An OSHA term defined in 29 CFR 1926, Section .1101 meaning an area established by the Contractor to demarcate areas where Class I, II, and III asbestos work is conducted; also any adjoining area where debris and waste from such asbestos work accumulate; and an area within which airborne concentrations of asbestos exceed, or there is a reasonable possibility they may exceed, the permissible exposure limit.

- nn. Removal: All operations where ACM is taken out or stripped from structures or substrates, and includes demolition operations.
- oo. Repair: Overhauling, rebuilding, reconstructing, or reconditioning of structures or substrates, including encapsulation or other repair of ACM attached to structures or substrates. If the amount of asbestos so "disturbed" cannot be contained in 1 standard glovebag or waste bag, Class I precautions are required.
- pp. Spills/Emergency Cleanups: Cleanup of sizable amounts of asbestos waste and debris which has occurred, for example, when water damage occurs in a building, and sizable amounts of ACM are dislodged. A Competent Person evaluates the site and ACM to be handled, and based on the type, condition and extent of the dislodged material, classifies the cleanup as Class I, II, or III. Only if the material was intact and the cleanup involves mere contact of ACM, rather than disturbance, could there be a Class IV classification.
- qq. Surfacing ACM: Asbestos-containing material which contains more than 1% asbestos and is sprayed-on, troweled-on, or otherwise applied to surfaces, such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, or other purposes.
- rr. Thermal system insulation (TSI) ACM: ACM which contains more than 1% asbestos and is applied to pipes, fittings, boilers, breeching, tanks, ducts, or other interior structural components to prevent heat loss or gain or water condensation.
- ss. Transite: A generic name for asbestos cement wallboard and pipe.
- tt. Worker: Individual (not designated as the Competent Person or a supervisor) who performs asbestos work and has completed asbestos worker training required by 29 CFR 1926, Section .1101, to include EPA Model Accreditation Plan (MAP) "Worker" training; accreditation required by 40 CFR 763, Subpart E, Appendix C, if required by the OSHA Class of work to be performed or by the state where the work is to be performed.

1.3 DESCRIPTION OF WORK

The work covered by this section includes the removal of asbestos-containing materials (ACM) which are encountered during demolition activities associated with this project and describes procedures and equipment required to protect workers and occupants of the regulated area from contact with airborne asbestos fibers and ACM dust and debris. Activities include OSHA Class I and II work operations involving ACM. The work also includes containment, storage, transportation and disposal of the generated ACM wastes. More specific operational procedures shall be detailed in the Task Order Specific submittals as well as the required Accident Prevention Plan and its subcomponents, the Asbestos Hazard Abatement Plan and Activity Hazard Analyses required in paragraph SAFETY AND HEALTH PROGRAM AND PLANS, Submittals Section and Specification 01110(01351): Human Safety and Health.

1.3.1 Abatement Work Tasks

The specific ACM to be abated is identified on the detailed plans, project

drawings and surveys. A summary of work task data elements for each individual ACM abatement work shall include the appropriate RESPONSE ACTION DETAIL SHEET (item to be abated and methods to be used) and SET-UP DETAIL SHEETS (containment techniques to include safety precautions and methods). The Contractor's "Competent Person" who is also an accredited "Project Designer" shall review and edit the sheets to reflect actual response and setup actions. The Contractor Modified SET UP DETAIL SHEETS and RESPONSE ACTION DETAIL SHEETS shall be submitted under "Site Layout/Response Actions" for approval. These Contractor modified detail sheets shall be used to complete Table 1, "INDIVIDUAL WORK TASK DATA ELEMENTS" at the end of this section. ONE "INDIVIDUAL WORK TASK DATA ELEMENTS" sheet shall be completed per Abatement Work Task. Response Action Detail Sheets and Setup Detail Sheets are provided at the end of this section.

1.3.2 Unexpected Discovery of Asbestos

For any previously untested building components suspected to contain asbestos and located in areas impacted by the work, the Contractor shall order additional bulk samples to be obtained at the Contractor's expense and delivered to a laboratory accredited under the National Institute of Standards and Technology (NIST) "National Voluntary Laboratory Accreditation Program (NVLAP)" and analyzed by PLM at no additional cost to the Government. Any additional components identified as ACM that have been approved by the Contracting Officer for removal shall be removed by the Contractor and will be paid for by an equitable adjustment to the contract price under the CONTRACT CLAUSE titled "changes". Sampling activities undertaken to determine the presence of additional ACM shall be conducted by personnel who have successfully completed the EPA Model Accreditation Plan (MAP) "Building Inspector" training course required by 40 CFR 763, Subpart E, Appendix C.

1.4 SUBMITTALS

Government approval is required for submittals with a "GA" designation; submittals having an "FIO" designation are for information only. Submittals with an "APP" designation are submittals required to be submitted under the Accident Prevention Plan which is specified in Section 01110(01351): HUMAN SAFETY AND HEALTH. Submittals with a "MP" designation are submittals required to be submitted under the Management Plan which is specified in Section 01101: MANAGEMENT PLAN AND FIELD REPORTS as the Asbestos Abatement Plan. Submittals required for every Task Order are listed under "Task Order Specific" Submittals. Amendments to the Asbestos Abatement Plan shall also be included with the Task Order Specific Submittals. A copy of all submittals shall also be delivered to the Base Asbestos Coordinator at the following location: Public Works ATTN: AFZH/PWC MS 17 BOX 33950 (BLDG. 2012) Fort Lewis, WA 98433-9500. All submittals shall have the applicable building number(s) and permit number(s) clearly displayed. For multiple building submittals, all the building numbers and street addresses must be included. The following shall be submitted in accordance with, Section 01300 SUBMITTAL PROCEDURES:

SD-01 Data

Asbestos Hazard Abatement Plan; APP;GA.

Accident Prevention Plan; APP;GA.

Materials and Equipment; MP,GA.

Manufacturer's catalog data for all materials and equipment to be used in the work, including brand name, model, capacity, performance characteristics and any other pertinent information. Test results and certificates from the manufacturer of encapsulants substantiating compliance with performance requirements of this specification. Material Safety Data Sheets for all chemicals to be used onsite in the same format as implemented in the Contractor's HAZARD COMMUNICATION PROGRAM. Data shall include, but shall not be limited to, the following items:

- a. High Efficiency Filtered Air (HEPA) local exhaust equipment
- b. Vacuum cleaning equipment
- c. Pressure differential monitor for HEPA local exhaust equipment
- d. Air monitoring equipment
- e. Respirators
- f. Personal protective clothing and equipment
 - (1) Coveralls
 - (2) Underclothing
 - (3) Other work clothing
 - (4) Foot coverings
 - (5) Hard hats
 - (6) Eye protection
 - (7) Other items required and approved by Contractors Designated IH and Competent Person
- g. Glovebag
- h. Duct Tape
- i. Disposal Containers
 - (1) Disposal bags
 - (2) Fiberboard drums
 - (3) Paperboard boxes
- j. Sheet Plastic
 - (1) Polyethylene Sheet - General
 - (2) Polyethylene Sheet - Flame Resistant
 - (3) Polyethylene Sheet - Reinforced
- k. Wetting Agent
 - (1) Amended Water
 - (2) Removal encapsulant
- l. Strippable Coating

- m. Prefabricated Decontamination Unit
- n. Other items
- o. Chemical encapsulant
- p. Chemical encasement materials
- q. Material Safety Data Sheets (for all chemicals proposed)

SD-04 Drawings

Site Layout; GA.

Submit edited SET-UP DETAIL SHEETS, RESPONSE ACTION DETAIL SHEETS and completed INDIVIDUAL WORK TASK DATA ELEMENT FORMS (TABLE 1). Information shall include descriptions, detail project drawings, and site layout sketches to include work site containment area, local exhaust ventilation system locations, decontamination and load-out units, other temporary waste storage facility, access tunnels, location of temporary utilities (electrical, water, sewer) and boundaries of each regulated area.

SD-08 Statements

Qualifications; GA.

A written report providing evidence of qualifications for personnel, facilities and equipment assigned to the work.

Training Program; FIO.

A copy of the written project site-specific training material as indicated in 29 CFR 1926, Section .1101 and WAC 296-62 also WAC 296-65 that will be used to train onsite employees. The training document shall be signed by the Contractor's Designated IH and Competent Person.

Medical Requirements; APP;GA.

Physician's written opinion. Include Physician written results and all other information in Paragraph MEDICAL REQUIREMENTS

Encapsulants; MP;GA.

Certificates stating that encapsulants meet the applicable specified performance requirements.

SD-09 Reports

Exposure Assessment and Air Monitoring; GA.

Initial exposure assessments, negative exposure assessments, air-monitoring results and documentation.

Local Exhaust Ventilation; FIO.

Pressure differential recordings.

Licenses, Permits and Notifications; GA.

Licenses, permits, and notifications.

SD-13 Certificates

Vacuum, Filtration and Ventilation Equipment; FIO.

Manufacturer's certifications showing compliance with ANSI Z9.2 for:

- a. Vacuums.
- b. Water filtration equipment.
- c. Ventilation equipment.
- d. Other equipment required to contain airborne asbestos fibers.

SD-18 Records

Task Order Specific Asbestos Closeout Report; GA.

Provide a written memorandum addressed to the Contracting Officer and the Fort Lewis Asbestos Coordinator indicating the asbestos project has been completed. Reference the task order number and building numbers. Provide jobsite entry logs; safety meeting sign-in logs; a summary of asbestos removed and remaining, waste shipment records; weigh, bills and delivery tickets; completed "Certification of final Cleaning and Visual Inspection" forms (SETUP DETAIL SHEET 19) with attached laboratory air sampling clearance results; bulk asbestos sample results taken during abatement activities.

Respiratory Protection Program; GA.

Records of the respirator program. Include records of the respiratory program and all other information in Paragraph RESPIRATORY PROTECTION PROGRAM

Cleanup and Disposal; GA.

Waste shipment records. Weigh bills and delivery tickets shall be furnished for information only.

1.5 QUALIFICATIONS

1.5.1 Written Qualifications and Organization Report

The Contractor shall furnish a written qualifications and organization report providing evidence of qualifications of the Contractor, Contractor's Project Supervisor, Designated Competent Person, supervisors and workers; Designated IH (person assigned to project and firm name); independent testing laboratory (including name of firm, principal, and analysts who will perform analyses); all subcontractors to be used including disposal transportation and disposal facility firms, subcontractor supervisors,

subcontractor workers; and any others assigned to perform asbestos abatement and support activities. The report shall include an organization chart showing the Contractor's staff organization for this project by name and title, chain of command and reporting relationship with all subcontractors. The report shall be signed by the Contractor, the Contractor's onsite project manager, Designated Competent Person, Designated IH, designated testing laboratory and the principals of all subcontractors to be used. The Contractor shall include the following statement in the report: "By signing this report I certify that the personnel I am responsible for during the course of this project fully understand the contents of 29 CFR 1926, Section .1101, 40 CFR 61, Subpart M, and the federal, state and local requirements specified in paragraph SAFETY AND HEALTH PROGRAM AND PLANS for those asbestos abatement activities that they will be involved in."

1.5.2 Specific Requirements

The Contractor shall designate in writing, personnel meeting the following qualifications:

- a. Designated Competent Person: The name, address, telephone number, and resume of the Contractor's Designated Competent Person shall be provided. Evidence that the full-time Designated Competent Person is qualified in accordance with 29 CFR 1926, Sections .32 and .1101, has EPA Model Accreditation Plan (MAP) "Contractor/Supervisor" training accreditation required by 40 CFR 763, Subpart E, Appendix C, and is experienced in the administration and supervision of asbestos abatement projects, including exposure assessment and monitoring, work practices, abatement methods, protective measures for personnel, setting up and inspecting asbestos abatement work areas, evaluating the integrity of containment barriers, placement and operation of local exhaust systems, ACM generated waste containment and disposal procedures, decontamination units installation and maintenance requirements, site safety and health requirements, notification of other employees onsite, etc. The duties of the Competent Person shall include the following: controlling entry to and exit from the regulated area; supervising any employee exposure monitoring required by 29 CFR 1926, Section .1101; ensuring that all employees working within a regulated area wear the appropriate personal protective equipment (PPE), are trained in the use of appropriate methods of exposure control, and use the hygiene facilities and decontamination procedures specified; and ensuring that engineering controls in use are in proper operating conditions and are functioning properly. The Designated Competent Person shall be responsible for compliance with applicable federal, state and local requirements, the Contractor's Accident Prevention Plan and Asbestos Hazard Abatement Plan. The Designated Competent Person shall provide, and the Contractor shall submit, the "Contractor/Supervisor" course completion certificate and the most recent certificate for required refresher training with the employee "Certificate of Worker Acknowledgment" required by this paragraph. The Contractor shall submit evidence that this person has a minimum of 2 years of on-the-job asbestos abatement experience relevant to OSHA competent person requirements. The Designated Competent Person shall be onsite at all times during the conduct of this project.

- b. Project and Other Supervisors: The Contractor shall provide the name, address, telephone number, and resume of the Project Supervisor and other supervisors who have responsibility to implement the Accident Prevention Plan, including the Asbestos Hazard Abatement Plan and Activity Hazard Analyses, the authority to direct work performed under this contract and verify compliance, and have EPA Model Accreditation Plan (MAP) "Contractor/Supervisor" training accreditation required by 40 CFR 763, Subpart E, Appendix C. The Project Supervisor and other supervisors shall provide, and the Contractor shall submit, the "Contractor/Supervisor" course completion certificate and the most recent certificate for required refresher training with the employee "Certificate of Worker Acknowledgment" required by this paragraph. The Contractor shall submit evidence that the Project Supervisor has a minimum of 2 years of on-the-job asbestos abatement experience relevant to project supervisor responsibilities and the other supervisors have a minimum of 1 year on-the-job asbestos abatement experience commensurate with the responsibilities they will have on this project.
- c. Designated Industrial Hygienist: The Contractor shall provide the name, address, telephone number, resume and other information specified below for the Industrial Hygienist (IH) selected to prepare the Contractor's Asbestos Hazard Abatement Plan, prepare and perform training, direct air monitoring and assist the Contractor's Competent Person in implementing and ensuring that safety and health requirements are complied with during the performance of all required work. The Designated IH is not required to be on-site full time. The Designated IH shall be a person who is board certified in the practice of industrial hygiene as determined and documented by the American Board of Industrial Hygiene (ABIH), has EPA Model Accreditation Plan (MAP) "Contractor/Supervisor" training accreditation required by 40 CFR 763, Subpart E, Appendix C, and has a minimum of 2 years of comprehensive experience in planning and overseeing asbestos abatement activities. The Designated IH shall provide, and the Contractor shall submit, the "Contractor/Supervisor" course completion certificate and the most recent certificate for required refresher training with the employee "Certificate of Worker Acknowledgment" required by this paragraph. The Designated IH shall be completely independent from the Contractor according to federal, state, or local regulations; that is, shall not be a Contractor's employee or be an employee or principal of a firm in a business relationship with the Contractor negating such independent status. A copy of the Designated IH's current valid ABIH certification or confirmation of eligibility in writing from the ABIH shall be included. The Designated IH shall visit the site at least once per week for the duration of asbestos activities and shall be available for emergencies. In addition, the Designated IH shall prepare, and the Contractor shall submit, the name, address, telephone numbers and resumes of additional IH's and industrial hygiene technicians (IHT) who will be assisting the Designated IH in performing onsite tasks. IHs and IHTs supporting the Designated IH shall have a minimum of 2 years of practical onsite asbestos abatement experience. The formal reporting relationship between the Designated IH and the support IHs and IHTs, the Designated Competent Person, and the Contractor shall be indicated.

