SPECIFICATIONS

for

Asbestos and Hazardous Materials Abatement

at

The City of St. Marys, Ohio Power Plant 335 North Chestnut Street St. Marys, Auglaize County, Ohio 45885

for

The City of St. Marys, Ohio 101 East Spring Street St. Marys, Ohio 45885

Prepared By

Allied Environmental Services, Inc. Attention: Steven D. Carr, P.E. 1867 South Dixie Highway Lima, OH 45804 Telephone: 419-227-4004; Facsimile: 419-229-4106

NOTICE TO CONTRACTOR

Public Notice is hereby given that the City of St. Marys, Ohio, will receive sealed bids for the City of St. Marys Former Power Plant Asbestos Abatement Project until twelve o'clock noon local time, July 25, 2013, in the Municipal Building, 101 E. Spring Street, St. Marys, Ohio 45885.

Contract Documents may be obtained from Allied Environmental, 1867 S Dixie Hwy, Lima OH 45804; Tel: 419-227-4004; Fax: 419-229-4106 and can be accessed at no charge at the following link: <u>http://www.allied-environmental.com/project-specs</u>. Note: prospective contractors must follow the directions on the webpage when obtaining specifications at the website link; contractors must register by clicking on the "How Can We Help" in order to receive addenda, etc. Contract Documents may also be reviewed without charge during business hours at the plan rooms listed in the Solicitation.

Each bidder is required to furnish with their proposal, a Bid Guaranty and Contract Bond in accordance with Section 153.54 of the Ohio Revised Code. Bid security furnished in Bond form, shall be issued by a Surety Company or corporation licensed in the State of Ohio to provide said surety.

Each proposal must contain the full name of the party or parties submitting the proposal and all persons interested therein. Each bidder must submit evidence on projects of similar size and complexity, and a complete listing of all subcontractors to be used. The owner intends and requires that this project be completed no later than November 1, 2013. See bid specifications for specific completion dates for various sections of the project.

All contractors and subcontractors involved with the project will, to the extent practicable, use Ohio products, materials, services, and labor in the implementation of their project. Additionally, contractor compliance with the equal employment opportunity requirements of Ohio Administrative Code Chapter 123, the Governor's Executive Order of 1972, and Governor's Executive Order 84-9 shall be required.

Bidders must comply with the Prevailing Wage Rates on Public Improvements in Auglaize County and the City of St. Marys, Ohio, as determined by the Ohio Bureau of Employment Services, Wage and Hour Division.

No bidder shall be permitted to withdraw his bid for a period of thirty (30) days after the time of opening of bids.

All bids are to be on a form furnished by the City Engineer and submitted in a sealed envelope with the name of the bidder and the project noted plainly on the outside.

The City of	H Marvs	Ohio rese	rves the right	to waive an	v irregularitie	es and to re	eject any	or all bids.
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Gregory J. Foxhoven

Director of Public Service and Safety

PUBLISH: July 10, 2013 July 17, 2013

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INSTRUCTION TO BIDDERS

The City of St. Marys, Ohio is requesting bids for the removal of asbestos containing materials (ACM) from the City of St. Marys, Ohio Power Plant Facility. To be considered, bids must be made in accordance with these instructions to bidders.

The Summary of the Work, Section 01010, highlights the materials to be removed as well as the locations and approximate quantities. The Contractor is responsible to verifying all quantities.

1. DOCUMENTS

Contract Documents may be obtained from Allied Environmental, 1867 S Dixie Hwy, Lima OH 45804; Tel: 419-227-4004; Fax: 419-229-4106 and can be accessed at no charge at the following link: <u>http://www.allied-environmental.com/project-specs</u>. Note: prospective contractors must follow the directions on the webpage when obtaining specifications at the website link; contractors must register by clicking on the "How Can We Help" in order to receive addenda, etc. Contract Documents may also be reviewed without charge during business hours at the plan rooms listed in the Solicitation.

