

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CONTRACT ID CODE J	PAGE OF PAGES 1 2
2. AMENDMENT/MODIFICATION NO. 0001	3. EFFECTIVE DATE 10 JUN 2010	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. <i>(If applicable)</i>	
6. ISSUED BY U.S. ARMY ENGINEER DISTRICT, ALBUQUERQUE CORPS OF ENGINEERS 4101 JEFFERSON PLAZA, N.E. ALBUQUERQUE, NEW MEXICO 87109-3435	CODE	7. ADMINISTERED BY <i>(If other than Item 6)</i>		CODE
8. NAME AND ADDRESS OF CONTRACTOR <i>(No., street, county, State and ZIP Code)</i>			(<input checked="" type="checkbox"/>)	9A. AMENDMENT OF SOLICITATION NO. W912PP-10-R-0048
			(<input checked="" type="checkbox"/>)	9B. DATED <i>(SEE ITEM 11)</i> 26 MAY 2010
				10A. MODIFICATION OF CONTRACTS/ORDER NO.
				10B. DATED <i>(SEE ITEM 13)</i>
CODE	FACILITY CODE			

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is extended, is not extended.

Offers 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.

(<input checked="" type="checkbox"/>)	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: <i>(Specify authority)</i> 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 <i>(such as changes in paying office, appropriation date, etc.)</i> 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 <i>(Specify type of modification and authority)</i>

E. IMPORTANT: Contractor is not, 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.)*

**PROJECT: FY10 UAS FTU COMPLEX- VERTICAL: ADD/ALTER MAINTENANCE HANGAR BUILDING 500
ADD/ALTER SQUADRON OPERATIONS BUILDING 318, HELLFIRE PGM FACILITY, HAYMAN STORAGE FACILITY,
HOLLOMAN AIR FORCE BASE, OTERO COUNTY, NEW MEXICO**

1. This is Amendment No. 0001 to Solicitation No. W912PP-10-R-0048; 26 MAY 2010. The following revisions shall be incorporated into the solicitation. All other provisions shall remain unchanged.

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 <i>(Type or print)</i>		16A. NAME AND TITLE OF CONTRACTING OFFICER <i>(Type or print)</i>	
15B. CONTRACTOR/OFFEROR <i>(Signature of person authorized to sign)</i>	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA BY _____ <i>(Signature of Contracting Officer)</i>	16C. DATE SIGNED

2. SPECIFICATIONS: Delete the following listed pages and substitute the pages attached hereto. On the revised pages, for convenience, changes are emphasized by the amendment number in parentheses before and after changes from the previous issue. All portions of the revised (or new) pages shall apply whether or not changes have been indicated.

<u>Delete Page</u>	<u>Insert Page</u>
00110, entire section	00110, entire section
00 80 00, pg. 1	00 80 00, pg. 1
01 35 26, pgs. 2, 4, & 11	01 35 26, pgs. 2, 4, 4a, & 11
02 82 14.00 10, pgs. 34 - 49	02 82 14.00 10, pgs. 34 - 48

//////////LAST ITEM//////////

SECTION 00110

PROPOSAL SUBMISSION REQUIREMENTS

1. GENERAL SUBMISSION REQUIREMENTS

a. The intent of this Request for Proposals (RFP) is to solicit proposals for FY10 UAS FTU Complex-Verical Add/Alter Maintenance Hanger Building 500 Add/Alter Squadron Operations building 318 Hellfire PGM Facility Hayman Storage Facility, Holloman Air Force Base, Otero County, New Mexico. Offerors shall organize their proposals as described herein. Proposals may be determined nonresponsive for failure to follow this format.

b. Submit your proposal packages to the U.S. Army Corps of Engineers, Albuquerque District, at the address shown in Block 8 of Standard Form 1442. The Government must receive your proposal no later than the time and date specified in Block 13 of Standard Form 1442.

c. Offerors must submit their proposal in two separate volumes, "Volume 1, Price Proposal" and "Volume 2, Technical Proposal". Each volume must be in a three-ring binder of sufficient size to permit unforced turning of pages and must be clearly marked as to its content, i.e., project title, solicitation number, Price or Technical Proposal, name and address of the Offeror, and the time/date specified for receipt of proposals. Offerors that include information in their proposals that they do not want disclosed to the public for any purpose, or used by the Government except for evaluation purposes, must mark such information in accordance with instructions at FAR 52.215-1, Instructions to Offerors—Competitive Acquisition, paragraph (e), "Restriction on disclosure and use of data."

d. Each volume of the proposal shall be tabbed consistent with the solicitation format (Tab A – Factor 1: Project Experience, Tab B – Factor 2: Past Performance Tab C- Factor 3: Preliminary Schedule.) as outlined herein. Include a Table of Contents for each volume.

e. In the case of an Offeror that is part of a large, multi-segmented business concern, provide information directly pertaining to the specific segment of the business concern (i.e., the division, group, unit, etc.) that will perform work under the prospective contract with its own workforce. Do not provide information pertaining to the business concern in general or pertaining to other affiliated concerns that will not be self-performing work under the perspective contract with their in-house forces.