- d. Asbestos Abatement Workers: Asbestos abatement workers shall meet the requirements contained in 29 CFR 1926, Section .1101, 40 CFR 61, Subpart M, and other applicable federal, state and local requirements. Worker training documentation shall be provided as required on the "Certificate of Workers Acknowledgment" in this paragraph.
- e. Worker Training and Certification of Worker Acknowledgment: Training documentation will be required for each employee who will perform OSHA Class I, Class II, Class III, or Class IV asbestos abatement operations. Such documentation shall be submitted on a Contractor generated form titled "Certificate of Workers Acknowledgment", to be completed for each employee in the same format and containing the same information as the example certificate at the end of this section. Training course completion certificates (initial and most recent update refresher) required by the information checked on the form shall be attached.
- f. Physician: The Contractor shall provide the name, medical qualifications, address, telephone number and resume of the physician who will or has performed the medical examinations and evaluations of the persons who will conduct the asbestos abatement work tasks. The physician shall be currently licensed by the state where the workers will be or have been examined, have expertise in pneumoconiosis and shall be responsible for the determination of medical surveillance protocols and for review of examination/test results performed in compliance with 29 CFR 1926, Section .1101 and paragraph MEDICAL REQUIREMENTS. The physician shall be familiar with the site's hazards and the scope of this project.
- g. First Aid and CPR Trained Persons: The names of at least 2 persons who are currently trained in first aid and CPR by the American Red Cross or other approved agency shall be designated and shall be onsite at all times during site operations. They shall be trained in universal precautions and the use of PPE as described in the Bloodborne Pathogens Standard of 29 CFR 1910, Section .1030 and shall be included in the Contractor's Bloodborne Pathogen Program. These persons may perform other duties but shall be immediately available to render first aid when needed. A copy of each designated person's current valid First Aid and CPR certificate shall be provided.
- h. Independent Testing Laboratory: The Contractor shall provide the name, address and telephone number of the independent testing laboratory selected to perform the sample analyses and report the results. The testing laboratory shall be completely independent from the Contractor as recognized by federal, state or local regulations. Written verification of the following criteria, signed by the testing laboratory principal and the Contractor, shall be submitted:
 - (1) Phase contrast microscopy (PCM): The laboratory is fully equipped and proficient in conducting PCM of airborne samples using the methods specified by 29 CFR 1926, Section .1101, OSHA method ID-160, the most current version of NIOSH Pub No. 84-100 Method 7400, and NIOSH Pub No. 84-100 Method 7402, transmission electron

microscopy (TEM); the laboratory is currently judged proficient (classified as acceptable) in counting airborne asbestos samples by PCM by successful participation in each of the last 4 rounds in the American Industrial Hygiene Association (AIHA) Proficiency Analytical Testing (PAT) Program; the names of the selected microscopists who will analyze airborne samples by PCM with verified documentation of their proficiency to conduct PCM analyses by being judged proficient in counting samples as current participating analysts in the AIHA PAT Program, and having successfully completed the Asbestos Sampling and Analysis course (NIOSH 582 or equivalent) with a copy of course completion certificate provided; when the PCM analysis is to be conducted onsite, documentation shall be provided certifying that the onsite analyst meets the same requirements.

(2) Polarized light microscopy (PLM): The laboratory is fully equipped and proficient in conducting PLM analyses of suspect ACM bulk samples in accordance with 40 CFR 763, Subpart E, Appendix E; the laboratory is currently accredited by NIST under the NVLAP for bulk asbestos analysis and will use analysts (names shall be provided) with demonstrated proficiency to conduct PLM to include its application to the identification and quantification of asbestos content.

(3) Transmission electron microscopy (TEM): A laboratory that is fully equipped and proficient in conducting TEM analysis of airborne samples using the mandatory method specified by 40 CFR 763, Subpart E, Appendix E; the laboratory is currently accredited by NIST under the NVLAP for airborne sample analysis of asbestos by TEM; the laboratory will use analysts (names shall be provided) that are currently evaluated as competent with demonstrated proficiency under the NIST NVLAP for airborne sample analysis of asbestos by TEM. Proficient in conducting analysis for low asbestos concentration, enhanced analysis of floor tiles and bulk materials where multiple layers are present, using an improved EPA test method titled, "Method for the Determination of Asbestos in Bulk Building Materials".

(4) PCM/TEM: The chosen laboratory is fully equipped and each analyst (name shall be provided) possesses demonstrated proficiency in conducting PCM and TEM analysis of airborne samples using NIOSH Pub No. 84-100 Method 7400 PCM and NIOSH Pub No. 84-100 Method 7402 (TEM confirmation of asbestos content of PCM results) from the same filter.

- i. Disposal Facility, Transporter: The Contractor shall provide written evidence that the landfill to be used is approved for asbestos disposal by the USEPA, state and local regulatory agencies. Copies of signed agreements between the Contractor (including subcontractors and transporters) and the asbestos waste disposal facility to accept and dispose of all asbestos containing waste generated during the performance of this contract shall be provided. Qualifications shall be provided for each subcontractor or transporter to be used, indicating previous experience in transport and disposal of asbestos waste to include all required state and local waste hauler requirements for asbestos. The Contractor and transporters shall meet the DOT requirements of 49

CFR 171, 49 CFR 172, and 49 CFR 173 as well as registration requirements of 49 CFR 107 and other applicable state or local requirements. The disposal facility shall meet the requirements of 40 CFR 61, Sections .154 or .155, as required in 40 CFR 61, Section .150(b), and other applicable state or local requirements.

1.5.3 Federal, State or Local Citations on Previous Projects

The Contractor and all subcontractors shall submit a statement, signed by an officer of the company, containing a record of any citations issued by Federal, State or local regulatory agencies relating to asbestos activities (including projects, dates, and resolutions); a list of penalties incurred through non-compliance with asbestos project specifications, including liquidated damages, overruns in scheduled time limitations and resolutions; and situations in which an asbestos-related contract has been terminated (including projects, dates, and reasons for terminations). If there are none, a negative declaration signed by an officer of the company shall be provided.

1.6 REGULATORY REQUIREMENTS

In addition to detailed requirements of this specification, work performed under this contract shall comply with EM 385-1-1, applicable federal, state, and local laws, ordinances, criteria, rules and regulations regarding handling, storing, transporting, and disposing of asbestos waste materials. This includes, but is not limited to, OSHA standards, 29 CFR 1926, especially Section .1101, 40 CFR 61, Subpart M and 40 CFR 763. Matters of interpretation of standards shall be submitted to the appropriate administrative agency for resolution before starting work. Where an agency substantially changes a work method or approach listed or referenced in these specifications, contractor must revise and submit a new work plan for Government review prior to implementation. Where the requirements of this specification, applicable laws, criteria, ordinances, regulations, and referenced documents vary, the most stringent requirements shall apply. The following state and local laws, rules and regulations regarding demolition, removal, encapsulation, construction alteration, repair, maintenance, renovation, spill/emergency cleanup, housekeeping, handling, storing, transporting and disposing of asbestos material apply: Puget Sound Clean Air Agency (PSCAA) Regulation III, Article 4; Washington Administrative Code (WAC) Chapters 296-62 and 296-65.

1.7 SAFETY AND HEALTH PROGRAM AND PLANS

The Contractor shall develop and submit a written comprehensive site-specific Accident Prevention Plan as described in Specification Section 01110(1351): Human Safety and Health at least 30 days prior to the preconstruction conference. The Accident Prevention Plan shall address requirements of EM 385-1-1, Appendix A, covering onsite work to be performed by the Contractor and subcontractors. The Accident Prevention Plan shall incorporate an Asbestos Hazard Abatement Plan, and Activity Hazard Analyses as separate appendices into 1 site specific Accident Prevention Plan document. Any portions of the Contractor's overall Safety and Health Program that are referenced in the Accident Prevention Plan, e.g., respirator program, hazard communication program, confined space entry program, etc., shall be included as appendices to the Accident Prevention Plan. The plan shall take into consideration all the individual asbestos abatement work tasks identified in Table 1. The plan shall be prepared,

signed (and sealed, including certification number if required), and dated by the Contractor's Designated IH, Competent Person, and Project Supervisor.

1.7.1 Asbestos Hazard Abatement Plan Appendix

The Asbestos Hazard Abatement Plan appendix to the Accident Prevention Plan shall include, but not be limited to, the following:

- a. The personal protective equipment to be used;
- b. The location and description of regulated areas including clean and dirty areas, access tunnels, and decontamination unit (clean room, shower room, equipment room, storage areas such as load-out unit);
- c. Initial exposure assessment in accordance with 29 CFR 1926, Section .1101;
- d. Level of supervision;
- e. Method of notification of other employers at the worksite;
- f. Abatement method to include containment and control procedures;
- g. Interface of trades involved in the construction;
- h. Sequencing of asbestos related work;
- i. Storage and disposal procedures and plan;
- j. Type of wetting agent and asbestos encapsulant to be used;
- k. Location of local exhaust equipment;
- l. Air monitoring methods (personal, environmental and clearance);
- m. Bulk sampling and analytical methods (if required);
- n. A detailed description of the method to be employed in order to control the spread of ACM wastes and airborne fiber concentrations;
- o. Fire and medical emergency response procedures;
- p. The security procedures to be used for all regulated areas.

1.7.2 Activity Hazard Analyses Appendix

Activity Hazard Analyses, for each major phase of work, shall be submitted and updated during the project. The analysis shall define the activities to be performed for a major phase of work, identify the sequence of work, the specific hazards anticipated, and the control measures to be implemented to eliminate or reduce each hazard to an acceptable level. Work shall not proceed on that phase until the Activity Hazard Analyses has been accepted and a preparatory meeting has been conducted by the Contractor to discuss its contents with everyone engaged in the activities, including the onsite Government representatives. The Activity Hazard Analyses shall be continuously reviewed and, when appropriate, modified to address changing site conditions or operations.

1.8 PRECONSTRUCTION CONFERENCE AND ONSITE SAFETY

The Contractor and the Contractor's Designated Competent Person, Project Supervisor, and Designated IH shall meet with the Contracting Officer prior to beginning work at a safety preconstruction conference to discuss the details of the Contractor's submitted Accident Prevention Plan to include the Asbestos Hazard Abatement Plan and Activity Hazard Analyses appendices. Deficiencies in the Accident Prevention Plan will be discussed and the Accident Prevention Plan shall be revised to correct the deficiencies and resubmitted for acceptance. Any changes required in the specification as a result of the Accident Prevention Plan shall be identified specifically in the plan to allow for free discussion and acceptance by the Contracting Officer, prior to the start of work. Onsite work shall not begin until the Accident Prevention Plan has been accepted. A copy of the written Accident Prevention Plan shall be maintained onsite. Changes and modifications to the accepted Accident Prevention Plan shall be made with the knowledge and concurrence of the Designated IH, the Project Supervisor, Designated Competent Person, and the Contracting Officer. Should any unforeseen hazard become evident during the performance of the work, the Designated IH shall bring such hazard to the attention of the Project Supervisor, Designated Competent Person, and the Contracting Officer, both verbally and in writing, for resolution as soon as possible. In the interim, all necessary action shall be taken by the Contractor to restore and maintain safe working conditions in order to safeguard onsite personnel, visitors, the public, and the environment. Once accepted by the Contracting Officer, the Accident Prevention Plan, including the Asbestos Hazard Abatement Plan and Activity Hazard Analyses will be enforced as if an addition to the contract. Disregarding the provisions of this contract or the accepted Accident Prevention Plan will be cause for stopping of work, at the discretion of the Contracting Officer, until the matter has been rectified.

1.9 SECURITY

Fenced and locked security area shall be provided for each regulated area. A logbook shall be kept documenting entry into and out of the regulated area. Entry into regulated areas shall only be by personnel authorized by the Contractor and the Contracting Officer. Personnel authorized to enter regulated areas shall be trained, be medically evaluated, and wear the required personal protective equipment, for the specific regulated area to be entered.

1.10 MEDICAL REQUIREMENTS

Medical requirements shall conform to 29 CFR 1926, Section .1101.

1.10.1 Medical Examinations

Before being exposed to airborne asbestos fibers, workers shall be provided with a medical examination as required by 29 CFR 1926, Section .1101 and other pertinent state or local requirements. This requirement shall have been satisfied within the last 12 months. The same medical examination shall be given on an annual basis to employees engaged in an occupation involving asbestos and within 30 calendar days before or after the termination of employment in such occupation. X-ray films of asbestos workers shall be identified to the consulting radiologist and medical record jackets shall be marked with the word "asbestos."

1.10.1.1 Information Provided to the Physician

The Contractor shall provide the following information in writing to the examining physician:

- a. A copy of 29 CFR 1926, Section .1101 and Appendices D, E, G, and I;
- b. A description of the affected employee's duties as they relate to the employee's exposure and physical exertion;
- c. The employee's representative exposure level or anticipated exposure level;
- d. A description of any personal protective and respiratory equipment used or to be used;
- e. Information from previous medical examinations of the affected employee that is not otherwise available to the examining physician.

1.10.1.2 Written Medical Opinion

For each worker, a written medical opinion prepared and signed by a licensed physician indicating the following:

- a. Summary of the results of the examination.
- b. The potential for an existing physiological condition that would place the employee at an increased risk of health impairment from exposure to asbestos.
- c. The ability of the individual to wear personal protective equipment, including respirators, while performing strenuous work tasks under cold and/or heat stress conditions.
- d. A statement that the employee has been informed of the results of the examination, provided with a copy of the results, informed of the increased risk of lung cancer attributable to the combined effect of smoking and asbestos exposure, and informed of any medical condition that may result from asbestos exposure.

1.10.2 Medical and Exposure Records

Complete and accurate records shall be maintained of each employee's medical examinations, medical records, and exposure data, as required by 29 CFR 1910, Section .1910.20 and 29 CFR 1926, Section .1101 for a period of 30 years after termination of employment. Records of the required medical examinations and exposure data shall be made available, for inspection and copying, to the Assistant Secretary of Labor for Occupational Safety and Health (OSHA) or authorized representatives of the employee and an employee's physician upon request of the employee or former employee. A copy of the required medical certification for each employee shall be maintained on file at the worksite for review, as requested by the Contracting Officer or the representatives.

1.11 TRAINING PROGRAM

1.11.1 General Training Requirements

The Contractor shall establish a training program as specified by EPA Model Accreditation Plan (MAP), training requirements at 40 CFR 763, Subpart E, Appendix C, the State of Washington regulation no's. 296-62 and 296-65, OSHA requirements at 29 CFR 1926, Section .1101(k)(9), and this specification. Contractor employees shall complete the required training for the type of work they are to perform and such training shall be documented and provided to the Contracting Officer as specified in paragraph QUALIFICATIONS.

1.11.2 Project Specific Training

Prior to commencement of work, each worker shall be instructed by the Contractor's Designated IH and Competent Person in the following project specific training:

- a. The hazards and health effects of the specific types of ACM to be abated;
- b. The content and requirements of the Contractor's Accident Prevention Plan to include the Asbestos Hazard Abatement Plan and Activity Hazard Analyses and site-specific safety and health precautions;
- c. Hazard Communication Program;
- d. Hands-on training for each asbestos abatement technique to be employed;
- e. Heat and/or cold stress monitoring specific to this project;
- f. Air monitoring program and procedures;
- g. Medical surveillance to include medical and exposure record-keeping procedures;
- h. The association of cigarette smoke and asbestos-related disease;
- i. Security procedures;
- j. Specific work practice controls and engineering controls required for each Class of work in accordance with 29 CFR 1926, Section .1101.