2. EXAMINATION

Bidders shall carefully examine all documents and the site to obtain first-hand knowledge of existing conditions. Contractors will not be given additional payment for conditions that can be determined by examining the site and documents.

3. QUESTIONS

Submit all questions in writing concerning the specifications to the Owner's Consultant. If a question should identify a warranted revision to the Specifications or other documents, then a reply will be issued by the Owner's Consultant in writing to all prime bidders by Addendum to the Specifications and will become part of the Contract.

4. SUBSTITUTIONS

- a. It is not the intent of these Specifications to exclude the use of any meritorious product of equal value and bidders are invited to submit with their bids, alternates, or other makes of material and apparatus acceptable to the Owner.
- b. Wherever the term "approved, approved equal, equal to, similar to, or equivalent" are used in these specifications, the bidder shall make written application for the approval of other material or apparatus he prefers to use.
- c. Substitutions and alterations for materials and apparatus other than those shown and specified must be submitted on the bidder's stationary at the time of the bidding. However, to insure consideration of any proposed substitution, the amount to be added to or deducted from the bid price must be stated in each case.
- d. Substitutions will not affect the determining of the "responsive and responsible bid".

5. BASIS OF BIDS

The bidder shall include all stipulated items shown on the Bid Forms; failure to comply may be cause for rejection. No segregated bids or assignments will be considered.

6. SUBMITTALS REQUIRED WITH BID FORM

a. Certificate of Insurance as follows:

The Contractor shall not commence work under this contract until he has obtained all insurance required herein and such insurance has been approved by the Owner, nor shall the Contractor allow any subcontractor to commence work on his subcontract until all similar insurance required coverage of the subcontractor has been so obtained and approved.

<u>Compensation Insurance.</u> The Contractor shall take out and maintain during the life of this contract, Workmen's Compensation Insurance for all of his employees employed at the site of the project and, in case any work is sublet, the Contractor shall require the subcontractor similarly to provide Workmen's Compensation Insurance for all the latter's employees unless such employees are covered by the protection afforded by the Contractor.

Comprehensive Liability Insurance. Indemnification: The contractor shall fully indemnify and save and hold the City free and harmless from and against any and all claims, damages, losses, liability, and judgments for personal injuries (including death) and property damage, whether occurring to the persons or properties of the Contractor, his agents or employees, or of subcontractors, if any, or their agents or employees, or any other persons, including the city, arising out of or in connection with the work called for by the contract, or occurring by reason of, or resulting from or occasioned or caused in whole or in part by, any act or omission of the Contractor, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, or (as to personal injuries, including death, to the Contractor or his employees, or subcontractors or their employees) of the City or its agents or employees or of any other person (s), whether in the execution or in the guarding of the work or otherwise, and free and harmless from and against all claims for payments of Workmen's Compensation premiums (other than the City's) including the defending of any and all litigation with regard to any of the claims referred to anywhere above in this paragraph. In any and all claims against the City or any of his agents or employees by any employee of the Contractor, any subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the indemnification obligation under the next preceding paragraphs shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the Contractor or any subcontractor under Workmen's Compensation acts, disability benefit acts, or other employee benefit acts.

Liability Insurance. The Contractor shall maintain such insurance as will protect him from claims under Workmen's Compensation acts and from any claims for damages for personal injury, including death, which may arise from operations under this contract, whether such operations be by himself or by any subcontractor or anyone directly or indirectly employed by either of them. The Contractor shall provide original certificate of insurance naming The City of St. Marys, Ohio and Allied Environmental Services, Inc. as additional insureds and containing the following language:

"Contractual liability insurance is included for both written and oral contracts. Additional insureds

is provided in favor of the certificate holder on all policies as required by the contract, but limited to the operations of the named insureds."

The Contractor shall secure and maintain insurance of and in the following types and amounts.

(i) **Comprehensive Liability.** (to also include contractual protection covering the liability assumed by the contractor under the terms of this article.)