2. CONTENTS OF "VOLUME 1, PRICE PROPOSAL"

This volume contains a Proposal Cover Sheet and Tabs A through C, and should not be page numbered. Submit only one original of this volume.

a. **Proposal Cover Sheet.** The proposal cover sheet is required by FAR 52.215-1(c)(2). This provision, entitled "Instructions to Offerors—Competitive Acquisition," has been included in full text in Section 00100. Provide the following information in the Proposal Cover Sheet:

- Solicitation number.
- Name, address, telephone and facsimile numbers of the Offeror (and electronic address if available).
- DUNS, CAGE, and tax identification numbers of the Offeror.
- Statement specifying the extent of agreement with all terms, conditions, and provisions included in the solicitation and agreement to furnish any or all items upon which prices are offered at the price set opposite each item as reflected on the proposal schedule attached to the SF1442. (Note, failure to agree with all terms, conditions, and provisions in the solicitation may result in your proposal being rejected as non-responsive.)
- Names, titles, telephone and facsimile numbers (and electronic addresses if available) of persons authorized to negotiate on the Offeror's behalf with the Government in connection with this solicitation.
- Name, title, and signature of person authorized to sign the proposal and any contract that may result from that proposal.

- Acknowledge that your company’s data at the Central Contractor Registration website is current per FAR Clause 52.204-7, Central Contractor Registration and DFARS 252.204-7004, Alternate A, Required Central Contractor Registration. (These clauses are in Section 00700 of this RFP.)

b. Tab A. Tab A shall contain the Standard Form (SF) 1442—Solicitation, Offer and Award; Proposal Schedule; and bid guarantee/bond. These documents should be secured within some form of document protector and not “hole-punched”. The **SF 1442** shall be completed by the Offeror and duly executed with an original signature by an official authorized to bind the company in accordance with instructions at FAR 4.102. Include with the Offeror’s name and address in Block 14 of the SF 1442, your company’s DUNS, CAGE, and tax identification numbers, and in Block 19, acknowledge all amendments to the solicitation. Your proposed price for this project shall be in the form of the **Proposal Schedule** immediately following the Standard Form 1442. As this is a firm-fixed price contract, price proposals will not be considered which provide for subsequent increases in price. No qualified price proposal of any type will be accepted; therefore, all offers containing such qualifications will be considered unacceptable. Include the **bid guarantee/bond** in this Tab. If the Offeror does not comply with all the requirements of these proposal forms, the proposal may be considered unacceptable and eliminated from consideration.

c. Tab B. Tab B shall contain Section 00600, Representations and Certifications. Complete this section of the Request for Proposal, filling in all applicable areas.

d. Tab C. Tab C shall contain financial and bank reference information. Provide your latest balance sheet and income statement, including the names of banks or other financial institutions with which your firm conducts business. If the financial statements are more than 60 days old, a certificate should be attached stating that the financial condition is substantially the same, or if not the same, state the changes that have taken place. The financial statements will be treated as confidential. Provide a point of contact with a phone number of one bank reference for the Government to verify general financial information such as average monthly balance or any delinquency on loan payments.

3. CONTENTS OF “VOLUME 2, TECHNICAL PROPOSAL”

The Volume 2, Technical Proposal, consists of all information and material submitted in accordance with the following instructions, which will be evaluated under the Factors listed in Section 00120. This volume contains Tabs A through C. Submit one original and five copies of Volume 2, which shall not exceed 25 (twenty five) single-sided pages. Owner/Client Past Performance Surveys and Personnel Resume forms are not included in the overall page total. Narrative portions of the proposal shall be in 8-1/2 x 11 inch format using no more than 7 vertical lines per inch, with page margins at least 1-inch wide. The first page of each Tab shall begin with the number “1” with succeeding pages consecutively numbered at the bottom of each page to the end of the Tab. The Offeror is cautioned to refrain from quoting prices, or other pricing terms of any nature, in this technical portion of the proposal.

a. Tab A. FACTOR 1: PROJECT EXPERIENCE. Relevant experience (within the past five (5) years) shall be submitted at Tab A for each project using the Project Experience Form shown at the end of this Section. If a project is currently under construction, annotate percent of completion on the form. Information provided on the Project Experience Forms will be evaluated for this Factor 1, and will also be used to support the evaluation of Factor 2, Past Performance (Tab B). Offerors are invited, but not required, to submit photographs of especially successful projects in conjunction with this Tab.