1.12 RESPIRATORY PROTECTION PROGRAM

The Contractor's Designated IH shall establish in writing, and implement a respiratory protection program in accordance with 29 CFR 1926, Section .1101, 29 CFR 1910, Section .134, ANSI Z88.2, CGA G-7, CGA G-7.1 and DETAIL SHEET 12. The Contractor's Designated IH shall establish minimum respiratory protection requirements based on measured or anticipated levels of airborne asbestos fiber concentrations encountered during the performance of the asbestos abatement work. The Contractor's respiratory protection program shall include, but not be limited to, the following elements:

- a. The company policy, used for the assignment of individual responsibility, accountability, and implementation of the respiratory protection program.
- b. The standard operating procedures covering the selection and use of respirators. Respiratory selection shall be determined by the hazard to which the worker is exposed.
- c. Medical evaluation of each user to verify that the worker may be assigned to an activity where respiratory protection is required.
- d. Training in the proper use and limitations of respirators.
- e. Respirator fit-testing, i.e., quantitative, qualitative and individual functional fit checks.
- f. Regular cleaning and disinfection of respirators.
- g. Routine inspection of respirators during cleaning and after each use when designated for emergency use.
- h. Storage of respirators in convenient, clean, and sanitary locations.
- i. Surveillance of regulated area conditions and degree of employee exposure (e.g., through air monitoring).
- j. Regular evaluation of the continued effectiveness of the respiratory protection program.
- k. Recognition and procedures for the resolution of special problems as they affect respirator use (e.g., no facial hair that comes between the respirator face piece and face or interferes with valve function; prescription eye wear usage; contact lenses usage; etc.).
- l. Proper training in putting on and removing respirators.

1.12.1 Respiratory Fit Testing

A qualitative or quantitative fit test conforming to 29 CFR 1926, Section 1101, Appendix C shall be conducted by the Contractor's Designated IH for each Contractor worker required to wear a respirator, and for the Contracting Officer and authorized visitors who enter a regulated area where respirators are required to be worn. A respirator fit test shall be performed for each worker wearing a negative-pressure respirator prior to initially wearing a respirator on this project and every 6 months thereafter. The qualitative fit tests may be used only for testing the fit of half-mask respirators where they are permitted to be worn, or of full-facepiece air purifying respirators where they are worn at levels at which half-facepiece air purifying respirators are permitted. If physical changes develop that will affect the fit, a new fit test for the worker shall be performed. Functional fit checks shall be performed by employees each time a respirator is put on and in accordance with the manufacturer's recommendation.

1.12.2 Respirator Selection and Use Requirements

The Contractor shall provide respirators, and ensure that they are used as required by 29 CFR 1926, Section .1101 and in accordance with the manufacturer's recommendations. Respirators shall be jointly approved by the Mine Safety and Health Administration and the National Institute for Occupational Safety and Health (MSHA/NIOSH), or by NIOSH, under the provisions of 42 CFR 84, for use in environments containing airborne asbestos fibers. Personnel who handle ACM, enter regulated areas that require the wearing of a respirator, or who are otherwise carrying out abatement activities that require the wearing of a respirator, shall be provided with approved respirators that are fully protective of the worker at the measured or anticipated airborne asbestos concentration level to be encountered. For air-purifying respirators, the particulate filter portion of the cartridges or canister approved for use in airborne asbestos environments shall be high-efficiency particulate air (HEPA). The initial respirator selection and the decisions regarding the upgrading or downgrading of respirator type shall be made by the Contractor's Designated IH based on the measured or anticipated airborne asbestos fiber concentrations to be encountered. Recommendations made by the Contractor's Designated IH to downgrade respirator type shall be submitted in writing to the Contracting Officer. The Contractor's Designated Competent Person in consultation with the Designated IH, shall have the authority to take immediate action to upgrade or downgrade respiratory type when there is an immediate danger to the health and safety of the wearer. Respirators shall be used in the following circumstances:

- a. During all Class I asbestos jobs.
- b. During all Class II work where the ACM is not removed in a substantially intact state.
- c. During all Class II and III work which is not performed using wet methods. Respirators need not be worn during removal of ACM from sloped roofs when a negative exposure assessment has been made and ACM is removed in an intact state.
- d. During all Class II and III asbestos jobs where the Contractor does not produce a negative exposure assessment.
- e. During all Class III jobs where TSI or surfacing ACM is being disturbed.
- f. During all Class IV work performed within regulated areas where employees performing other work are required to wear respirators.
- g. During all work where employees are exposed above the PEL-TWA or PEL-Excursion Limit.
- h. In emergencies

1.12.3 Class I Work

The Contractor shall provide: (1) a tight-fitting, powered air purifying respirator equipped with high efficiency filters, or (2) a full-facepiece supplied air respirator operated in the pressure demand mode, equipped with HEPA egress cartridges, or (3) an auxiliary positive pressure self-contained

breathing apparatus, for all employees within the regulated area where Class I work is being performed; provided that a negative exposure assessment has not been produced, and that the exposure level will not exceed 1 f/cc as an 8-hour time weighted average. A full-facepiece supplied air respirator, operated in the pressure demand mode, equipped with an auxiliary positive pressure self-contained breathing apparatus shall be provided under such conditions, if the exposure assessment indicates exposure levels above 1 f/cc as an 8-hour time weighted average.

1.12.4 Class II and III Work

The Contractor shall provide an air purifying respirator, other than a disposable respirator, equipped with high-efficiency filters whenever the employee performs Class II and III asbestos jobs where the Contractor does not produce a negative exposure assessment; and Class III jobs where TSI or surfacing ACM is being disturbed.

1.12.5 Sanitation

Employees who wear respirators shall be permitted to leave work areas to wash their faces and respirator facepieces whenever necessary to prevent skin irritation associated with respirator use.

1.13 HAZARD COMMUNICATION PROGRAM

A hazard communication program shall be established and implemented in accordance with 29 CFR 1926, Section .59. Material safety data sheets (MSDSs) shall be provided for all hazardous materials brought onto the worksite. One copy shall be provided to the Contracting Officer and 1 copy shall be included in the Contractor's Hazard Communication Program. Also, see Specification Section 01061(01355) - ENVIRONMENTAL PROTECTION AT FORT LEWIS, YAKIMA & VANCOUVER BARRACKS for additional HAZCOM submittal requirements.

1.14 LICENSES, PERMITS AND NOTIFICATIONS

1.14.1 General Legal Requirements

Necessary licenses, permits and notifications shall be obtained in conjunction with the project's asbestos abatement, transportation and disposal actions and timely notification furnished of such actions as required by federal, state, regional, and local authorities. The Contractor shall notify the local air pollution control district/agency (PSCAA), State OSHA program, notify (Department of Labor and Industries), and the Contracting Officer in writing at least 10 days prior to the commencement of work, in accordance with 40 CFR 61, Subpart M, and state and local requirements to include the mandatory "Notification of Demolition and Renovation Record" form and other required notification documents. Notification shall be by Certified Mail, Return Receipt Requested. The Contractor shall furnish copies of the receipts to the Contracting Officer, in writing, prior to the commencement of work. Local fire department shall be notified 3 days before fire-proofing material is removed from a building and the notice shall specify whether or not the material contains asbestos. A copy of the rental company's written acknowledgment and agreement shall be provided as required by paragraph RENTAL EQUIPMENT. For licenses, permits, and notifications that the Contractor is responsible for obtaining, the Contractor shall pay any associated fees or other costs incurred.

1.14.2 Litigation and Notification

The Contractor shall notify the Contracting Officer if any of the following occur:

- a. The Contractor or any of the subcontractors are served with notice of violation of any law, regulation, permit or license which relates to this contract;
- b. Proceedings are commenced which could lead to revocation of related permits or licenses; permits, licenses or other Government authorizations relating to this contract are revoked;
- c. Litigation is commenced which would affect this contract;
- d. The Contractor or any of the subcontractors become aware that their equipment or facilities are not in compliance or may fail to comply in the future with applicable laws or regulations.

1.15 PERSONAL PROTECTIVE EQUIPMENT

Three complete sets of personal protective equipment shall be made available to the Contracting Officer and authorized visitors for entry to the regulated area. Contracting Officer and authorized visitors shall be provided with training equivalent to that provided to Contractor employees in the selection, fitting, and use of the required personal protective equipment and the site safety and health requirements. Contractor workers shall be provided with personal protective clothing and equipment and the Contractor shall ensure that it is worn properly. The Contractor's Designated IH and Designated Competent Person shall select and approve all the required personal protective clothing and equipment to be used.

1.15.1 Respirators

Respirators shall be in accordance with paragraph RESPIRATORY PROTECTION PROGRAM.

1.15.2 Whole Body Protection

Personnel exposed to airborne concentrations of asbestos that exceed the PELs, or for all OSHA Classes of work for which a required negative exposure assessment is not produced, shall be provided with whole body protection and such protection shall be worn properly. The Contractor's Designated IH and Competent Person shall select and approve the whole body protection to be used. The Competent Person shall examine work suits worn by employees at least once per work shift for rips or tears that may occur during performance of work. When rips or tears are detected while an employee is working, rips and tears shall be immediately mended, or the work suit shall be immediately replaced. Disposable whole body protection shall be disposed of as asbestos contaminated waste upon exiting from the regulated area. Reusable whole body protection worn shall be either disposed of as asbestos contaminated waste upon exiting from the regulated area or be properly laundered in accordance with 29 CFR 1926, Section .1101. Whole body protection used for asbestos abatement shall not be removed from the worksite by a worker to be cleaned. All recommendations made by the Contractor's Designated IH to downgrade whole body protection shall be

submitted in writing to the Contracting Officer. The Contractor's Designated Competent Person, in consultation with the Designated IH, has the authority to take immediate action to upgrade or downgrade whole body protection when there is an immediate danger to the health and safety of the wearer.

1.15.2.1 Coveralls

Disposable-impermeable or disposable-breathable coveralls with a zipper front shall be provided. Sleeves shall be secured at the wrists, and foot coverings secured at the ankles.

1.15.2.2 Work Clothing

An additional coverall shall be provided when the abatement and control method employed does not provide for the exit from the regulated area directly into an attached decontamination unit. Cloth work clothes for wear under the protective coverall, and foot coverings, shall be provided when work is being conducted in low temperature conditions. Cloth work clothes shall be either disposed of as asbestos contaminated waste or properly laundered in accordance with 29 CFR 1926, Section .1101.

1.15.2.3 Gloves

Gloves shall be provided to protect the hands. Where there is the potential for hand injuries (i.e., scrapes, punctures, cuts, etc.) a suitable glove shall be provided and used.

1.15.2.4 Foot Coverings

Footwear, as required by OSHA and EM 385-1-1, that is appropriate for safety and health hazards in the area shall be worn. Rubber boots shall be used in moist or wet areas. Reusable footwear removed from the regulated area shall be thoroughly decontaminated or disposed of as ACM waste. Disposable protective foot covering shall be disposed of as ACM waste. If rubber boots are not used, disposable foot covering shall be provided.

1.15.2.5 Head Covering

Hood type head covering shall be provided. In addition, protective head gear (hard hats) shall be provided as required. Hard hats shall only be removed from the regulated area after being thoroughly decontaminated.

1.15.2.6 Protective Eye Wear

Eye protection provided shall be in accordance with ANSI Z87.1.

1.16 HYGIENE FACILITIES AND PRACTICES

The Contractor shall establish a decontamination area in compliance with 29 CFR 1926 Section 1101(j) for the decontamination of employees, material and equipment. The Contractor shall ensure that employees enter and exit the regulated area through the decontamination area.

1.16.1 Shower Facilities

Shower facilities, when provided, shall comply with 29 CFR 1910, Section .141(d) (3).

1.16.2 3-Stage Decontamination Area

A temporary negative pressure decontamination unit that is adjacent and attached in a leak-tight manner to the regulated area shall be provided as described in SET UP DETAIL SHEET 22 and 23. Utilization of prefabricated units shall have prior approval of the Contracting Officer. The decontamination unit shall have an equipment room and a clean room separated by a shower that complies with 29 CFR 1910, Section .141 (unless the Contractor can demonstrate that such facilities are not feasible). Surfaces of the equipment room shall be wet wiped 2 times after each shift. Materials used for wet wiping shall be disposed of as asbestos contaminated waste. Two separate lockers shall be provided for each asbestos worker, one in the equipment room and one in the clean room. Hot water service may be secured from the building hot water system provided backflow protection is installed by the Contractor at the point of connection. Should sufficient hot water be unavailable, the Contractor shall provide a minimum 40 gal. electric water heater with minimum recovery rate of 20 gal. per hour and a temperature controller for each showerhead. 29 CFR 1910, Section .141(d) (3) provides for 1 shower per 10 employees. Instantaneous type in-line water heater may be incorporated at each shower head in lieu of hot water heater, upon approval by the Contracting Officer. Flow and temperature controls shall be located within the shower and shall be adjustable by the user. Used shower water shall be collected and filtered to remove asbestos contamination. Filters and residue shall be disposed of as asbestos contaminated material. Filtered water shall be discharged to the sanitary system. Wastewater filters shall be installed in series with the first stage pore size of 20 microns and the second stage pore size of 5 microns. The floor of the decontamination unit's clean room shall be kept dry and clean at all times. Water from the shower shall not be allowed to wet the floor in the clean room. Surfaces of the clean room and shower shall be wet-wiped 2 times after each shift change with a disinfectant solution. Proper housekeeping and hygiene requirements shall be maintained. Soap and towels shall be provided for showering, washing and drying. Any cloth towels provided shall be disposed of as ACM waste or shall be laundered in accordance with 29 CFR 1926, Section .1101.

1.16.3 Load-Out Unit

A temporary load-out unit that is adjacent and connected to the regulated area shall be provided as described in DETAIL SHEET Number 20 and 25. Utilization of prefabricated units shall have prior approval of the Contracting Officer. The load-out unit shall be attached in a leak-tight manner to each regulated area. Surfaces of the load-out unit shall be adequately wet-wiped 2 times after each shift change. Materials used for wet wiping shall be disposed of as asbestos contaminated waste. Equipment and surfaces of containers filled with ACM shall be cleaned prior to removing them from the equipment room or area.

1.16.4 Single Stage Decontamination Area

A decontamination area (equipment room/area) shall be provided for Class I work involving less than 25 feet or 10 square feet of TSI or surfacing ACM,

and for Class II and Class III asbestos work operations where exposures exceed the PELs or where there is no negative exposure assessment produced before the operation in accordance with 29 CFR 1926 Section .1101(j). The equipment room or area shall be adjacent to the regulated area for the decontamination of employees, material, and their equipment which is contaminated with asbestos. The equipment room or area shall consist of an area covered by an impermeable drop cloth on the floor or horizontal working surface. The area must be of sufficient size to accommodate cleaning of equipment and removing personal protective equipment without spreading contamination beyond the area. Surfaces of the equipment room shall be wet wiped 2 times after each shift or replaced with new materials. Materials used for wet wiping shall be disposed of as asbestos contaminated waste.

1.16.5 Decontamination Requirements for Class IV Work

The Contractor shall ensure that employees performing Class IV work within a regulated area comply with the hygiene practice required of employees performing work which has a higher classification within that regulated area, or the Contractor shall provide alternate decontamination area facilities for employees cleaning up debris and material which is TSI or surfacing ACM.

1.16.6 Decontamination Area Entry Procedures

The Contractor shall ensure that employees entering the decontamination area through the clean room or clean area:

- a. Remove street clothing in the clean room or clean area and deposit it in lockers.
- b. Put on protective clothing and respiratory protection before leaving the clean room or clean area.
- c. Pass through the equipment room to enter the regulated area.

1.16.7 Decontamination Area Exit Procedures

The Contractor shall ensure that the following procedures are followed:

- a. Before leaving the regulated area, respirators shall be worn while employees remove all gross contamination and debris from their work clothing using a HEPA vacuum.
- b. Employees shall remove their protective clothing in the equipment room and deposit the clothing in labeled impermeable bags or containers for disposal and/or laundering.
- c. Employees shall not remove their respirators in the equipment room.
- d. Employees shall shower prior to entering the clean room. If a shower has not been located between the equipment room and the clean room or the work is performed outdoors, the Contractor shall ensure that employees engaged in Class I asbestos jobs: a) Remove asbestos contamination from their work suits in the equipment room or decontamination area using a HEPA vacuum before proceeding to a shower that is not adjacent to the work area; or b) Remove their contaminated work suits in the equipment room, without cleaning

worksuits, and proceed to a shower that is not adjacent to the work area, leaving respirators on until wetted in the remote shower.

- e. After showering, employees shall enter the clean room before changing into street clothes.

1.16.8 Lunch Areas

The Contractor shall provide lunch areas inside of which the airborne concentrations of asbestos are below 0.01 f/cc.