Each occurrence	\$2,000,000
Aggregate	\$4,000,000

(ii) **Pollution Liability**

Each occurrence	\$2,000,000
Aggregate	\$4,000,000

(iii) **Automobile Liability.** (To include coverage of vehicles hired by the Contractor, and vehicles owned by the Contractor's employees and used in his business, as well as those owned by the Contractor.)

Personal Injury - each person	\$1,000,000		
- each accident	\$1,000,000		
Property Damage - each accident	\$1,000,000		

The bidder's financial ability to complete the contract successfully and on time without resort to its surety.

Ohio Department of Health Asbestos Abatement Contractor's Licenses.

Bid Guarantee. Each bidder shall in accordance with Section 153.54 of the Revised Code of Ohio, submit with his bid a bid guarantee in the form of either:

A bond conditioned to provide that, if the bid is accepted, the bidder will, after the awarding of the contract, enter into a proper contract in accordance with the bid, plans, details, and specifications. The bond shall be for the full amount of the bid and be in the form as require in Section 153.571 of the Revised Code of Ohio.

A certified check, cashier's check, or letter of credit pursuant to Chapter 1305 of the Revised Code of Ohio to provide that if the bid is accepted the bidder will, after the awarding of the contract, enter into a proper contract in accordance with the bid, plans, details and specifications. The certified check, cashier's check or letter of credit shall be equal to ten (10) percent of the bid.

Bid guarantee procedures shall be in accordance with Section 153.54 of the Ohio Revised Code.

Documentation of five (5) previous projects similar in scope and size, including name of the project, address of the project, Contract name of the Owner, telephone number of the Owner, project dates and the type of project.

Affidavit of Contractor and/or supplier of non-delinquency for property taxes in Auglaize County, Ohio. A licensed Notary Public must notarize affidavit.

Each Bidder shall provide a list of issuance's and citations within the last ten years by regulatory agencies including but not limited to the EPA, OEPA, ODH, OSHA, or comparable state agencies.

7. ADDITIONAL REQUIREMENTS

Terms. Each insurance contract required by the article shall contain a <u>thirty-day cancellation</u> clause, and shall bear and endorsement committing the insurer to give thirty days written notice of any cancellation or restrictive amendment to the Owner.

Certificates. Copies of certificates of such compliance and insurance shall be filed by the contractor with the City prior to initiation of any work at the site, and shall be subject to review.

Subcontractors. The contractor shall require all subcontractors to comply with the same laws and to secure and maintain the same types, terms and amounts of insurance as required of the contractor by this article, excepting only contractual insurance protection covering such indemnification or hold harmless liability or obligations as such subcontractors may assume toward the contractor and the contractor shall file.

Wage Scale and Labor. The minimum wage to be paid to all labor employed on this contract shall be in accordance with the Schedule of Prevailing Hourly Wage Rates Ascertained and Determined by the Ohio Bureau of Employment Services, Wage and Hour Division applicable to Auglaize County, a copy of which is attached and made a part of this contract.

8. BIDS

Bids shall be made on unaltered Bid Forms furnished by the Owner's Consultant. **Fill in all blank spaces**. Bids shall be signed with name typed below the signature. Where bidder is a corporation, bids must be signed with the legal name of the corporation followed by the name of the State of Incorporation and the legal signature of an office authorized to bind the corporation to a contract.

Bids shall not be modified after submittal. Bidders may withdraw bids at any time prior to the bid opening, but may not resubmit them. No bid may be withdrawn or modified after the bid opening except when the award of the Contract has been delayed for 60 days.

Bids shall be submitted by the Bidders and shall be enclosed in an opaque sealed envelope, marked with the Project title and the name and address of the Bidder and accompanied by the Bid Security and other required documents. Bid guarantee, contract bonds, checks or money orders shall be made payable to the City of St. Marys, Ohio, St. Marys, Ohio. If the bid is sent through the Postal system or other delivery service, the sealed envelope shall be enclosed in a separate envelope with the notation "BID ENCLOSED" on the face of it.