1.) OFFEROR (PRIME CONTRACTOR): The offeror must demonstrate successful completion (70% complete or more) of no more than five (5) examples of projects within the past five (5) years that are similar to this project in type (e.g., other facilities with similar attributes/requirements), scope (e.g., contract amount, square footage, firm-fixed price contract, etc.), and complexity (features that are either unique or even typical of this type of project that in general would also apply to this project). Offeror’s experience may include the experience of associated subcontractors. Responses to this factor should take into account past performance information of the management team proposed for the contract, timeliness of performance, safety and health record, customer satisfaction and cost control.

b. Tab B. FACTOR 2: PAST PERFORMANCE

1.) Owner/Client Past Performance Survey Forms. For each project pertaining **only** to the Offeror (Prime Contractor) submitted under Factor 1 – Experience (Tab A), the Offeror shall provide to his previous customers a completed “copy” of the Project Experience Form along with a blank Owner/Client Past Performance Survey which is shown at the end of this Section. Do not obtain Owner/Client Past Performance Surveys for any subcontractors. Customers shall return both forms (Project Experience Form and Owner/Client Past Performance Survey) directly to the Albuquerque District Contracting Division at the address specified on the Owner/Client Past Performance Survey. Surveys must be received by Contracting Division no later than the proposal due date.

2.) Small Business Subcontracting Success. The Government will obtain this information from the Project Experience Forms submitted for the Offeror for Factor 1 (Tab A) and from any other information the Offeror chooses to submit, such as SF 294 and 295, Subcontracting Reports, which evidences small-business subcontracting efforts.

3.) Safety Experience Record. The Offeror shall provide documentation of the firm’s safety performance record, including the Experience Modification Rate (EMR) for the previous 3 years. EMRs must be on an NCCI form (National Council of Compensation Insurance) or on letterhead from your insurer.

c. Tab C. FACTOR 3: PRELIMINARY SCHEDULE. Preliminary Schedule includes a capability narrative, management narrative, and a graphic schedule.

- i. Capability. By narrative, address how you maintain, update and use your schedule. Specifically state the number of calendar days you are proposing for completion of this project. If you are proposing a shorter project duration than indicated in Section 00800 of the solicitation, affirmatively state the following: **“We propose to accomplish this project in ____ (insert number) calendar days and acknowledge that this duration will become contractually binding in the event of contract award.”** The proposed duration should also be the same as shown in the graphic schedule that is submitted for this evaluation factor. Be advised that any assessment of liquidated damages will be based on the proposed shortened duration accepted by the Government.
- ii. Management. By narrative address how you plan to manage, coordinate, integrate, control, and document the construction of this project. Narrative should be consistent with supplementary documentation including the preliminary schedule, and/or organizational charts. The management narrative shall not exceed five (5) pages.
- iii. Preliminary Schedule. The preliminary schedule may be of any size but should be folded and inserted within Tab C of the binder. In graphic format, submit a proposed schedule in **calendar days** for the construction of this project. Do not submit a schedule in workdays. The preliminary schedule will, after contract award, be replaced with a final schedule as required in Section 01 32 01 of the solicitation.
- iv. The preliminary schedule shall be task oriented, indicating the number of calendar days, after notice to proceed, by which milestones are to be achieved. Assume an NTP date of September 02, 2010. Give special attention to the following tasks:
 1. Show the construction phase for each major feature of construction, including facilities, site work, utilities, and material and equipment lead times, as applicable. Show how the work for the antenna pad will be fast tracked.
 2. If applicable, incorporate activities associated with any option items in the solicitation, assuming for the purposes of this submission that the Government will exercise the option(s).
 3. Show project closeout activities, including as applicable, Final Surveys, final grading, O&M manual submission, Final Clean-up, and turnover of the project.

PROJECT EXPERIENCE FORM
(VOLUME 2, TAB A)
Control No.: 10-R-0048

OFFEROR'S NAME: _____

Provide a completed form for each project for which experience is being claimed.

Experience provided for (check more than one box if applicable):

Offeror: _____

Key Construction Subcontractor: _____

Was project a firm-fixed-price contract (Y/N)? ____ If No, what type was it?