1.16.9 Smoking

Smoking, if allowed by the Contractor, shall only be permitted in designated areas approved by the Contracting Officer.

1.17 REGULATED AREAS

All Class I, II, and III asbestos work shall be conducted within regulated areas. The regulated area shall be demarcated to minimize the number of persons within the area and to protect persons outside the area from exposure to airborne asbestos. Where critical barriers or negative pressure enclosures are used, they shall demarcate the regulated area. Access to regulated areas shall be limited to authorized persons. The Contractor shall control access to regulated areas, ensure that only authorized personnel enter, and verify that Contractor required medical surveillance, training and respiratory protection program requirements are met prior to allowing entrance.

1.18 WARNING SIGNS AND TAPE

Warning signs and tape printed in English shall be provided at the regulated boundaries and entrances to regulated areas. The Contractor shall ensure that all personnel working in areas contiguous to regulated areas comprehend the warning signs. Signs shall be located to allow personnel to read the signs and take the necessary protective steps required before entering the area. Warning signs shall be in vertical format conforming to 29 CFR 1910 and 29 CFR 1926, Section .1101 and displaying the following legend in the lower panel:

DANGER
ASBESTOS
CANCER AND LUNG DISEASE HAZARD
AUTHORIZED PERSONNEL ONLY

Spacing between lines shall be at least equal to the height of the upper of any two lines. Warning tape shall be provided as shown and described on DETAIL SHEET 11, appended herein. Decontamination unit shall be as shown and described on DETAIL SHEET 15.

1.19 WARNING LABELS

Warning labels shall be affixed to all asbestos disposal containers used to contain asbestos materials, scrap, waste debris, and other products contaminated with asbestos. Containers with preprinted warning labels conforming to requirements are acceptable. Warning labels shall conform to 29 CFR 1926, Section .1101 and shall be of sufficient size to be clearly legible displaying the following legend:

DANGER
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND LUNG DISEASE HAZARD

1.20 LOCAL EXHAUST VENTILATION

Local exhaust ventilation units shall conform to ANSI Z9.2 and 29 CFR 1926, Section .1101. Filters on local exhaust system equipment shall conform to ANSI Z9.2 and UL 586. Filter shall be UL labeled. Provide documentation showing air change. Out calculations providing four air changes per hour in each individual negative pressure enclosure.

1.21 TOOLS

Vacuums shall be leak proof to the filter, equipped with HEPA filters, of sufficient capacity and necessary capture velocity at the nozzle or nozzle attachment to efficiently collect, transport and retain the ACM waste material. Power tools shall not be used to remove ACM unless the tool is equipped with effective, integral HEPA filtered exhaust ventilation capture and collection system and the use of such tools have been incorporated in the contractors' submitted Health, Safety and Work Plan, or has otherwise been approved for use by the Contracting Officer. Residual asbestos shall be removed from reusable tools prior to storage and reuse. Reusable tools shall be thoroughly decontaminated prior to being removed from regulated areas.

1.22 RENTAL EQUIPMENT

If rental equipment is to be used, written notification shall be provided to the rental agency, concerning the intended use of the equipment, the possibility of asbestos contamination of the equipment and the steps that will be taken to decontaminate such equipment. A written acceptance of the terms of the Contractor's notification shall be obtained from the rental agency.

1.23 AIR MONITORING EQUIPMENT

The Contractor's Designated IH shall approve air monitoring equipment to be used to collect samples. The equipment shall include, but shall not be limited to:

- a. High-volume sampling pumps that can be calibrated and operated at a constant airflow up to 20 liters per minute when equipped with a sampling train of tubing and filter cassette.
- b. Low-volume, battery powered, body-attachable, portable personal pumps that can be calibrated to a constant airflow up to approximately 4 liters per minute when equipped with a sampling train of tubing and filter cassette, and a self-contained rechargeable power pack capable of sustaining the calibrated flow rate for a minimum of 10 hours. The pumps shall also be equipped with an automatic flow control unit which shall maintain a constant flow, even as filter resistance increases due to accumulation of fiber and debris on the filter surface.

- c. Single use standard 25 mm diameter cassette, open face, 0.8 micron pore size, mixed cellulose ester membrane filters and cassettes with 50 mm electrically conductive extension cowl, and shrink bands, to be used with low flow pumps in accordance with 29 CFR 1926, Section .1101 for personal air sampling.
- d. Single use standard 25 mm diameter cassette, open face, 0.8 micron pore size, mixed cellulose ester membrane filters and cassettes with 50 mm electrically conductive cowl, and shrink bands, to be used with high flow pumps when conducting environmental area sampling using NIOSH Pub No. 84-100 Methods 7400 and 7402.
- e. Appropriate plastic tubing to connect the air sampling pump to the selected filter cassette.
- f. A flow calibrator capable of calibration to within plus or minus 2 percent of reading over a temperature range of minus 4 to plus 140 degrees F and traceable to a NIST primary standard.

1.24 EXPENDABLE SUPPLIES

1.24.1 Glovebag

Glovebags shall be provided as described in 29 CFR 1926, Section .1101. The glovebag assembly shall be 6 mil thick plastic, prefabricated and seamless at the bottom with preprinted OSHA warning label.

1.24.2 Duct Tape

Industrial grade duct tape of appropriate widths suitable for bonding sheet plastic and disposal container shall be provided.

1.24.3 Disposal Containers

Leak-tight (defined as solids, liquids, or dust that cannot escape or spill out) disposal containers shall be provided for ACM wastes as required by 29 CFR 1926 Section .1101 and DETAIL SHEETS 9A, 9B, 9C and 14.

1.24.4 Disposal Bags

Leak-tight bags, 6 mil thick, shall be provided for placement of asbestos generated waste.

1.24.5 Cardboard Boxes

When used, heavy-duty corrugated cardboard boxes, coated with plastic or wax to retard deterioration from moisture, shall be provided. Boxes shall fit into selected ACM disposal bags. Filled boxes shall be sealed leak-tight with duct tape.

1.24.6 Sheet Plastic

Sheet plastic shall be polyethylene of 6 mil minimum thickness and shall be provided in the largest sheet size necessary to minimize seams, as indicated on the project drawings. Film shall conform to ASTM D 4397, except as specified below:

1.24.6.1 Flame Resistant

Where a potential for fire exists, flame-resistant sheets shall be provided. Film shall be frosted and shall conform to the requirements of NFPA 701.

1.24.6.2 Reinforced

Reinforced sheets shall be provided where high skin strength is required, such as where it constitutes the only barrier between the regulated area and the outdoor environment. The sheet stock shall consist of translucent, nylon-reinforced or woven-polyethylene thread laminated between 2 layers of polyethylene film. Film shall meet flame resistant standards of NFPA 701. This barrier must perform fiber control duties (be fully sealed) when used in lieu of conventional sheet plastic.

1.24.7 Amended Water

Amended water shall meet the requirements of ASTM D 1331.

1.24.8 Mastic Removing Solvent

Mastic removing solvent shall be nonflammable and shall not contain methylene chloride, glycol ether, or halogenated hydrocarbons. Solvents used onsite shall have a flash point greater than 140 degrees F. MSDS shall be submitted in accordance with Section 01410 prior to use.

1.24.9 Leak-tight Wrapping

Two layers of 6 mil minimum thick polyethylene sheet stock shall be used for the containment of removed asbestos-containing components or materials such as reactor vessels, large tanks, boilers, insulated pipe segments and other materials too large to be placed in disposal bags as described in DETAIL SHEET 9B. Upon placement of the ACM component or material, each layer shall be individually leak-tight sealed with duct tape.

1.24.10 Viewing Inspection Window

Where feasible, a minimum of 1 clear, 1/8 inch thick, acrylic sheet, 18 by 24 inches, shall be installed as a viewing inspection window at eye level on a wall in each containment enclosure. The windows shall be sealed leak-tight with industrial grade duct tape. This window is required by local NESHAPS, PSCAA Regulation III Article 4, Section 4.05(b) (2).

1.24.11 Wetting Agents

Removal encapsulant (a penetrating encapsulant) shall be provided when conducting removal abatement activities that require a longer removal time or are subject to rapid evaporation of amended water. The removal encapsulant shall be capable of wetting the ACM and retarding fiber release during disturbance of the ACM greater than or equal to that provided by amended water. Performance requirements for penetrating encapsulants are specified in paragraph ENCAPSULANTS. Contractor must allow for the potential costs (time and material) incurred with drying removal encapsulant (after application), and the resulting difficulties in asbestos removal, in base bid.

1.25 MISCELLANEOUS ITEMS

A sufficient quantity of other items, such as, but not limited to: scrapers, brushes, brooms, staple guns, tarpaulins, shovels, rubber squeegees, dust pans, other tools, scaffolding, staging, enclosed chutes, wooden ladders, lumber necessary for the construction of containments, UL approved temporary electrical equipment, material and cords, ground fault circuit interrupters, water hoses of sufficient length, fire extinguishers, first aid kits, portable toilets, logbooks, log forms, markers with indelible ink, spray paint in bright color to mark areas, project boundary fencing, etc., shall be provided.

PART 2 PRODUCTS

2.1 ENCAPSULANTS

Encapsulants shall conform to USEPA requirements, shall contain no toxic or hazardous substances and no solvent and shall meet the following requirements:

ALL ENCAPSULANTS

| <u>Requirement</u> | <u>Test Standard</u> |
|---|------------------------------|
| Flame Spread - 25, Smoke Emission - 50, | ASTM E 84 |
| Combustion Toxicity, Zero Mortality | Univ. of Pittsburgh Protocol |
| Life Expectancy, 20 yrs Accelerated Aging Test | ASTM C 732 |
| Permeability, Minimum 0.4 perms | ASTM E 96 |

Additional Requirements for Bridging Encapsulant

| <u>Requirement</u> | <u>Test Standard</u> |
|---|----------------------|
| Cohesion/Adhesion Test 50 pounds of force/foot | ASTM E 736 |
| Fire Resistance, Negligible affect on fire resistance rating over 3 hour test (Classified by UL for use over fibrous and cementitious sprayed fireproofing) | ASTM E 119 |
| Impact Resistance, Minimum 43 in-lb (Gardner Impact Test) | ASTM D 2794 |
| Flexibility, no rupture or cracking (Mandrel Bend Test) | ASTM D 522 |

Additional Requirements for Penetrating Encapsulant

| <u>Requirement</u> | <u>Test Standard</u> |
|--------------------|----------------------|
|--------------------|----------------------|

Cohesion/Adhesion Test, 50 pounds of force/foot ASTM E 736

Fire Resistance, Negligible affect on fire resistance rating over 3 hour test (Classified by UL for use over fibrous and cementitious sprayed fireproofing) ASTM E 119

Impact Resistance, Minimum 43 in-lb (Gardner Impact Test) ASTM D 2794

Flexibility, no rupture or cracking (Mandrel Bend Test) ASTM D 522

Additional Requirements for Lockdown Encapsulant

| Requirement | Test Standard |
|--|----------------------|
| Fire Resistance, Negligible affect on fire resistance rating over 3 hour test (Tested with fireproofing over encapsulant applied directly to steel member) | ASTM E 119 |
| Bond Strength, 100 pounds of force/foot (Tests compatibility with cementitious and fibrous fireproofing) | ASTM E 736 |

2.2 ENCASUREMENT PRODUCTS - NOT USED

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

Asbestos abatement work tasks shall be performed as shown on the detailed plans and drawings, as summarized in paragraph DESCRIPTION OF WORK and including Table 1 and the Contractor's Accident Prevention Plan, Asbestos Hazard Abatement Plan, and the Activity Hazard Analyses. The Contractor shall use the engineering controls and work practices required in 29 CFR 1926, Section .1101(g) in all operations regardless of the levels of exposure. Personnel shall wear and utilize protective clothing and equipment as specified. The Contractor shall not permit eating, smoking, drinking, chewing or applying cosmetics in the regulated area. All hot work (burning, cutting, welding, etc.) shall be conducted under controlled conditions in conformance with 29 CFR 1926, Section .352, Fire Prevention. Personnel of other trades, not engaged in asbestos abatement activities, shall not be exposed at any time to airborne concentrations of asbestos unless all the administrative and personal protective provisions of the Contractor's Accident Prevention Plan are complied with. Power to the regulated area shall be locked-out and tagged in accordance with 29 CFR 1910, and temporary electrical service with ground fault circuit interrupters shall be provided as needed. Temporary electrical service shall be disconnected when necessary for wet removal. The Contractor shall stop abatement work in the regulated area immediately when the airborne

total fiber concentration: (1) equals or exceeds 0.01 f/cc, or the pre-abatement concentration, whichever is greater, outside the regulated area; or (2) equals or exceeds 1.0 f/cc inside the regulated area. The Contractor shall correct the condition to the satisfaction of the Contracting Officer, including visual inspection and air sampling. Work shall resume only upon notification by the Contracting Officer. Corrective actions shall be documented.

3.1.1 Permits

All Permit applications shall indicate the following address as the building owner:

Public Works
ATTN: AFZH/PWC, MS 17
BOX 339500 (BLDG 2012)
Fort Lewis, WA 9500

3.2 PROTECTION OF ADJACENT WORK OR AREAS TO REMAIN

Asbestos abatement shall be performed without damage to or contamination of adjacent work or area. Where such work or area is damaged or contaminated, as verified by the Contracting Officer using visual inspection or sample analysis, it shall be restored to its original condition or decontaminated by the Contractor at no expense to the Government, as deemed appropriate by the Contracting Officer. This includes inadvertent spill of dirt, dust or debris in which it is reasonable to conclude that asbestos may exist. When these spills occur, work shall stop in all effected areas immediately and the spill shall be cleaned. When satisfactory visual inspection and air sampling analysis results are obtained and have been evaluated by the Contractor's Designated IH and the Contracting Officer, work may proceed.

3.3 OBJECTS

3.3.1 Removal of Mobile Objects

Mobile objects, furniture, and equipment will be removed from the area of work by the Contractor before asbestos abatement work begins.

3.3.2 Stationary Objects

Stationary objects, furniture, and equipment as shown in contract documents shall remain in place. Stationary objects and furnishings shall be covered with 2 layers of polyethylene and edges sealed with duct tape, as appropriate.

3.4 BUILDING VENTILATION SYSTEM AND CRITICAL BARRIERS

Building ventilating systems supplying air into or through or returning air out of or through a regulated area shall be shut down and isolated by lockable switch or other positive means in accordance with 29 CFR 1910, Section .147. Air-tight critical barriers shall be installed on building ventilating openings located inside the regulated area that supply or return air from the building ventilation system or serve to exhaust air from the building. The critical barriers shall consist of 2 layers of polyethylene. Edges to wall, ceiling and floor surfaces shall be sealed with industrial grade duct tape. Critical barriers shall be installed as shown on drawings and appended SET-UP DETAIL SHEETS.

3.5 PRECLEANING

All surfaces that contain accumulations of dust, within the confines of the established regulated areas must be pre-cleaned as asbestos-contaminated (unless inside negative pressure enclosures (NPE's)) prior to beginning work.

3.6 METHODS OF COMPLIANCE

3.6.1 Mandated Practices

The Contractor shall employ proper handling procedures in accordance with 29 CFR 1926 and 40 CFR 61, Subpart M, and the specified requirements. The specific abatement techniques and items identified shall be detailed in the Contractor's Asbestos Hazard Abatement Plan including, but not limited to, details of construction materials, equipment, and handling procedures. The Contractor shall use the following engineering controls and work practices in all operations, regardless of the levels of exposure:

- a. Vacuum cleaners equipped with HEPA filters to collect debris and dust containing ACM.
- b. Wet methods or wetting agents to control employee exposures during asbestos handling, mixing, removal, cutting, application, and cleanup; except where it can be demonstrated that the use of wet methods is unfeasible due to, for example, the creation of electrical hazards, equipment malfunction, and in roofing.
- c. Prompt clean-up and disposal in leak-tight containers of wastes and debris contaminated with asbestos.
- d. Inspection and repair of polyethylene in work and high traffic areas.
- e. Cleaning of equipment and surfaces of containers filled with ACM prior to removing them from the equipment room or area.