The Owner reserves the right to disqualify bids, before or after opening, upon evidence of collusion with intent to defraud or other illegal practices upon the part of the bidder or for other reasons for which the Owner deems in his best interest.

Bids will be opened and read aloud at the time specified below. Any bids received after this time and date will be returned unopened.

BIDS DUE: July 25, 2013 at 12:00 p.m. EDT

Official award of the contract is to be determined following review of all required submittals. Contractors should be prepared to initiate work and file appropriate notifications upon verbal award to expedite the work process.

The Bidders shall make all necessary measurements to determine bid price and to properly execute the work. Quantifications appearing in the specifications are approximate and must be verified by the Bidder.

9. **OPENING OF BIDS**

Bids will be opened and (unless obviously non-responsive) read aloud publicly. An abstract of the amounts of the base Bids and major alternates (if any) may be made available to Bidders after the opening of the Bids.

10. CONTRACT AWARD

Owner reserves the right to reject any and all Bids, to waive any and all informalities and irregularities. In the event of mathematical calculation errors that are evident on the face of the Bid Form, the Bid will be corrected utilizing the Unit Price as the governing value in determination of the corrected extension.

Subject to the right of the Owner to reject any and all Bids, the Owner will award a Contract for the work to the Bidder submitting the lowest responsible Bid. In determining which Bid is the lowest responsible Bid, the Owner may take into consideration not only the amount of the Bid but such of the stated criteria as in its discretion is deemed appropriate.

If the Contract is to be awarded, Owner will give the Successful Bidder a Notice of Award within fifteen days after the day of the Bid opening.

11. PROJECT SCHEDULE

Work shall commence on August 5, 2013, with a projected time frame for completion of 64 workdays (approximately 13 weeks). Work shall be performed during normal work hours between 7:00 a.m. and 5:00 p.m., five days per week (Monday through Friday), except during emergencies or as authorized by the Consultant. Workdays shall not exceed 10 hours per day. All work, final clearance sampling and demobilization must be completed by November 1, 2013.

Failure to complete the work in accordance with the above will result in the contractor being liable for liquidated damages payable to the City. Liquidated damages in the amount of One Thousand and 00/100 Dollars (\$1,000.00) shall be charged for each calendar day beyond the completion date. An extension of time may be granted if, in the opinion of the Consultant, additional work is identified that was not previously revealed during the inspection of the site. Such extensions of time shall be

requested in writing to the Director of Public Service and Safety and the Consultant within ten (10) days after the delay.

12. MANDATORY PRE-BID MEETING

Mandatory Pre-Bid Meeting is scheduled as follows:

DATE: July 18, 2013

LOCATION: Power Plant Facility City of St. Marys, Ohio St. Marys, Ohio 45885

TIME: 9:00 a.m. EDT

OHIO REVISED CODE - SECTION 153.54

(A) Each person bidding for a contract with the state or any political subdivision district, institution, or other agency thereof, excluding therefrom the Department of Transportation, for the construction, demolition, alteration, repair, or reconstruction of any public improvement is required to file with his bid and bid guaranty in the form of either;

(1) A bond in accordance with Division (B) of this section for the full amount of this bid;

(2) A certified check, cashier's check, or letter of credit pursuant to Chapter 1305 of the Revised Code, in accordance with Division (C) of this section. Any such letter of credit shall be revocable only at the option of the beneficiary state, political subdivision, district, institution, or agency. The amount of the certified check, cashier's check, or letter of credit shall be equal to ten per cent of the bid.

(B) A bid guaranty filed pursuant to Division (A) (1) of this section shall be conditioned to:

(1) Provide that, if the bid is accepted, the bidder will, after the awarding or the recommendation for the award of the contract, whichever the contracting authority designates, enter into a proper contract in accordance with the bid, plans, details, specifications, and bills of material. If for any reason, other than as authorized by Section 9.31 of the Revised Code or Division (G) of this section, the bidder fails to enter into the contract, and the contracting authority awards the contract to the next lowest bidder, the bidder and the surety on his bond shall be liable to the state, political subdivision, district, institution, or agency for the difference between his bid and that of the next lowest bidder but resubmits the project for bidding, the bidder failing to enter into the contract and the surety on his bond shall, except as provided in Division (G) of this section, be liable to the state, political subdivision, district, institution, or agency for a penal sum not to exceed ten per cent of the amount of the bid or the costs in connection with the re-submission of printing new contract documents, required advertising, and printing and mailing notices to prospective bidders, whichever is less.