Project Name: _____

Project Location: _____

Owner/Client: _____

For this project for which experience is being claimed, firm(s) worked as the prime contractor; or Subcontractor. If experience is provided for more than one firm, check more than one box as appropriate for each firm listed.

Brief description of project (Include, as applicable, how project is similar in scope and magnitude to the work required in this RFP)

Construction Contract Amount or Design Fee (for Designer): _____

Original Contract Completion Date: _____

Final Contract Completion Date: _____

Actual Completion Date: _____

Percent of Completion (if project is currently under construction) _____

Explanation of any Late Finish:

Was the project terminated early or were cure/show cause letters received? ___ Yes ___ No

Explain early termination (default/convenience) or cure/show cause letters

Safety record: ___ Injuries with Lost Workdays*, ___ Injuries without Lost Workdays*
(*Use the number reported on OSHA Form No. 200 or equivalent)

List and explain any customer concerns or dissatisfaction. Explain how you responded.

SMALL BUSINESS SUBCONTRACTING (Complete for Offeror (Prime Contractor) only):

Large Business Offerors Only: What were the various small business percentage goals in the original contract, if applicable (see FAR 52.219-9)? SDB: _____ WOB: _____

Small Business: _____ Veteran-owned: _____ HUBZone: _____

What was the actual percent achieved at contract completion? SDB: _____ WOB: _____

Small Business: _____ Veteran-owned: _____ HUBZone: _____

Explanation—If goals were not met:

Large and Small Business Offerors: Percent of contract and types of work subcontracted to small businesses (see FAR 52.219-8, Utilization of Small Business Concerns).

Name, address, FAX and telephone number of the owner:

Name and telephone number of a representative of **your firm** who is knowledgeable of this project and can readily be contacted:

Name, address, FAX and telephone number of a **representative of the owner** who is knowledgeable of this project and can be readily contacted:

Name, address, FAX and telephone number of the **Contracting Officer** if project was for Federal Government:

OWNER/CLIENT PAST PERFORMANCE SURVEY
(VOLUME 2, TAB B)
Control No.: 10-R-0048

The U.S. Army Corps of Engineers, Albuquerque District, is interested in your assessment of the named company's "past performance". **Past performance** refers to the company's record of conforming to contract requirements and to standards of good workmanship; the company's record of forecasting and controlling costs; the company's adherence to contract schedules including the administrative aspects of performance; the company's history of reasonable and cooperative behavior and commitment to customer satisfaction; and the company's general business-like concern for the interest of the customer.

These questions relate to the work performed by _____

_____ (Name of Contractor)

at _____ (Name and Location of Project)

1. Is the information provided by the contractor in the attached Project Experience Form accurate and correct to the best of your knowledge?

Yes ___ No ___

Why Not?

2. How would you rate the following performance of this Contractor on the subject project?

a. Conformance to contract requirements.

Excellent Good Satisfactory Fair Unsatisfactory

b. Adherence to contract schedules.

Excellent Good Satisfactory Fair Unsatisfactory

c. Overall satisfaction with project quality.

Excellent Good Satisfactory Fair Unsatisfactory

d. Reasonable and cooperative behavior and commitment to customer satisfaction.

Excellent Good Satisfactory Fair Unsatisfactory

e. Conformance to contract safety requirements.

Excellent Good Satisfactory Fair Unsatisfactory

f. Contractor's price, in terms of initial price and control of changes or claims.

Excellent Good Satisfactory Fair Unsatisfactory

g. Execution of effective quality control procedures.

Excellent Good Satisfactory Fair Unsatisfactory

OWNER/CLIENT PAST PERFORMANCE SURVEY (CONTINUED)

CONTRACTOR'S NAME: _____

3. Were there any significant problems encountered by the Contractor? Yes ___ No ___
If yes, state the problem(s), what corrective actions were taken by the Contractor, and indicate whether you consider these corrective actions to be effective?

4. Additional Comments: _____

Name _____

Title _____

Telephone _____

Fax _____

E-Mail Address _____

Date _____

Return to: U.S. Army Corps Of Engineers, Albuquerque District
Contracting Division, Attn: Diana Martinez
4101 Jefferson Plaza, NE
Albuquerque, NM 87109-3435

Ph: (505) 342-3460 Fax: (505) 342-3263 EMAIL: diana.m.martinez@usace.army.mil

THANK YOU FOR YOUR TIME IN PREPARING THIS SURVEY!