3.6.2 Control Methods

The Contractor shall use the following control methods to comply with the PELs:

- a. Local exhaust ventilation equipped with HEPA filter dust collection systems;
- b. Enclosure or isolation of processes producing asbestos dust;
- c. Ventilation of the regulated area to move contaminated air away from the breathing zone of employees and toward a filtration or collection device equipped with a HEPA filter;
- d. Use of other work practices and engineering controls;
- e. Where the feasible engineering and work practice controls described above are not sufficient to reduce employee exposure to or below the PELs, the Contractor shall use them to reduce employee exposure

to the lowest levels attainable by these controls and shall supplement them by the use of respiratory protection that complies with paragraph, RESPIRATORY PROTECTION PROGRAM.

3.6.3 Unacceptable Practices

The following work practices and engineering controls shall not be used for work related to asbestos or for work which disturbs ACM, regardless of measured levels of asbestos exposure or the results of initial exposure assessments:

- a. High-speed abrasive disc saws that are not equipped with point of cut ventilator or enclosures with HEPA filtered exhaust air.
- b. Compressed air used to remove asbestos, or materials containing asbestos, unless the compressed air is used in conjunction with an enclosed ventilation system designed to capture the dust cloud created by the compressed air, and as submitted and approved by COE.
- c. Dry sweeping, shoveling, or other dry clean-up of dust and debris containing ACM.
- d. Employee rotation as a means of reducing employee exposure to asbestos.

3.6.4 Class I Work Procedures

In addition to requirements of paragraphs Mandated Practices and Control Methods, the following engineering controls and work practices shall be used:

- a. A Competent Person shall supervise the installation and operation of the control system.
- b. For jobs involving the removal of more than 25 feet or 10 square feet of TSI or surfacing material, the Contractor shall place critical barriers over all openings to the regulated area.
- c. HVAC systems shall be isolated in the regulated area by sealing with a double layer of plastic or air-tight rigid covers.
- d. Impermeable dropcloths (6 mil or greater thickness) shall be placed on surfaces beneath all removal activity.
- e. Objects within the regulated area shall be handled as specified in paragraph OBJECTS.
- f. Where a negative exposure assessment has not been provided or where exposure monitoring shows the PEL was exceeded, the regulated area shall be ventilated to move contaminated air away from the employee's breathing zone toward a HEPA unit or collection device.

3.6.5 Specific Control Methods for Class I Work

In addition to requirements of paragraph Class I Work Procedures, Class I asbestos work shall be performed using the control methods identified in the subparagraphs below.

3.6.5.1 Negative Pressure Enclosure (NPE) System

The NPE system shall be as shown in SET-UP DETAIL SHEET 2,3,4 and 8. The system shall provide at least 4 air changes per hour inside the containment. The local exhaust unit equipment shall be operated 24 hours per day until the containment is removed, and shall be leak-proof to the filter and equipped with HEPA filters. Air movement shall be directed away from the employees and toward a HEPA filtration device. The NPE shall be smoke tested for leaks at the beginning of each shift. Local exhaust equipment shall be sufficient to maintain a minimum pressure differential of minus 0.02 inch of water column relative to adjacent, unsealed areas. Pressure differential shall be monitored continuously, 24 hours per day, with an automatic manometric recording instrument (active manometer). Pressure differential recordings shall be provided daily on the same day collected. Readings shall be reviewed by the Contractor's Designated Competent Person and IH prior to submittal. The Contracting Officer shall be notified immediately if the pressure differential falls below the prescribed minimum. The building ventilation system shall not be used as the local exhaust system for the regulated area. The local exhaust system shall terminate outdoors unless an alternate arrangement is allowed by the Contract Officer. All filters used shall be new at the beginning of the project and shall be periodically changed as necessary and disposed of as ACM waste.

3.6.5.2 Glovebag Systems

Glovebag systems shall be shown in SET-UP DETAIL SHEET 10. The glove bag system shall be used to remove ACM from straight runs of piping and elbows and other connections. Glovebags shall be used without modification and shall be smoke-tested for leaks and any leaks sealed prior to use. Glovebags shall be installed to completely cover the circumference of pipe or other structures where the work is to be done. Glovebags shall be used only once and shall not be moved. Glovebags shall not be used on surfaces that have temperatures exceeding 150 degrees F. Prior to disposal, glovebags shall be collapsed by removing air within them using a HEPA vacuum. Before beginning the operation, loose and friable material adjacent to the glovebag operation shall be wrapped and sealed in 2 layers of plastic or otherwise rendered intact. At least 2 persons shall perform Class I glovebag removal. Asbestos regulated work areas shall be established as specified and shown on detailed drawings and plans for glovebag abatement. Designated boundary limits for the asbestos work shall be established with rope or other continuous barriers and all other requirements for asbestos control areas shall be maintained, including area signage and boundary warning tape as specified in SET-UP DETAIL SHEET 11.

- a. In addition to requirements for negative pressure glovebag systems above, the Contractor shall attach HEPA vacuum systems or other devices to the bag to prevent collapse during removal of ACM from straight runs of piping and elbows and other connections.
- b. The negative pressure glove boxes used to remove ACM from pipe runs shall be fitted with gloved apertures and a bagging outlet and

constructed with rigid sides from metal or other material which can withstand the weight of the ACM and water used during removal. A negative pressure shall be created in the system using a HEPA filtration system. The box shall be smoke tested for leaks prior to each use.

3.6.5.3 Mini-Enclosures

Mini-containment (small walk-in enclosure) as shown in SET-UP DETAIL SHEET 5,6 and 7 to accommodate no more than 2 persons, may be used if the disturbance or removal can be completely contained by the enclosure with the following specifications and work practices. The mini-enclosure shall be inspected for leaks and smoke tested before each use. Air movement shall be directed away from the employee's breathing zone within the mini-enclosure.

3.6.5.4 Wrap and Cut Operation

Wrap and cut operations shall be shown in SET-UP DETAIL SHEET 9B and 10. Prior to cutting pipe, the asbestos-containing insulation shall be wrapped with polyethylene and securely sealed with duct tape to prevent asbestos becoming airborne as a result of the cutting process. The following steps shall be taken: drain pipe, install glovebag, strip back sections to be cut 6 inches from point of cut, encapsulate raw insulation ends, wrap pipe with 2 layers of 6 mil polyethylene sheeting and cut pipe into manageable sections.

3.6.6 Class II Work

In addition to the requirements of paragraphs Mandated Practices and Control Methods, the following engineering controls and work practices shall be used:

- a. A Competent Person shall supervise the work.
- b. For indoor work, critical barriers shall be placed over all openings to the regulated area.
- c. Impermeable dropcloths shall be placed on surfaces beneath all removal activity.

3.6.7 Specific Control Methods for Class II Work

In addition to requirements of paragraph Class II Work, Class II work shall be performed using the following methods:

3.6.7.1 Vinyl and Asphalt Flooring Materials

When removing vinyl and asphalt flooring materials which contain ACM, the Contractor shall use the following practices as shown in RESPONSE ACTION SET-UP DETAIL SHEET 57,58,59,61,62,63,64. Resilient sheeting shall be removed by adequately wet methods in 6 inch wide strips, unless inside an NPE. Tiles shall be removed intact (if possible); wetting is not required when tiles are heated and removed intact. Flooring or its backing shall not be sanded. Scraping of residual adhesive and/or backing shall be performed using wet methods. Mechanical chipping is prohibited unless performed in a negative pressure enclosure. Dry sweeping is prohibited. The Contractor

shall use vacuums equipped with HEPA filter, disposable dust bag, and metal floor tool (no brush) to clean floors.

3.6.7.2 Roofing Material

When removing roofing materials which contain ACM as described in 29 CFR 1926.1101(g) (8) (ii), the Contractor shall use the following practices as shown in RESPONSE ACTION SET-UP DETAIL SHEET 74 and 75. Roofing material shall be removed in an intact state. Wet methods shall be used to remove roofing materials that are not intact, or that will be rendered not intact during removal, unless such wet methods are not feasible or will create safety hazards. When removing built-up roofs, with asbestos-containing roofing felts and an aggregate surface, using a power roof cutter, all dust resulting from the cutting operations shall be collected by a HEPA dust collector, or shall be HEPA vacuumed by vacuuming along the cut line. Asbestos-containing roofing material shall not be dropped or thrown to the ground, but shall be lowered to the ground via covered, dust-tight chute, crane, hoist or other method approved by the Contracting Officer or their representative. Any ACM that is not intact shall be lowered to the ground as soon as practicable, but not later than the end of the work shift. While the material remains on the roof it shall be kept wet or placed in an impermeable waste bag or wrapped in plastic sheeting. Intact ACM shall be lowered to the ground as soon as practicable, but not later than the end of the work shift. Unwrapped material shall be transferred to a closed receptacle precluding the dispersion of dust. Critical barriers shall be placed over roof level heating and ventilation air intakes.

3.6.7.3 Cementitious Siding and Shingles or Transite Panels

When removing cementitious asbestos-containing siding, shingles or transite panels the Contractor shall use the following practices as shown in RESPONSE ACTION SET-UP DETAIL SHEET 81,82,83. Intentionally cutting, abrading or breaking siding, shingles, or transite panels is prohibited. Each panel or shingle shall be sprayed with amended water prior to removal. Nails shall be cut with flat, sharp instruments. Unwrapped or unbagged panels or shingles shall be immediately lowered to the ground via covered dust-tight chute, crane or hoist, or placed in an impervious waste bag or wrapped in plastic sheeting and lowered to the ground no later than the end of the work shift.

3.6.7.4 Gaskets

Gaskets shall be thoroughly wetted with amended water prior to removal and immediately placed in a disposal container. If a gasket is visibly deteriorated and unlikely to be removed intact, removal shall be undertaken within a glovebag. Any scraping to remove residue shall be performed wet. Gaskets may be cut out intact with the flange still bolted; the metallic pipe flange with gasket must be disposed of as asbestos containing material.

3.6.7.5 Other Class II Jobs

The Contractor shall use the following work practices when performing Class II removal of any other ACM: The material shall be thoroughly saturated or coated with amended water prior and during its removal. The material shall be removed in an intact state. Cutting, abrading or breaking the material is prohibited. The ACM removed shall be immediately bagged or wrapped while saturated or coated with amended water.

3.6.8 Specific Control Methods for Class III Work

Class III asbestos work shall be conducted using engineering and work practice controls, which minimize the exposure to employees performing the asbestos work and to bystander employees. The work shall be performed using wet methods and, to the extent feasible, using local exhaust ventilation. The Contractor shall use impermeable dropcloths and shall isolate the operation, using mini-enclosures or glovebag systems, where the disturbance involves drilling, cutting, abrading, sanding, chipping, breaking, or sawing of TSI or surfacing material.

3.6.9 Specific Control Methods for Class IV Work

Class IV jobs shall be conducted using wet methods, HEPA vacuums, and prompt clean-up of debris containing ACM. Employees cleaning up debris and waste in a regulated area where respirators are required shall wear the selected respirators.

3.6.10 Alternative Methods for Roofing Materials and Asphaltic Wrap

Submit to COE for approval any alternate methods proposed for asphaltic roofing and asphaltic pipe wrap, prior to use. The Contractor shall use the following engineering controls and work practices when removing, repairing or maintaining intact pipeline asphaltic wrap, or roof cements, mastics, coatings or flashings which contain asbestos fibers encapsulated or coated by bituminous or resinous compounds. If during the course of the job the material does not remain intact, the Contractor shall use the procedures described in paragraph Roofing Material. Before work begins, and as needed during the job, the Designated Competent Person shall conduct an inspection and determine that the roofing material is intact and will likely remain intact. The material shall not be sanded, abraded, or ground. Manual methods which would render the material non-intact shall not be used. Roofing material shall not be dropped or thrown to the ground but shall be lowered via covered, dust-tight chute, crane, hoist or other method approved by the Contracting Officer. All such material shall be removed from the roof as soon as practicable, but in any event no later than the end of the work shift. All removal or disturbance of pipeline asphaltic wrap shall be performed using wet methods.

3.6.11 Cleaning After Asbestos Removal

After completion of all asbestos removal work, surfaces from which ACM has been removed shall be wet wiped or sponged clean, or cleaned by some equivalent method to remove all visible residue. Run-off water shall be collected and filtered through a filtration system. A first filter shall be provided to remove fibers 20 micrometers and larger, and a final filter provided that removes fibers 5 micrometers and larger. After the gross amounts of asbestos have been removed from every surface, remaining visible accumulations of asbestos on floors shall be collected using plastic shovels, rubber squeegees, rubber dustpans, and HEPA vacuum cleaners as appropriate to maintain the integrity of the regulated area. When TSI and surfacing material has been removed, workmen shall use HEPA vacuum cleaners to vacuum every surface. Surfaces or locations which could harbor

accumulations or residual asbestos dust shall be checked after vacuuming to verify that no asbestos-containing material remains; and shall be re-vacuumed as necessary to remove the ACM. Use procedures as detailed in the document ASTM E1368.

3.6.12 Class I Asbestos Work RESPONSE ACTION DETAIL Sheets

The following Class I Asbestos Work RESPONSE ACTION DETAIL SHEETS shall be specified on Table 1 for each individual work task to be performed. The Contractor shall modify the Detail Sheets accordingly to reflect actual site conditions. RESPONSE ACTION Detail Sheets shall be submitted for approval prior to commencement of asbestos abatement. The Contractor shall perform all work in accordance with the Contractor Modified and Government Approved RESPONSE ACTION DETAIL sheets only.

Troweled Wall Plaster on Masonry: See Sheet 32
Troweled Wall Plaster on Stud Wall: See Sheet 33
Troweled Ceiling Plaster on Structural Substrate: See Sheet 35
Troweled Ceiling Plaster on Hung Ceiling: See Sheet 36
Acoustical Wall Plaster on Masonry: See Sheet 42
Acoustical Ceiling Plaster (Non-Asbestos Substrate): See Sheet 44
Asbestos Decorative Point on Plaster: See Sheet 46
Asbestos-contaminated Masonry for Masonry Chimney: See Sheet 50
Asbestos-contaminated Masonry Wall or Thermal Insulation: See Sheet 51
Fireproofing or Thermal Surface Insulation: See Sheet 68
Acoustical Ceiling Insulation: See Sheet 70
Exterior Asbestos Stucco: See Sheet 79

Duct Insulation: Duct work insulation removal shall not begin without the written authorization of the Contracting Officer stating that the HVAC system to be worked on is either isolated or inoperative and locked out of service. No forced air circulation is permitted in ductwork while abatement work is in progress. See Sheet 101
Pipe Insulation (Using a Glovebag): See Sheet 87
Horizontal Pipe Insulation (Using a Containment Area): See Sheet 88
Pipe Insulation (Using a Mini-Containment Area): See Sheet 89
Storage Tank and Boiler Breeching insulation: See Sheet 93. Written approval must be obtained from the Contracting Officer before start of work on tanks and boiler breeching. The Contracting Officer will ensure that tanks and boilers have been valved off or shut down and allowed a sufficient amount of time to cool down. Insulation shall be sprayed with a mist of amended water or removal encapsulant. Amended water or removal encapsulant shall be allowed to saturate material to substrate. Bands or wires holding breeching or insulation to equipment shall be cut. Cover jackets shall be slit at seams, and sections removed and hand-placed in a polyethylene disposable bag. Exposed surfaces shall be continuously sprayed with amended water to minimize airborne dust. Insulation on tanks and boiler breeching shall not be allowed to drop to the floor. Residue shall be removed from tank and boiler surfaces. A water stream shall be used to dislodge insulation in joints or irregular spaces that cannot be reached with tools. Lagging on piping and insulation on fittings shall be removed. A penetrating encapsulant shall be sprayed on all

exposed tank, boiler and boiler breeching surfaces.
Interior Stucco: See Sheet 78
Pipe and Fitting Insulation (using Glovebag): See Sheet 86

3.6.13 Class II Asbestos Work RESPONSE ACTION DETAIL Sheets

The following Class II Asbestos Work RESPONSE ACTION DETAIL SHEET shall be specified on Table 1 for each individual work task to be performed. The Contractor shall modify the Detail Sheets accordingly to reflect actual site conditions. RESPONSE ACTION DETAIL Sheets shall be submitted for approval prior to commencement of asbestos abatement. The Contractor shall perform all removal work in accordance with the Contractor Modified and Government approved RESPONSE ACTION DETAIL Sheets only.