(2) Indemnify the state, political subdivision, district, institution, or agency against all damage suffered by failure to perform the contract according to its provisions and in accordance with the plans, details, specifications, and bills of material therefore and to pay all lawful claims of subcontractor, material men, and laborers for labor performed or material furnished in carrying forward, performing, or completing the contract; and agree and assent that this undertaking shall be for the benefit of any subcontractor, material man, or laborer having a just claim, as well as for the state, political subdivision, district, institution, or agency.

(C) A bid guaranty filed pursuant to Division (A) (2) of this section shall be conditioned to provide that if the bid is accepted, the bidder will, after the awarding or the recommendation for the award of the contract, whichever the contracting authority designates, enter into a proper contract in accordance with the bid, plans, details, specifications, and bills of material. If for any reason, other than as authorized by Section 9.31 of the Revised Code or Division (G) of this section, the bidder fails to enter into the contract, and the contracting authority awards the contract to the next lowest bidder, the bidder shall be liable to the state, political subdivision, district, institution, or agency for a penal sum not to exceed ten per cent of the amount of the bid or the costs in connection with the re-submission, of printing new contract documents, required advertising, and printing and mailing

notices to prospective bidders, whichever is less.

If the bidder enters into the contract the bidder shall, at the time he enters into the contract, file a bond for the amount of the contract to indemnify the state, political subdivision, district, institution, or agency against all damage suffered by failure to perform the contract according to its provisions and in accordance with the plans, details, specifications and bills of material therefore and to pay all lawful claims of subcontractors, material men, and labor performed or material furnished in carrying forward, performing, or completing the contract; and agree and assent that this undertaking shall be for the benefit of any subcontractor, material man, or laborer having a just claim, as well as for the state, political subdivision, district, institution, or agency.

(D) Where the state, political subdivision, district, institution, or agency accepts a bid but the bidder fails or refuses to enter into a proper contract in accordance with the bid, plans, details, specifications, and bills of material within ten days after awarding of the contract, the bidder and surety on any bond shall, except as provided in Division (G) of this section, be liable for the amount of the difference between his bid and that of the next lowest bidder, but not in excess of the liability specified in Division (B) (1) or (C) of this section. Where the state, political subdivision, district, institution, or agency then awards the bid to such next lowest bidder and such next lowest bidder also fails or refuses to enter into a proper contract in accordance with the bid, plans, details, specifications, and bills of material within ten days after the awarding of the contract, the liability of such next lowest bidder shall, except as provided in Division (G) of this section, be the amount of the difference between the bids of such next lowest bidder and the third lowest bidder, but not in excess of the liability specified in Division (B) (i) or (C) of this section. Liability on account of an award to any lowest bidder beyond the third lowest bidder shall be determined in like manner.

(E) Notwithstanding Division (C) of this section, where the state, political subdivision, district, institution, or agency resubmits the project forbidding each bidder whose bid was accepted but who failed or refused to enter into a proper contract shall, except as provided in Division (G) of this section, be liable for an equal share of a penal sum in connection with the re-submission, of printing new contract documents, required advertising, and printing and mailing notices to prospective bidders, but no bidder's liability shall exceed the amount of his guaranty.

(F) All bid guaranties filed pursuant to this section shall be payable to the state, political subdivision, district, institution, or agency, shall be for the benefit of the state, political subdivision, district, institution, or agency or any person having a right of action thereon, and shall be deposited with, and held by, the board, officer, or agency contracting on behalf of the state, political subdivision, district, institution, or agency. All bonds filed pursuant to this section shall be issued by a surety company authorized to do business in contract on behalf of the state, political subdivision, district, institution, or agency.