SECTION 00 80 00

SPECIAL CONTRACT REQUIREMENTS

1. COMMENCEMENT, PROSECUTION AND COMPLETION OF WORK (FAR 52.211-10) (APR 1984)

(a) commence work under this contract within ten (10) calendar days after the date the Contractor receives the notice to proceed,

(b) prosecute the work diligently, and

(c) complete the entire work ready for use not later than the dates or number of calendar days set forth in the schedule with notes below. The time stated for completion shall include final cleanup of the premises.

SCHEDULE

SPA APR 2002

Item of Work	Commencement Time in Calendar Days After Receipt of Notice to Proceed	Completion Time in Calendar Days After Receipt of Notice to Proceed	Liquidated Damages Per Calendar Day
<u>BASE BID</u>			
(1) (1) All Work for FY10 UAS FTU Complex- Vertical: Lot No. 1 - Add/Alter Squadron Operations Building 318, Lot No. 2 - Add/Alter Maintenance Hangar Building 500, Lot No. 3 - Hellfire PGM Facility, Lot No. 4 - Hayman Storage Facility, Complete	10	510 See Note 3	\$3,828.00
(2) Final As-Built Drawings	-	See Note 1	-
(3) Operation and Maintenance (O&M) Manuals	-	See Note 2	-

U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1 (2008) Safety -- Safety and Health Requirements

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

29 CFR 1910 Occupational Safety and Health Standards
29 CFR 1910.146 Permit-required Confined Spaces
29 CFR 1915 Confined and Enclosed Spaces and Other Dangerous Atmospheres in Shipyard Employment
29 CFR 1919 Gear Certification
29 CFR 1926 Safety and Health Regulations for Construction
29 CFR 1926.500 Fall Protection

1.2 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. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

SD-01 Preconstruction Submittals

(1) Zero Accident Program (ZAP); G

Accident Prevention Plan (APP); G

Activity Hazard Analysis (AHA); G

Crane Critical Lift Plan; G

Proof of qualification for Crane Operators; G

Asbestos Abatement Plan; G, ED

(1)

SD-06 Test Reports

Reports

Submit reports as their incidence occurs, in accordance with the requirements of the paragraph entitled, "Reports".

Accident Reports

Monthly Exposure Reports

Crane Reports

1.4 REGULATORY REQUIREMENTS

In addition to the detailed requirements included in the provisions of this contract, comply with USACE EM 385-1-1, and pertinent federal, state, local, and US Air Force laws, ordinances, criteria, rules and regulations. Submit matters of interpretation of standards to the appropriate administrative agency for resolution before starting work. Where the requirements of this specification, applicable laws, criteria, ordinances, regulations, and referenced documents vary, the most stringent requirements govern.

1.5 SITE QUALIFICATIONS, DUTIES AND MEETINGS

1.5.1 Personnel Qualifications

1.5.1.1 Site Safety and Health Officer (SSHO)

Provide a Site Safety and Health Officer (SSHO) at the work site at all times to perform safety and occupational health management, surveillance, inspections, and safety enforcement for the Contractor. The Superintendent cannot be the SSHO on this project. Meet the following requirements within the SSHO:

A minimum of 5 years safety work on similar projects.

30-hour OSHA construction safety class or equivalent within the last 5 years.

An average of at least 24 hours of formal safety training each year for the past 5 years.

Competent person training as needed.

(1) 1.5.1.2 Certified Industrial Hygienist (CIH)

Provide a Certified Industrial Hygienist (CIH) that is available to the contractor as a consultant for all asbestos abatement activities at the work site to perform safety and occupational health management, surveillance, inspections, and safety enforcement for the Contractor. The CIH shall be the safety and occupational health "competent person" as defined by USACE EM 385-1-1.

1.5.1.3 Crane Operators

(1)

Meet the crane operators requirements in USACE EM 385-1-1, Section 16 and "Appendix I". In addition, for mobile cranes with Original Equipment Manufacturer (OEM) rated capacities of 50,000 pounds or greater, designate crane operators as qualified by a source that qualifies crane operators (i.e., union, a government agency, or an organization that tests and qualifies crane operators). Provide proof of current qualification.

1.5.2 Personnel Duties

1.5.2.1 Site Safety and Health Officer (SSHO)

a. Conduct daily safety and health inspections and maintain a written log which includes area/operation inspected, date of inspection,

identified hazards, recommended corrective actions, estimated and actual dates of corrections. Attach safety inspection logs to the Contractors' daily production report.

b. Conduct mishap investigations and complete required reports. Maintain the OSHA Form 300 and Daily Production reports for prime and sub-contractors.