Light Curtain: See Sheet 47
Interior Asbestos Cement, Fiberboard and Drywall Panels: See Sheet 48
Suspended Asbestos Cement Ceiling Tile: See Sheet 52
Asbestos Cement Architectural Products: See Sheet 53
Glued-on Acoustical Ceiling and Wall Tile: See Sheet 55
Suspended Acoustical Ceiling Tile: See Sheet 54
Vinyl Asbestos Tile Adhered to Concrete Floor System by Asbestos Containing Adhesive: See Sheet 67
Vinyl Asbestos Tile Adhered to Concrete Floor System by Asbestos Free Adhesive: See Sheet 62
Vinyl Asbestos Tile and Chemical Dissolution of Asbestos-Containing Adhesives On Concrete Floor System: See Sheet 59
Vinyl Asbestos Tile Adhered to Wood Floor System by Asbestos-Containing Adhesive: See Sheet 61
Vinyl Asbestos Tile Adhered to Wood Floor System by Asbestos Free Adhesive: See Sheet 62
Sheet Flooring Adhered Wood Floor System: See Sheet 63
Asbestos-Containing Sheet Flooring Adhered to Concrete Floor System by Asbestos-Containing Adhesive: See Sheet 64
Carpeting (Asbestos-Containing or Contaminated): See Sheet 65
Miscellaneous Asbestos-Containing Materials: See Sheet 45
Built-Up Roofing and Flashing: See Sheet 74
Roof Shingles and Underlayment: See Sheet 75
Asbestos Cement Siding: See Sheet 81
Asbestos Cement Roofing: See Sheet 82
Asbestos-Containing Walkway Cover: See Sheet 83
Asbestos-Containing Metal Siding: See Sheet 84
Asbestos Cement Sunscreen Louvers: See Sheet 85
Electrical Wiring and Fixtures: See Sheet 95
Asbestos Insulated Electrical Fixture: See Sheet 96
Boiler Firebox Insulation: The asbestos-containing boiler firebox lining shall be removed from out-of-service boilers before the boiler is dismantled: See Sheet 97.
Removal of Boiler and Piping Gaskets: See Sheet 99
Removal of Asbestos Cement Pipe: See Sheet 102
Removal of Asbestos Cement Duct Work: See Sheet 103
Removal of Asbestos Flex Connector See Sheet 104

3.6.14 Abatement of Asbestos Contaminated Soil

Asbestos Contaminated Soil shall be removed from areas to a minimum depth of 2 inches. Soil shall be thoroughly dampened with amended water and – removed by manual shoveling into labeled containers. The workers shall be closely monitored for heat exhaustion. The minimum ventilation shall be 8 air changes per hour through a local exhaust HEPA system. See DETAIL SHEET 73.

3.6.15 Sealing Contaminated items Designated for Disposal

Contaminated architectural, mechanical, and electrical appurtenances such as Venetian blinds, full height partitions, carpeting, duct work, pipes and fittings, radiators, light fixtures, conduit panels and other contaminated items designated for removal shall be coated with an asbestos lockdown encapsulant at the demolition site before being removed from the asbestos control area. These items need to be vacuumed prior to application of the lockdown encapsulant. The asbestos lockdown encapsulant shall be tinted a contrasting color and shall be spray applied by airless method. Thoroughness of sealing operation shall be visually gauged by the extent of colored coating on exposed surfaces.

3.7 FINAL CLEANING AND VISUAL INSPECTION

Upon completion of abatement, the regulated area shall be cleaned by collecting, packing, and storing all gross contamination; see SET-UP DETAIL SHEETS 9,14 and 10. A final cleaning shall be performed using HEPA vacuum and wet cleaning of all exposed surfaces and objects in the regulated area. Upon completion of the cleaning, the Contractor shall conduct a visual pre-inspection of the cleaned area in preparation for a final inspection before final air clearance monitoring and recleaning, as necessary. Upon completion of the final cleaning, the Contractor and the Contracting Officer shall conduct a final visual inspection of the cleaned regulated area in accordance with ASTM E 1368 and document the results on the Final Cleaning and Visual Inspection as specified on the SET-UP DETAIL SHEET 19. If the Contracting Officer rejects the clean regulated area as not meeting final cleaning requirements. The Contractor shall reclean as necessary and have a follow-on inspection conducted with the Contracting Officer. Recleaning and follow-up reinspection shall be at the Contractors expense.

3.8 LOCKDOWN

Prior to removal of plastic barriers and after clean-up of gross contamination and final visual inspection, a post removal (lockdown) encapsulant shall then be spray applied to ceiling, walls, floors, and other surfaces in the regulated area.

3.9 EXPOSURE ASSESSMENT AND AIR MONITORING

3.9.1 General Requirements For Exposure

Exposure assessment, air monitoring and analysis of airborne concentration of asbestos fibers shall be performed in accordance with 29 CFR 1926, Section .1101, the Contractor's air monitoring plan, and as specified.

Personal exposure air monitoring (collected at the breathing zone) that is representative of the exposure of each employee who is assigned to work within a regulated area shall be performed by the Contractor's Designated IH. Breathing zone samples shall be taken for at least 25 percent of the workers in each shift, or a minimum of 2, whichever is greater. Air monitoring results at the 95 percent confidence level shall be calculated as shown in Table 2 at the end of this section. The Contractor shall provide an independent testing laboratory with qualified analysts and appropriate equipment to conduct sample analyses of air samples using the methods prescribed in 29 CFR 1926, Section .1101, to include NIOSH Pub No. 84-100 Method 7400. Preabatement and abatement environmental air monitoring shall be performed by the Contractor's Designated IH. Final clearance and environmental air monitoring, shall be performed by the Contractor's Designated IH. Environmental and final clearance air monitoring shall be performed using NIOSH Pub No. 84-100 Method 7400 (PCM) with optional confirmation of results by NIOSH Pub No. 84-100 Method 7402 (TEM). For environmental and final clearance, air monitoring shall be conducted at a sufficient velocity and duration to establish the limit of detection of the method used at 0.005 f/cc. Confirmation of asbestos fiber concentrations (asbestos f/cc) from environmental and final clearance samples collected and analyzed by NIOSH Pub No. 84-100 Method 7400 (total f/cc) may be conducted using TEM in accordance with NIOSH Pub No. 84-100 Method 7402. When such confirmation is conducted, it shall be from the same sample filter used for the NIOSH Pub No. 84-100 Method 7400 PCM analysis. For all Contractor required environmental or final clearance air monitoring, confirmation of asbestos fiber concentrations, using NIOSH Pub No. 84-100 Method 7402, shall be at the Contractor's expense. Monitoring may be duplicated by the Government at the discretion of the Contracting Officer. Results of breathing zone samples shall be posted at the job site within 15 working days and made available to the Contracting Officer. The Contractor shall maintain a fiber concentration inside a regulated area less than or equal to 0.1 f/cc expressed as an 8 hour, time-weighted average (TWA) during the conduct of the asbestos abatement. If fiber concentration rises above 0.1 f/cc, all asbestos work shall cease and work procedures shall be investigated with the Contracting Officer to determine the cause. At the discretion of the Contracting Officer, fiber concentration may exceed 0.1 f/cc but shall not exceed 1.0 f/cc expressed as an 8-hour TWA. This option is available only in full NPE's. The Contractor's workers shall not be exposed to an airborne fiber concentration in excess of 1.0 f/cc, as averaged over a sampling period of 30 minutes. Should either an environmental concentration of 1.0 f/cc expressed as an 8-hour TWA or a personal excursion concentration of 1.0 f/cc expressed as a 30-minute sample occur inside a regulated work area, the Contractor shall stop work immediately, notify the Contracting Officer, and implement additional engineering controls and work practice controls to reduce airborne fiber levels below prescribed limits in the work area. Work shall not restart until authorized by the Contracting Officer.

3.9.2 Initial Exposure Assessment

The Contractor's competent person, in conjunction with the Contractor's Designated IH shall conduct an exposure assessment immediately before or at the initiation of an asbestos abatement operation to ascertain expected exposures during that operation. The assessment shall be completed in time to comply with the requirements which are triggered by exposure data or the lack of a negative exposure assessment, and to provide information necessary to assure that all control systems planned are appropriate for that

operation. The assessment shall take into consideration both the monitoring results and all observations, information or calculations which indicate employee exposure to asbestos, including any previous monitoring conducted in the workplace, or of the operations of the Contractor which indicate the levels of airborne asbestos likely to be encountered on the job. For Class I asbestos work, until the employer conducts exposure monitoring and documents that employees on that job will not be exposed in excess of PEL's, or otherwise makes a negative exposure assessment, the Contractor shall presume that employees are exposed in excess of the PEL-TWA and PEL-Excursion Limit.

3.9.3 Negative Exposure Assessment

The Contractor shall provide a negative exposure assessment for the specific asbestos job which will be performed. The negative exposure assessment shall be provided within 1 day of the initiation of the project and conform to the following criteria:

- a. Objective Data: Objective data demonstrating that the product or material containing asbestos minerals or the activity involving such product or material cannot release airborne fibers in concentrations exceeding the PEL-TWA and PEL-Excursion Limit under those work conditions having the greatest potential for releasing asbestos.
- b. Prior Asbestos Jobs: Where the Contractor has monitored prior asbestos jobs for the PEL and the PEL-Excursion Limit within 12 months of the current job, the monitoring and analysis were performed in compliance with asbestos standard in effect; the data were obtained during work operations conducted under workplace conditions "closely resembling" the processes, type of material, control methods, work practices, and environmental conditions used and prevailing in the Contractor's current operations; the operations were conducted by employees whose training and experience are no more extensive than that of employees performing the current job; and these data show that under the conditions prevailing and which will prevail in the current workplace, there is a high degree of certainty that the monitoring covered exposure from employee exposures will not exceed the PEL-TWA and PEL-Excursion Limit.
- c. Initial Exposure Monitoring: The results of initial exposure monitoring of the current job, made from breathing zone air samples that are representative of the 8-hour PEL-TWA and 30-minute short-term exposures of each employee. The monitoring covered exposure from operations which are most likely during the performance of the entire asbestos job to result in exposures over the PELs.

3.9.4 Preabatement Environmental Air Monitoring

Preabatement environmental air monitoring shall be established 1 day(s) prior to the masking and sealing operations for each regulated area to determine background concentrations before abatement work begins. As a minimum, preabatement air samples shall be collected using NIOSH Pub No. 84-100 Method 7400, PCM at these locations: outside the building; inside the building, but outside the regulated area perimeter; and inside each regulated work area. One sample shall be collected for every 2000 square feet of floor space. At least two samples shall be collected outside the

building: at the exhaust of the HEPA unit; and downwind from the abatement site. The PCM samples shall be analyzed within 24 hours; and if any result in fiber concentration greater than 0.01 f/cc, asbestos fiber concentration shall be confirmed using NIOSH Pub No. 84-100 Method 7402 (TEM).

3.9.5 Environmental Air Monitoring During Abatement

Until an exposure assessment is provided to the Contracting Officer, environmental air monitoring shall be conducted at locations and frequencies that will accurately characterize any evolving airborne asbestos fiber concentrations. The assessment shall demonstrate that the product or material containing asbestos minerals, or the abatement involving such product or material, cannot release airborne asbestos fibers in concentrations exceeding 0.01 f/cc as a TWA under those work conditions having the greatest potential for releasing asbestos. The monitoring shall be at least once per shift at locations including, but not limited to, close to the work inside a regulated area; preabatement sampling locations; outside entrances to a regulated area; close to glovebag operations; representative locations outside of the perimeter of a regulated area; inside clean room; and at the exhaust discharge point of local exhaust system ducted to the outside of a containment (if used). If the sampling outside regulated area shows airborne fiber levels have exceeded background or 0.01 f/cc, whichever is greater, work shall be stopped immediately, and the Contracting Officer notified. The condition causing the increase shall be corrected. Work shall not restart until authorized by the Contracting Officer.

3.9.6 Final Clearance Air Monitoring

Prior to conducting final clearance air monitoring, the Contractor and the Contracting Officer shall conduct a final visual inspection of the regulated area where asbestos abatement has been completed. The final visual inspection shall be conducted as specified in SET-UP DETAIL SHEET 19 and document ASTM E1368. Final clearance air monitoring shall not begin until acceptance of the Contractor's final cleaning by the Contracting Officer. The Contractor's Designated IH shall conduct final clearance air monitoring using aggressive air sampling techniques in NPE's and as defined in EPA 560/5-85-024 and as otherwise required by federal or state requirements. The sampling and analytical method used will be NIOSH Pub No. 84-100 Method 7400 (PCM) and Table 3 with confirmation of results by NIOSH Pub No. 84-100 Method 7402 (TEM).

3.9.6.1 Final Clearance Requirements, NIOSH PCM Method

For PCM sampling and analysis using NIOSH Pub No. 84-100 Method 7400, the fiber concentration inside the abated regulated area, for each airborne sample, shall be less than 0.01 f/cc. The abatement inside the regulated area is considered complete when every PCM final clearance sample is below the clearance limit. If any sample result is greater than 0.01 total f/cc, the asbestos fiber concentration (asbestos f/cc) shall be confirmed from that same filter using NIOSH Pub No. 84-100 Method 7402 (TEM) at Contractor's expense. If any confirmation sample result is greater than 0.01 asbestos f/cc, abatement is incomplete and cleaning shall be repeated. Upon completion of any required recleaning, resampling with results to meet the above clearance criteria shall be done. All regulated work areas shall remain regulated until final air clearance is confirmed.

3.9.6.2 Air Clearance Failure

If clearance sampling results fail to meet the final clearance requirements, the Contractor shall pay all costs associated with the required recleaning, resampling, and analysis, until final clearance requirements are met.

3.9.7 Air-Monitoring Results and Documentation

Air sample fiber counting shall be completed and results provided within 24 hours (breathing zone samples), and 48 hours (environmental/clearance monitoring) after completion of a sampling period. The Contracting Officer shall be notified immediately of any airborne levels of asbestos fibers in excess of established requirements. Written sampling results shall be provided within 5 working days of the date of collection. The written results shall be signed by testing laboratory analyst, testing laboratory principal and the Contractor's Designated IH. The air sampling results shall be documented on a Contractor's daily air monitoring log. The daily air monitoring log shall contain the following information for each sample:

- a. Sampling and analytical method used;
- b. Date sample collected;
- c. Sample number;
- d. Sample type: BZ = Breathing Zone (Personal - TWA or Ceiling/STEL), P = Preabatement, E = Environmental, C = Abatement Clearance;
- e. Location/activity/name - accreditation card # and/or social security number also where sample was collected;
- f. Sampling pump manufacturer, model, serial or pump number, beginning flow rate, end flow rate, average flow rate (L/min);
- g. Calibration date, time, method, location, name of calibrator, signature;
- h. Sample period (start time, stop time, elapsed time (minutes));
- i. Total air volume sampled (liters);
- j. Sample results (f/cc and S/mm square) if EPA methods are required for final clearance;
- k. Laboratory name, location, analytical method, analyst, confidence level. In addition, the printed name and a signature and date block for the Industrial Hygienist who conducted the sampling and for the Industrial Hygienist who reviewed the daily air monitoring log verifying the accuracy of the information.