1.15 SEVERE STORM PLAN

In the event of a severe storm warning, the Contractor must:

- a. Secure outside equipment and materials and place materials that could be damaged in protected areas.
- b. Check surrounding area, including roof, for loose material, equipment, debris, and other objects that could be blown away or against existing facilities.
- c. Ensure that temporary erosion controls are adequate.

PART 2 - PRODUCTS

Not used.

PART 3 - EXECUTION

3.1 CONSTRUCTION AND/OR OTHER WORK

3.1.1 Hazardous Material Exclusions

Notwithstanding any other hazardous material used in this contract, radioactive materials or instruments capable of producing ionizing/non-ionizing radiation (with the exception of radioactive material and devices used in accordance with USACE EM 385-1-1 such as nuclear density meters for compaction testing and laboratory equipment with radioactive sources) as well as materials which contain asbestos, mercury or polychlorinated biphenyls, di-isocyanates, lead-based paint are prohibited. The Contracting Officer, upon written request by the Contractor, may consider exceptions to the use of any of the above excluded materials.

3.1.2 Unforeseen Hazardous Material

(1) The design identified non-friable asbestos present in the work areas per Specification 02 82 14.00 10 Asbestos Hazard Control Activities. If additional material, not indicated, that may be hazardous to human health upon disturbance during construction operations is encountered, stop that portion of work and notify the Contracting Officer immediately. Within 14 calendar days the Government will determine if the material is hazardous. If material is not hazardous or poses no danger, the Government will direct the Contractor to proceed without change. If material is hazardous and handling of the material is necessary to accomplish the work, the Government will issue a modification pursuant to "FAR 52.243-4, Changes" and "FAR 52.236-2, Differing Site Conditions". (1)

3.2 PRE-OUTAGE COORDINATION MEETING

Contractors are required to apply for utility outages at least 15 days in advance. As a minimum, the request should include the location of the outage, utilities being affected, duration of outage and any necessary

TABLE 1

INDIVIDUAL WORK TASK DATA ELEMENTS

Sheet 1 of 9

There is a separate data sheet for each individual work task.

1. WORK TASK DESIGNATION NUMBER 1 (Keyed Note)
2. LOCATION OF WORK TASK See Plan Sheet H-101
3. BRIEF DESCRIPTION OF MATERIAL TO BE ABATED: 12"x12" Floor Tile
 - a. Type of Asbestos: Chrysotile
 - b. Percent asbestos content: 5% in Tile and 3% in Mastic
4. ABATEMENT TECHNIQUE TO BE USED See Detail Work Sheets
5. OSHA ASBESTOS CLASS DESIGNATION FOR WORK TASK Class II
6. EPA NESHAP FRIABILITY DESIGNATION FOR WORK TASK Non-friable Category I
7. FORM: IA and CONDITION OF ACM: FAIR
8. QUANTITY: METERS , SQUARE METERS
- 8a. QUANTITY: LINEAR FT. , SQUARE FT. 36
9. RESPONSE ACTION DETAIL SHEET NUMBER FOR WORK TASK 57
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 1

INDIVIDUAL WORK TASK DATA ELEMENTS

Sheet 2 of 9

There is a separate data sheet for each individual work task.

1. WORK TASK DESIGNATION NUMBER 3 (Keyed Note)
2. LOCATION OF WORK TASK See Plan Sheet H-101
3. BRIEF DESCRIPTION OF MATERIAL TO BE ABATED: 12"x12" Floor Tile
 - a. Type of Asbestos: Chrysotile
 - b. Percent asbestos content: 5% in Tile and 2% in Mastic
4. ABATEMENT TECHNIQUE TO BE USED See Detail Work Sheets
5. OSHA ASBESTOS CLASS DESIGNATION FOR WORK TASK Class II
6. EPA NESHAP FRIABILITY DESIGNATION FOR WORK TASK:
Non-friable Category I
7. FORM: IA and CONDITION OF ACM: FAIR
8. QUANTITY: METERS , SQUARE METERS
- 8a. QUANTITY: LINEAR FT. , SQUARE FT. 1612
9. RESPONSE ACTION DETAIL SHEET NUMBER FOR WORK TASK 57
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 1

INDIVIDUAL WORK TASK DATA ELEMENTS

Sheet 3 of 9

There is a separate data sheet for each individual work task.

1. WORK TASK DESIGNATION NUMBER 4 (Keyed Note)
2. LOCATION OF WORK TASK See Plan Sheet H-101
3. BRIEF DESCRIPTION OF MATERIAL TO BE ABATED: 9"x9" Floor Tile
 - a. Type of Asbestos: Chrysotile
 - b. Percent asbestos conten: 5% in Tile and 3% in Mastic
4. ABATEMENT TECHNIQUE TO BE USED See Detail Work Sheets
5. OSHA ASBESTOS CLASS DESIGNATION FOR WORK TASK Class II
6. EPA NESHAP FRIABILITY DESIGNATION FOR WORK TASK Non-friable Category I
7. FORM: IA and CONDITION OF ACM: FAIR
8. QUANTITY: METERS , SQUARE METERS
- 8a. QUANTITY: LINEAR FT. , SQUARE FT. 9,675
9. RESPONSE ACTION DETAIL SHEET NUMBER FOR WORK TASK 57
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 1

INDIVIDUAL WORK TASK DATA ELEMENTS

Sheet 4 of 9

There is a separate data sheet for each individual work task.

1. WORK TASK DESIGNATION NUMBER 5 (Keyed Note)
2. LOCATION OF WORK TASK See Plan Sheet H-101
3. BRIEF DESCRIPTION OF MATERIAL TO BE ABATED: 12"x12" Floor Tile
 - a. Type of Asbestos: Chrysotile
 - b. Percent asbestos content: 5% in Tile and ND in Mastic
4. ABATEMENT TECHNIQUE TO BE USED See Detail Work Sheets
5. OSHA ASBESTOS CLASS DESIGNATION FOR WORK TASK Class II
6. EPA NESHAP FRIABILITY DESIGNATION FOR WORK TASK Non-friable Category I
7. FORM: IA and CONDITION OF ACM: FAIR
8. QUANTITY: METERS , SQUARE METERS
- 8a. QUANTITY: LINEAR FT. , SQUARE FT. 36
9. RESPONSE ACTION DETAIL SHEET NUMBER FOR WORK TASK 58
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 1

INDIVIDUAL WORK TASK DATA ELEMENTS

Sheet 5 of 9

There is a separate data sheet for each individual work task.

1. WORK TASK DESIGNATION NUMBER 6 (Keyed Note)
2. LOCATION OF WORK TASK See Plan Sheet H-101
3. BRIEF DESCRIPTION OF MATERIAL TO BE ABATED: 9"x9" Floor Tile
 - a. Type of Asbestos: Chrysotile
 - b. Percent asbestos content: 5% in Tile and 5% in Mastic
4. ABATEMENT TECHNIQUE TO BE USED See Detail Work Sheets
5. OSHA ASBESTOS CLASS DESIGNATION FOR WORK TASK Class II
6. EPA NESHAP FRIABILITY DESIGNATION FOR WORK TASK:
Non-friable Category I
7. FORM: IA and CONDITION OF ACM: FAIR
8. QUANTITY: METERS , SQUARE METERS
- 8a. QUANTITY: LINEAR FT. , SQUARE FT. 1,283
9. RESPONSE ACTION DETAIL SHEET NUMBER FOR WORK TASK 57
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 1

INDIVIDUAL WORK TASK DATA ELEMENTS

Sheet 6 of 9

There is a separate data sheet for each individual work task.

1. WORK TASK DESIGNATION NUMBER 7 (Keyed Note)
2. LOCATION OF WORK TASK See Plan Sheet H-101
3. BRIEF DESCRIPTION OF MATERIAL TO BE ABATED: 9"x9" Floor Tile
 - a. Type of Asbestos: Chrysotile
 - b. Percent asbestos content: 5% in Tile and 3% in Mastic
4. ABATEMENT TECHNIQUE TO BE USED See Detail Work Sheets
5. OSHA ASBESTOS CLASS DESIGNATION FOR WORK TASK Class II
6. EPA NESHAP FRIABILITY DESIGNATION FOR WORK TASK
Non-friable Category I
7. FORM: IA and CONDITION OF ACM: FAIR
8. QUANTITY: METERS , SQUARE METERS
- 8a. QUANTITY: LINEAR FT. , SQUARE FT. 791
9. RESPONSE ACTION DETAIL SHEET NUMBER FOR WORK TASK 57
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 1

INDIVIDUAL WORK TASK DATA ELEMENTS

Sheet 7 of 9

There is a separate data sheet for each individual work task.