3.10 CLEARANCE CERTIFICATION

When asbestos abatement is complete, ACM waste is removed from the regulated areas, and final clean-up is completed and final air clearance criteria are met, the Contractor's IH will certify the areas as safe before allowing the warning signs and boundary warning tape to be removed. After final clean-up and acceptable airborne concentrations are attained, but before the HEPA

unit is turned off and the containment removed, the Contractor shall remove all pre-filters on the building HVAC system and provide new pre-filters. The Contractor shall dispose of such filters as asbestos contaminated materials. HVAC, mechanical, and electrical systems shall be re-established in proper working order. The Contractor and the Contracting Officer shall visually inspect all surfaces within the containment for residual material or accumulated debris. The Contractor shall reclean all areas showing dust or residual materials. The Contractor's IH will determine if such additional recleaning warrants another clearance air sample if so, the retest will be at contractor expense. The Contracting Officer will certify in writing that the area is safe before unrestricted entry is permitted. The Government will have the option to perform monitoring to certify the areas are safe before entry is permitted.

3.11 CLEANUP AND DISPOSAL

3.11.1 Title to ACM Materials

ACM material resulting from abatement work, except as specified otherwise, shall become the property of the Contractor and shall be disposed of as specified and in accordance with applicable federal, state and local regulations.

3.11.2 Collection and Disposal of Asbestos

All ACM waste including contaminated wastewater filters, scrap, debris, bags, containers, equipment, and asbestos contaminated clothing, shall be collected and placed in leak-tight containers such as double plastic bags (see DETAIL SHEET 9A); sealed double wrapped polyethylene sheet (see DETAIL SHEET 9B); sealed fiberboard boxes (see DETAIL SHEET 9C); or other approved containers. Waste within the containers shall be saturated or coated with a wetting agent in case the container is breached. Asbestos-containing waste shall be disposed of at an EPA, state and local approved asbestos landfill, off government property. For temporary storage, sealed impermeable containers shall be stored in an asbestos waste load-out unit or in a storage/transportation conveyance (i.e., dumpster, roll-off waste boxes, etc.) in a manner acceptable to and in an area assigned by the Contracting Officer. This storage must not exceed 10 days, unless a 90 day PSCAA storage permit is obtained by contractor. Procedure for hauling and disposal shall comply with 40 CFR 61, Subpart M, state, regional, and local PSCAA standards.

3.11.3 Scale Weight Measurement

Scales used for measurement shall be public scales. Weighing shall be at a point nearest the work at which a public scale is available. Scales shall be standard truck scales of the beam type; scales shall be equipped with the type registering beam and an "over and under" indicator; and shall be capable of accommodating the entire vehicle. Scales shall be tested, approved and sealed by an inspector of the State of WA. Scales shall be calibrated and resealed as often as necessary and at least once every three months to ensure continuous accuracy. Vehicles used for hauling ACM shall be weighed empty daily at such time as directed and each vehicle shall bear a plainly legible identification mark.

3.11.4 Weigh Bill and Delivery Tickets

Copies of weigh bills and delivery tickets shall be submitted to the Contracting Officer during the progress of the work. The Contractor shall furnish the Contracting Officer scale tickets for each load of ACM weighed and certified. These tickets shall include tare weight; identification mark for each vehicle weighed; and date, time and location of loading and unloading. Tickets shall be furnished at the point and time individual trucks arrive at the worksite. A master log of all vehicle loading shall be furnished for each day of loading operations. Before the final statement is allowed, the Contractor shall file with the Contracting Officer certified weigh bills and/or certified tickets and manifests of all ACM actually disposed by the Contractor for this contract.

3.11.5 Asbestos Waste Shipment Record

The Contractor shall complete and provide the Contracting Officer and the Fort Lewis Asbestos Coordinator final completed copies of the Waste Shipment Record for all shipments of waste material as specified in 40 CFR 61, Subpart M and other required state waste manifest shipment records, within 3 days of delivery to the landfill. Each Waste Shipment Record shall be signed and dated by the Contractor, the waste transporter and disposal facility operator.

TABLE 1

INDIVIDUAL WORK TASK DATA ELEMENTS

Sheet _____ of _____

There is a separate data sheet for each individual work task.

1. WORK TASK DESIGNATION NUMBER _____
2. LOCATION OF WORK TASK _____
3. BRIEF DESCRIPTION OF MATERIAL TO BE ABATED: _____

a. Type of Asbestos _____
b. Percent asbestos content _____ %
4. ABATEMENT TECHNIQUE TO BE USED _____
5. OSHA ASBESTOS CLASS DESIGNATION FOR WORK TASK _____
6. EPA NESHAP FRIABILITY DESIGNATION FOR WORK TASK
Friable _____ Non-friable Category I _____
Non-friable Category II _____
7. FORM _____ and CONDITION OF ACM: GOOD _____ FAIR _____ POOR _____
8. QUANTITY: METERS _____, SQUARE METERS _____
- 8a. QUANTITY: LINEAR FT. _____, SQUARE FT. _____
9. RESPONSE ACTION DETAIL SHEET NUMBER FOR WORK TASK _____
10. SET-UP DETAIL SHEET NUMBERS
FOR WORK TASK _____, _____, _____, _____,
_____, _____, _____, _____.

NOTES:

- (1) Numeric sequence of individual work tasks (1,2,3,4, etc.) for each regulated area. Each category of EPA friability/OSHA class has a separate task.
- (2) Specific location of work (building, floor, area, e.g., Building 1421, 2nd Floor, Rm 201)
- (3) A description of material to be abated (example: horizontal pipe, cement wall panels, tile, stucco, etc.) type of asbestos (chrysotile, amosite, crocidolite, etc.); and % asbestos content.
- (4) Technique to be used: Removal = REM; Encapsulation = ENCAP; Encasement = ENCAS; Enclosure = ENCL; Repair = REP.
- (5) Class designation: Class I, II, III, or IV (OSHA designation).
- (6) Friability of materials: Check the applicable EPA NESHAP friability designation.
- (7) Form: Interior or Exterior Architectural = IA or EA; Mechanical/Electrical = ME.
Condition: Good = G; Fair = F; Poor = P.
- (8) Quantity of ACM for each work task in meters or square meters.
- (8a) Quantity of ACM for each work task in linear feet or square feet.
- (9) Response Action Detail Sheet specifies the material to be abated and the methods to be used. There is only one Response Action Detail Sheet for each abatement task.
- (10) Set-up Detail Sheets indicate containment and control methods used in support of the response action (referenced in the selected Response Action Detail Sheet).

TABLE 2

FORMULA FOR CALCULATION OF THE 95 PERCENT CONFIDENCE LEVEL
(Reference: NIOSH 7400)

$$\text{Fibers/cc(01.95 percent CL)} = X + [(X) * (1.645) * (CV)]$$

Where: $X = ((E) (AC)) / ((V) (1000))$

$$E = ((F/Nf) - (B/Nb)) / Af$$

CV = The precision value; 0.45 shall be used unless the analytical laboratory provides the Contracting Officer with documentation (Round Robin Program participation and results) that the laboratory's precision is better.

AC = Effective collection area of the filter in square millimeters

V = Air volume sampled in liters

E = Fiber density on the filter in fibers per square millimeter

F/Nf = Total fiber count per graticule field

B/Nb = Mean field blank count per graticule field

Af = Graticule field area in square millimeters

$$\text{TWA} = C1/T1 + C2/T2 = Cn/Tn$$

Where: C = Concentration of contaminant

T = Time sampled.

TABLE 3

NIOSH METHOD 7400

PCM ENVIRONMENTAL AIR SAMPLING PROTOCOL (NON-PERSONAL)

| Sample Location | Minimum No. of Samples | Filter Pore Size (Note 1) | Min. Vol. (Note 2) (Liters) | Sampling Rate (liters/min.) |
|---|-------------------------------------|---------------------------|-----------------------------|-----------------------------|
| Inside Abatement Area | 0.5/140 Square Meters (Notes 3 & 4) | 0.45 microns | 1500 | 2-10 |
| Each Room in Abatement Area Less than 140 Square meters | 1 | 0.45 microns | 1500 | 2-10 |
| Field Blank | 2 | 0.45 microns | 0 | 0 |
| Laboratory Blank | 1 | 0.45 microns | 0 | 0 |

Notes:

1. Type of filter is Mixed Cellulose Ester.
2. Ensure detection limit for PCM analysis is established at 0.005 fibers/cc.
3. One sample shall be added for each additional 140 square meters. (The corresponding I-P units are 5/1500 square feet).
4. A minimum of 5 samples are to be taken per abatement area, plus 2 field blanks.

SEE ENCLOSED

NIOSH METHOD 7402

13280-53

CERTIFICATE OF WORKER'S ACKNOWLEDGMENT

PROJECT NAME _____ CONTRACT NO. _____
PROJECT ADDRESS _____
CONTRACTOR FIRM NAME _____
EMPLOYEE'S NAME _____, _____, _____,
(Print) (Last) (First) (MI)

Social Security Number: _____ - _____ - _____,

WORKING WITH ASBESTOS CAN BE DANGEROUS. INHALING ASBESTOS FIBERS HAS BEEN LINKED WITH TYPES OF LUNG DISEASE AND CANCER. IF YOU SMOKE AND INHALE ASBESTOS FIBERS, THE CHANCE THAT YOU WILL DEVELOP LUNG CANCER IS GREATER THAN THAT OF THE NONSMOKING PUBLIC.

Your employer's contract for the above project requires that you be provided and you complete formal asbestos training specific to the type of work you will perform and project specific training; that you be supplied with proper personal protective equipment including a respirator, that you be trained in its use; and that you receive a medical examination to evaluate your physical capacity to perform your assigned work tasks, under the environmental conditions expected, while wearing the required personal protective equipment. These things are to be done at no cost to you. By signing this certification, you are acknowledging that your employer has met these obligations to you. The Contractor's Designated Industrial Hygienist will check the block(s) for the type of formal training you have completed. Review the checked blocks prior to signing this certification.

FORMAL TRAINING:

_____ a. For Competent Persons and Supervisors: I have completed EPA's Model Accreditation Program (MAP) training course, "Contractor/Supervisor", that meets this State's requirements.

b. For Workers:

_____ (1) For OSHA Class I work: I have completed EPA's MAP training course, "Worker", that meets this State's requirements.

_____ (2) For OSHA Class II work (where there will be abatement of more than one type of Class II materials, i.e., roofing, siding, floor tile, etc.): I have completed EPA's MAP training course, "Worker", that meets this State's requirements.

_____ (3) For OSHA Class II work (there will only be abatement of one type of Class II material):

_____ (a) I have completed an 8-hour training class on the elements of 29 CFR 1926, Section .1101(k)(9)(viii), in addition to the specific work practices and engineering controls of 29 CFR 1926, Section .1101(g) and hands-on training.

_____ (b) I have completed EPA's MAP training course, "Worker", that meets this State's requirements.

_____ (4) For OSHA Class III work: I have completed at least a 16-hour course consistent with EPA requirements for training of local education agency maintenance and custodial staff at 40 CFR 763, Section .92(a)(2) and the elements of 29 CFR 1926, Section .1101(k)(9)(viii), in addition to the specific work practices and engineering controls at 29 CFR 1926, Section .1101, and hands-on training.

_____ (5) For OSHA Class IV work: I have completed at least a 2-hr course consistent with EPA requirements for training of local education agency maintenance and custodial staff at 40 CFR 763, (a)(1), and the elements of 29 CFR 1926, Section .1101(k)(9)(viii), in addition to the specific work practices and engineering controls at 29 CFR 1926, Section .1101(g) and hands-on training.

_____ c. Workers, Supervisors and the Designated Competent Person: I have completed annual refresher training as required by EPA's MAP that meets this State's requirements.

PROJECT SPECIFIC TRAINING:

_____ I have been provided and have completed the project specific training required by this Contract. My employer's Designated Industrial Hygienist and Designated Competent Person conducted the training.

RESPIRATORY PROTECTION:

_____ I have been trained in accordance with the criteria in the Contractor's Respiratory Protection program. I have been trained in the dangers of handling and breathing asbestos dust and in the proper work procedures and use and limitations of the respirator(s) I will wear. I have been trained in and will abide by the facial hair and contact lens use policy of my employer.

RESPIRATOR FIT-TEST TRAINING:

_____ I have been trained in the proper selection, fit, use, care, cleaning, maintenance, and storage of the respirator(s) that I will wear. I have been fit-tested in accordance with the criteria in the Contractor's Respiratory Program and have received a satisfactory fit. I have been assigned my individual respirator. I have been taught how to properly perform positive and negative pressure fit-check upon donning negative pressure respirators each time.

MEDICAL EXAMINATION:

_____ I have had a medical examination within the last twelve months which was paid for by my employer. The examination included: health history, pulmonary function tests, and may have included an evaluation of a chest x-ray. A physician made a determination regarding my physical capacity to perform work tasks on the project while wearing personal protective equipment including a respirator. I was personally provided a copy and informed of the results of that examination. My employer's Industrial Hygienist evaluated the medical certification provided by the physician and checked the appropriate blank below. The physician determined that there:

_____ were no limitations to performing the required work tasks.

_____ were identified physical limitations to performing the required work tasks.

Date of the medical examination _____

Employee Signature _____ date _____

Contractor's Industrial Hygienist Signature _____ date _____

This page intentionally blank

SECTION 13281

LEAD HAZARD CONTROL ACTIVITIES

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by basic designation only.

CODE OF FEDERAL REGULATIONS (CFR)

29 CFR 1926 Safety and Health Regulations for Construction

UNDERWRITERS LABORATORIES (UL)

UL 586 (1996; Rev thru Aug 1999) High-Efficiency, Particulate, Air Filter Units

U.S. ARMY CORPS OF ENGINEERS ENGINEERING MANUAL (EM)

EM 385-1-1 (1996) Safety and Health Requirements Manual

WASHINGTON STATE DEPARTMENT OF ECOLOGY (WAC)

WAC 173-303 Dangerous Waste Regulations
WAC 296-24 General Health and Safety Regulations

WAC 296-62 Occupational Health Regulations

WAC 296-155-176 Lead Exposure in Construction-Inspection Compliance Procedures

1.2 DEFINITIONS

- a. Lead Hazard Control Activity - Any abatement, demolition, or earthmoving work where a worker may be occupationally exposed to lead and procedures have to be followed to assure that: 1). Lead inside the lead hazard control area is cleaned up to appropriate levels and 2). Lead dust does not disperse outside the lead hazard control area at unacceptable levels.

1.3 DESCRIPTION OF WORK

The work covered by this section includes work tasks and the precautions specified in this section for the protection of workers and the environment.

1.3.1 Protection of Existing Areas To Remain

All project work including abatement, demolition, grading, storage, transportation, and disposal shall be performed without damaging or contaminating adjacent areas. Where such areas are damaged or contaminated, the Contractor shall restore work and areas to the original condition at no additional cost to the Government.

1.3.2 Coordination with Other Work

The contractor shall coordinate lead hazard control activities with work being performed in adjacent areas. Coordination procedures shall be explained in the Contractor's SSHP and shall describe how the Contractor will prevent lead exposure to other contractors and/or Government personnel performing work unrelated to lead hazard control activities.

1.4 SUBMITTALS

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for information only.

SD-06 Test Reports

Qualifications; G

A report providing evidence of qualifications and designating responsibilities for personnel and laboratories.

Sampling and Analysis; G

A log of the analytical results required for the sampling. The log shall be kept current.

Clearance Report; G

Report prepared by the Safety and Health Manager.

1.5 QUALIFICATIONS

1.5.1 Qualifications Report

The Contractor shall furnish a qualification report describing the qualifications of all lead testing subcontractors and laboratory(ies) selected for this project. The report shall be signed by the Contractor and the Contractor's Safety and Health Manager to indicate that all personnel and laboratories comply with certification and experience requirements of this section and that project personnel have been given the authority to complete the tasks assigned to them.

1.5.2 Personnel and Subcontractor Responsibilities and Qualifications

1.5.2.1 Lead Testing Workers

Lead Testing workers shall be responsible for performing the labor necessary to complete the lead sampling activities required in this contract.