1. WORK TASK DESIGNATION NUMBER 8 (Keyed Note)
2. LOCATION OF WORK TASK See Plan Sheet H-101
3. BRIEF DESCRIPTION OF MATERIAL TO BE ABATED: 12"x12" Floor Tile
 - a. Type of Asbestos: Chrysotile
 - b. Percent asbestos content: 5% in Tile and ND in Mastic
4. ABATEMENT TECHNIQUE TO BE USED See Detail Work Sheets
5. OSHA ASBESTOS CLASS DESIGNATION FOR WORK TASK Class II
6. EPA NESHAP FRIABILITY DESIGNATION FOR WORK TASK:
Non-friable Category I
7. FORM: IA and CONDITION OF ACM: FAIR
8. QUANTITY: METERS , SQUARE METERS
- 8a. QUANTITY: LINEAR FT. , SQUARE FT. 22
9. RESPONSE ACTION DETAIL SHEET NUMBER FOR WORK TASK 58
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 1

INDIVIDUAL WORK TASK DATA ELEMENTS

Sheet 8 of 9

There is a separate data sheet for each individual work task.

1. WORK TASK DESIGNATION NUMBER 9 (Keyed Note)
2. LOCATION OF WORK TASK See Plan Sheet H-101
3. BRIEF DESCRIPTION OF MATERIAL TO BE ABATED: 12"x12" Floor Tile
 - a. Type of Asbestos: Chrysotile
 - b. Percent asbestos content: 5% in Tile and 2% in Mastic
4. ABATEMENT TECHNIQUE TO BE USED See Detail Work Sheets
5. OSHA ASBESTOS CLASS DESIGNATION FOR WORK TASK Class II
6. EPA NESHAP FRIABILITY DESIGNATION FOR WORK TASK
Non-friable Category I
7. FORM: IA and CONDITION OF ACM: FAIR
8. QUANTITY: METERS , SQUARE METERS
- 8a. QUANTITY: LINEAR FT. , SQUARE FT. 77
9. RESPONSE ACTION DETAIL SHEET NUMBER FOR WORK TASK 57
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 1

INDIVIDUAL WORK TASK DATA ELEMENTS

Sheet 9 of 9

There is a separate data sheet for each individual work task.

1. WORK TASK DESIGNATION NUMBER 1 (General Note)
2. LOCATION OF WORK TASK See Plan Sheet H-101
3. BRIEF DESCRIPTION OF MATERIAL TO BE ABATED: White Roofing
Felt Around the Base of the Air Handler Room on the Roof
 - a. Type of Asbestos: Chrysotile
 - b. Percent asbestos content: 5%
4. ABATEMENT TECHNIQUE TO BE USED See Detail Work Sheets
5. OSHA ASBESTOS CLASS DESIGNATION FOR WORK TASK Class II
6. EPA NESHAP FRIABILITY DESIGNATION FOR WORK TASK
Non-friable Category I
7. FORM: IA and CONDITION OF ACM: FAIR
8. QUANTITY: METERS , SQUARE METERS
- 8a. QUANTITY: LINEAR FT. , SQUARE FT. 77
9. RESPONSE ACTION DETAIL SHEET NUMBER FOR WORK TASK 75
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	3850	2-16
Each Room in 1 Abatement Area Less than 140 Square meters		0.45 microns	3850	2-16
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.

TABLE 4

EPA AHERA METHOD: TEM AIR SAMPLING PROTOCOL

Location Sampled	Minimum No. of Samples	Filter Pore Size	Min. Vol. (Liters)	Sampling Rate (liters/min.)
Inside Abatement Area	5	0.45 microns	1500	2-16
Outside Abatement Area	5	0.45 microns	1500	2-16
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. The detection limit for TEM analysis is 70 structures/square mm.

CERTIFICATE OF WORKER'S ACKNOWLEDGMENT

PROJECT NAME _____ CONTRACT NO. _____
PROJECT ADDRESS _____
CONTRACTOR FIRM NAME _____
EMPLOYEE'S NAME _____, _____, _____
(Print) (Last) (First) (MI)

Social Security Number: _____ - _____ - _____, _____ (Optional)

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 1926.1101(k)(9)(viii), in addition to the specific work practices and engineering controls of 29 CFR 1926.1101(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 1926.1101(k)(9)(viii), in addition to the specific work practices and engineering controls at 29 CFR 1926.1101, and hands-on training.

CERTIFICATE OF WORKER'S ACKNOWLEDGMENT

_____ (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 1926.1101(k)(9)(viii), in addition to the specific work practices and engineering controls at 29 CFR 1926.1101(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.

EPA/STATE CERTIFICATION/LICENSE

I have an EPA/STATE certification/license as:
Building Inspector/Management Planner; Certification # _____
Contractor/Supervisor, Certification # _____
Project Designer, Certification # _____
Worker, Certification # _____

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.

CERTIFICATE OF WORKER'S ACKNOWLEDGMENT

Date of the medical examination _____

Employee Signature _____ date _____

Contractor's Industrial

Hygienist Signature _____ date _____

-- End of Section --