1.5.2.2 Testing Laboratories

The laboratory selected to perform analysis of samples for environmental and TCLP lead shall be accredited by EPA's National Lead Laboratory Accreditation Program (NLLAP). The laboratory selected to perform analysis on worker exposure (industrial hygiene) samples shall be in the American Industrial Hygiene Association's Industrial Hygiene Laboratory Accreditation Program (IHLAP) and shall be successfully participating in the Proficiency Analytical Testing (PAT) program for lead.

1.5.2.5 Blood Lead Testing

The laboratory selected to perform analysis on worker blood samples shall be listed at http://www.osha-slc.gov/OCIS/toc_bloodlead.html.

1.5.2.6 Disposal Facility and Transporter

The Contractor shall furnish written evidence that the landfill(s) to be used for disposal of demolition debris and lead hazardous wastes (if any are generated) meet EPA, state, and local requirements. Copies of any required signed agreements between the Contractor (including subcontractors and transporters) and the disposal facility shall be provided.

1.6 REGULATORY REQUIREMENTS

In addition to the detailed requirements of this specification, work shall be performed in accordance with requirements of EM 385-1-1 and applicable regulations including, but not limited to, 29 CFR 1910, 29 CFR 1926, and the accepted SSHP. Matters of interpretation of the standards shall be

resolved to the satisfaction of, and with the concurrence of, the Contracting Officer before starting work. Where these requirements vary, the most stringent shall apply.

1.7 SITE SAFETY AND HEALTH PLAN

The SSHP developed by the Contractor under Section 01351 shall detail provisions for protection of workers from exposure to lead at this site.

1.8 PRE-CONSTRUCTION SAFETY CONFERENCE

The Contractor and the Safety and Health Manager shall attend a pre-construction safety conference at which lead control issues will be discussed prior to starting work on any work that could result in generation of lead dust or worker exposure to lead.

1.9 MEDICAL SURVEILLANCE REQUIREMENTS

The Contractor shall comply with the medical surveillance requirements specified in its SSHP, developed under Section 01351 of these specifications.

1.10 RESPIRATORY PROTECTION PROGRAM

The Contractor's use of respiratory protection shall comply with the requirements specified in its SSHP, developed under Section 01351 of these specifications.

1.11 LICENSES, PERMITS, AND NOTIFICATIONS

At this time, it is believed that there are no licenses, permits, or notifications that need to be made for lead hazard activities. The Contractor shall certify in writing to the Contracting Officer at least ten days prior to the commencement of site work a statement verifying this assertion. If Contractor discovers that any such items are necessary at the time of the site work for this project, it will be the responsibility of the Contractor to obtain any such licenses or permits, make required notifications, and pay all associated fees or costs incurred in obtaining the licenses, permits, and notifications.

1.12 TRAINING

The Contractor shall comply with lead training requirements specified in its SSHP, developed under Section 01351 of these specifications.

1.13 SAMPLING AND ANALYSIS

1.13.1 Personnel Sampling and Analysis

Occupational exposure assessments to lead shall comply with applicable federal and state regulations, and the applicable portions of the specified Contractor's SSHP, developed under Section 01351 of these specifications.

1.13.2 Environmental Dust Sampling and Analysis

At least two environmental assessments of airborne dust at the site fence line shall be performed daily by the Contractor, one each in the predominant upwind and downwind directions. Sampling and analysis will be made using the same procedures as used for personnel sampling and analysis, except the samples will be collected at a single fixed location, and shall be set up in such a way to avoid impacts from weather or mechanical disturbance.

1.13.3 Waste Disposal Sampling and Analysis

The Contractor shall sample the following waste streams for TCLP analysis to determine waste disposal requirements.

- a. The Contractor shall take representative samples of building demolition debris.
- b. The Contractor shall take representative samples of stockpiled soil.

Contractor shall verify by laboratory analysis that demolition debris and soils removed from the site do not fail TCLP analysis for lead before sending any such wastes for off-site disposal. Representative sampling must be used to account for all components of the waste stream. Contractor shall coordinate with the Contracting Officer's representative, so that the representative may observe all such TCLP sampling.

1.13.4 Lead Hazard Control Area/Containment Monitoring

The Contractor shall perform a visual inspection once per day inside and immediately outside the site fence line area to assure visual clearance criteria are maintained while site activities are performed, and before final clearance is obtained. The Contractor shall clean at its own expense, and to the Contracting Officer's satisfaction, all contaminated surfaces outside the lead hazard control area, if surfaces fail visual clearance criteria. Visual indicators of contamination include visible paint chips or painted debris.

1.13.4 Analytical Results

The Contractor shall develop and maintain during the course of the project a log of analytical results generated by the above sampling requirements. The log shall clearly describe the reason for which the sample was taken (worker exposure, migration control, clearance) the analytical result for each sample and evaluate if the analytical result passed or failed the action levels.

1.14 CLEARANCE REQUIREMENTS

Contractor shall verify that soil remaining on site after demolition and final grading is below Washington Model Toxic Control Act (MTCA) Method A unrestricted land use criteria for lead (currently 250 mg/kg). A minimum of 20 discrete surface soil samples of the bare soil inside the lead hazard control area (final graded site) will be collected randomly by the Contractor. Such collection will be coordinated with the Contracting Officer's representative. If soils tested by this procedure are confirmed to contain lead above the MTCA criteria, the soils will be properly excavated, characterized, transported, and disposed of at a landfill or treatment facility approved by the EPA for receiving such waste.

1.15 PERSONAL PROTECTIVE EQUIPMENT (PPE)

The Contractor shall describe the PPE to be used to protect workers from lead hazards in the Lead Hazard Control Section of the SSHP. The Contractor shall furnish, at no cost to the workers, clothing for protection from lead-contaminated dust and debris. An adequate supply of these items shall be available for worker and Government personnel use.

1.16 HYGIENE FACILITIES

The Contractor shall describe the personal hygiene facilities to be used by the workers in the Lead Hazard Control Section of the SSHP. The Contractor shall provide hygiene facilities for lead hazard control workers.

1.17 POSTED WARNINGS AND NOTICES

The following regulations, warnings, and notices shall be posted at the worksite in accordance with 29 CFR 1926.62.

1.17.1 Regulations

At least two copies of 29 CFR 1926.62 shall be made available for use by either the Contracting Officer or affected workers; and for the purpose of providing required information and training to the workers involved in the project. One copy shall be maintained in the Contractor's jobsite file, and a second copy shall be posted where it will be accessible to workers on the site.

1.17.2 Warning Signs and Labels

Warning signs shall be posted in each lead hazard control area where worker exposure to lead is undetermined or where the exposures are above the permissible exposure limit as defined in 29 CFR 1926.62. Signs shall be located to allow personnel to read the signs and take necessary precautions before entering the lead hazard control area.

1.17.2.1 Warning Signs

Warning signs shall be in English, be of sufficient size to be clearly legible, and display the following:

WARNING
LEAD WORK AREA
POISON
NO SMOKING OR EATING

1.17.2.2 Warning Labels

Warning labels shall be affixed to all lead waste disposal containers used to hold materials, debris and other products contaminated with lead hazards; warning labels shall be in English, and be of sufficient size to be clearly legible, and display the following:

CAUTION: CLOTHING CONTAMINATED WITH LEAD. DO NOT REMOVE DUST BY
BLOWING OR SHAKING. DISPOSE OF LEAD CONTAMINATED WASH WATER IN
ACCORDANCE WITH APPLICABLE FEDERAL, STATE OR LOCAL REGULATIONS.

1.17.3 Worker Information

Right-to-know notices shall be placed in clearly visible areas accessible to personnel on the site, to comply with Federal, state, and local regulations.

1.17.4 Air Monitoring Results

Air monitoring results shall be prepared so as to be easily understood by the workers. One copy shall be maintained in the Contractor's jobsite file, and a second copy shall be posted where it will be accessible to the workers as specified in 29 CFR 1926 (.62).

1.17.5 Emergency Telephone Numbers

A list of emergency telephone numbers shall be posted at the site. The list shall include numbers of the local hospital, emergency squad, police and fire departments, Government and Contractor representatives who can be reached 24 hours per day, and professional consultants directly involved in the project.

1.18 MATERIALS AND EQUIPMENT

Sufficient quantities of health and safety materials required by 29 CFR 1926 .62, the SSHP, and other materials and equipment needed to complete the project, shall be available and kept on the site.

1.18.1 Abrasive Removal Equipment

The use of powered machines for vibrating, sanding, grinding, or abrasive blasting is prohibited unless equipped with local exhaust ventilation systems equipped with high efficiency particulate air (HEPA) filters.

1.18.2 Chemical Paint Strippers

Chemical paint strippers shall not be used on this project.

1.19 EXPENDABLE SUPPLIES

1.19.1 Polyethylene Bags

Disposable bags shall be polyethylene plastic and shall be a minimum of 0.15 mm 6 mils thick (0.1 mm 4 mils thick if double bags are used) or any other thick plastic material shown to demonstrate at least equivalent performance; and shall be capable of being made leak-tight. Leak-tight means that solids, liquids or dust cannot escape or spill out.

1.19.2 Containers

When used, containers shall be leak-tight and shall be labeled in accordance with EPA, DOT and OSHA standards, as specified in paragraph WARNING LABELS.

1.20 STORAGE OF MATERIALS

Materials shall be stored protected from damage and contamination. Materials shall be regularly inspected to identify damaged or deteriorating items. Damaged or deteriorated items shall not be used and shall be removed from the site as soon as they are discovered. Stored materials shall not present a hazard or an inconvenience to workers, visitors, and/or other occupants and employees of the facility in which they are located.

PART 2 PRODUCTS (NOT APPLICABLE)

PART 3 EXECUTION

3.1 WORK PROCEDURES

3.1.1 Lead Hazard Control Areas, Equipment and Procedures

The Contractor shall set up lead hazard control areas and operate equipment within the lead hazard control area in such a manner to minimize migration of lead dust beyond the lead hazard control area boundaries and minimize exposure to workers.

3.1.2 Lead Hazard Control Areas

Access into lead hazard control areas by the general public shall be prohibited. Workers entering the lead hazard control area shall meet medical surveillance requirements of the SSHP and shall be required to understand and follow procedures described in the Contractor's SSHP for reducing lead exposure. Lead hazard control area preparation and restriction requirements shall include containment features for exterior lead hazard control projects, such as colored caution tape and fenced boundary perimeter.

3.2 USE OF HYGIENE FACILITIES

Personnel and equipment shall be decontaminated when exiting the lead hazard control area, as specified in the Contractor's SSHP. The Contractor shall provide an eating facility outside any lead hazard control area as free as practical from lead contamination. Workers shall be allowed usage of the designated eating facility for rest/lunch breaks.

3.3 WASTE DISPOSAL PROCEDURES

3.3.1 Construction Debris and/or Sanitary Landfill Waste

The Contractor shall dispose of the following waste streams in a construction debris landfill: building demolition debris and used Personal Protective Equipment.

3.3.2 Waste Stream Classification

The Contractor shall determine the RCRA waste classification for all waste streams generated by the project. The Contractor shall perform the sampling and analysis required for characterization of each waste stream, evaluate analytical results, and propose waste stream treatment and disposal requirements for the contract. The Contracting Officer shall approve waste stream treatment and disposal requirements proposed by the Contractor.

3.4 CLEARANCE PROCEDURES

3.4.1 Visual Inspection

Contractor shall perform a visual inspection, using the form at the end of this section, for each lead hazard control area to assure that lead hazard control activities have been properly completed. The Contractor shall visually verify that lead hazards have been removed, control technology has been appropriately applied, and that the lead hazard control area is free of dust and paint chips generated by lead hazard control activities.

3.4.2 Analytical Demonstration of Clearance

After the visual inspection, the Contractor shall take clearance samples for laboratory analysis to verify clearance requirements specified in paragraph CLEARANCE REQUIREMENTS have been met.

3.5 EVALUATION OF SAMPLING AND MONITORING RESULTS

Analytical results from samples taken during lead hazard control activities shall be evaluated to determine compliance with occupational safety and health standards and project specific control efficiency and clearance/clean up levels.

3.5.1 Occupational Safety and Health

The Contractor shall review the analytical results from samples taken for the initial exposure assessment and continued occupational safety and health monitoring if required. Effectiveness and adequacy of personal protective equipment, respirators, work practices, hygiene facilities and personal decontamination procedures shall be evaluated and upgrades/downgrades in equipment and procedures made.

3.5.2 Control Efficiency of Containment Features

The Contractor shall review and document results of the visual inspection determining visual clearance criteria are being met while lead hazard control activities are being performed. The Contractor shall review analytical results from samples taken to determine if lead is migrating outside lead hazard control areas. The Contractor shall notify the Contracting Officer and apply the following actions if results exceed project specific clearance levels outside the lead hazard control area:

- a. Improve dust control measures.
- b. Improve work practices to reduce lead aerosol generation.

3.5.3 Clearance

The Contractor shall review analytical results for the samples taken to determine compliance with project-specific clearance requirements. Excavation of additional soils and retesting to determine clearance shall be performed at the Contractor's expense if project-specific clearance levels are exceeded:

3.5.4 Removal of Lead Hazard Control Area

Upon acceptance of the final clearance certification by the Contracting Officer, and when authorized, cleared Lead Hazard Control Area boundary controls and warning signs shall be removed.

3.6 CLEARANCE REPORT

The Contractor shall prepare a Lead Clearance Report including the following information:

- a. Start and completion dates of lead hazard control activities.
- b. Locations and lead hazards controlled.
- c. The name and address of each firm conducting lead hazard control activities and the name of each supervisor assigned to the project.
- d. Certification that clearance requirements have been met. by signature of the Safety and Health Manager.
- e. Analytical results from clearance sampling and the name of the laboratory that conducted the analysis. Results shall be provided in both the laboratory report .
- f. Hazardous waste disposal documentation.

3.9 TITLE TO MATERIALS

Materials resulting from demolition work, except as specified otherwise, shall be come the property of the Contractor, and shall be disposed of in accordance with Section 02220 DEMOLITION, except as specified.

3.10 PAYMENT FOR HAZARDOUS WASTE

Payment for disposal of hazardous waste (if any) will not be made until a signed copy of the manifest from the treatment or disposal facility certifying the amount of lead-containing materials delivered is returned and a copy is furnished to the Government.

3.11 CERTIFICATION OF VISUAL INSPECTION

Certify that the lead hazard control area(s) for each individual work task data elements have passed visual clearance criteria and are ready for clearance sampling. To pass visual clearance, lead hazards have to be removed; control technology appropriately applied/installed; the lead hazard control area must be free from visible dust debris, paint chips or any other residue that may have been generated by the lead hazard control activities.

EXAMPLE VISUAL CLEARANCE FORM

Signature by the Safety and Health Manager indicates that the described lead hazard control area(s) have passed visual clearance criteria. Provide detailed description of each Lead Hazard Control Area.

BY: _____

Date: _____

Print name and title _____

CONTRACTING OFFICER ACCEPTANCE OR REJECTION

The Contracting Officer hereby determines that the Contractor has performed visual inspection of the lead hazard control area and by quality assurance inspection, finds the Contractor's work to be:

_____ Acceptable, ready for performance of clearance sampling

_____ Unacceptable, Contractor instructed to re-clean the lead hazard control area

BY: Contracting Officer

Date: _____

Print name and title _____

**EXAMPLE LEAD HAZARD CONTROL CLEARANCE SAMPLING CERTIFICATION
FORM**

Site: _____

Clearance Levels _____

Sample quantity and location:

Exterior Soils _____

Date of sample collection _____

I certify that the clearance samples taken meet the clearance sampling requirements of this contract.

By: _____ Date: _____
Safety and Health Manager

Print name and Title: _____

CONTRACTING OFFICER ACCEPTANCE OR REJECTION

I have inspected sampling locations and procedures and have found them to be

_____ Acceptable, meet contract requirements.

_____ Unacceptable, do not meet contract requirements, Contractor is directed to resample.

By: _____ Date: _____
Contracting Officer

Print name and Title: _____

END OF SECTION