(G) A bidder for a contract with the state or any political subdivision, district, institution, or other agency thereof, excluding therefrom the Ohio Department of Transportation, for the construction, demolition, alteration, repair, or reconstruction of a public improvement costing less than one-half million dollars may withdraw his bond from consideration if his bond for some other contract with the state or any political subdivision, district, institution, or other agency thereof, excluding therefrom the Department of Transportation, for the construction, demolition, alteration, repair, or reconstruction of a public improvement costing less than one-half million dollars has already been accepted, if he certifies in good faith that the total amount of all his current contracts is less than one-half million dollars, and if the surety certifies in good faith that the bidder is unable to perform

the subsequent contract because to do so would exceed the bidder's bonding capacity. If a bid is withdrawn under authority of this division, the contracting authority may award the contract to the next lowest bidder or reject all bids and resubmit the project for bidding, and neither the bidder not the surety on his bond shall be liable for the difference between his bid and that of the next lowest bidder, for a penal sum, or for the costs of printing new contract documents, required advertising, and printing and mailing notices to prospective bidders.

(H) Bid guaranties filed pursuant to Division (A) of this section shall be returned to all unsuccessful bidders immediately after the contract is executed. The bid guaranty filed pursuant to Division (A) (2) of this section shall be returned to the successful bidder upon filing of the bond required in Division (C) of this section.

OHIO REVISED CODE - SECTION 153.571

The bond provided for in Division (B) of Section 153.54 of the Revised Code shall be in substantially the following form, and recovery of any claimant there under shall be subject to Sections 153.01 and 153.60 of the Revised Code, to the same extent as if the provisions of such sections were fully incorporated in said bond form:

"KNOW	ALL	MEN	BY	THESE	PR	ESE	NTS	, that	we	e, t	he i	undersi	gned		
	, as]	principa	al, and_										, 8	as sure	eties, are
hereby he	ld and	firmly b	oound u	unto										_as ol	bligee in
the penal	sum	of the	dollar	amount	of	the	bid	submit	ted	by	the	princip	al to	the	obligee
on									to	uno	lerta	ke the	pr	oject	known
96															

_____. The penal sum referred to herein shall be the dollar amount of the principal's bid to the obligee, incorporating any additive or deductive alternate proposals made by the principal on the date referred to above to the obligee, which are accepted by the obligee. In no case shall the penal sum exceed the amount of _______ Dollars. (If the foregoing blank is not filled in, the penal sum will be the full amount of the principal's bid, including alternates. Alternatively, if the blank is filled in, the amount stated must not be less than the full amount of the bid including alternates in dollars and cents. A percentage is not acceptable.) For the payment of the penal sum well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors, and assigns.

Signed this _____ day of ______, 2011.

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH, that whereas the above named principal has submitted a bid for______.

Now, therefore, if the obligee accepts the bid of the principal and the principal fails to enter into a proper contract in accordance with the bid, plans, details, specifications, and bills of materials; and in the event the principal pays to the obligee the difference not to exceed ten per cent of the penalty hereof between the amount specified in the bid and such larger amount for which the obligee may in good faith contract with the next lowest bidder to perform the work covered by the bid; or in the event the obligee does not award the contract to the next lowest bidder and resubmits the project for bidding, the principal pays to the obligee the difference not to exceed ten per cent of the penalty hereof between the amount specified in the bid, or the costs, in connection with the re-submission, of printing new contract documents, required advertising, and printing and mailing notices to remain in full force and effect; if the obligee accepts the bid of the principal and the principal within ten days after awarding of the contract enters into a proper contract in accordance with the bid, plans, details, specifications, and bills of material, which said contract is made a part of this bond the same as though set forth herein;

Now also, if the said	_shall well and faithfully do
and perform the things agreed by	to be done and
performed according to the terms of said contract; and shall pay all lawf	ful claims of subcontractors,
material men, and laborers, for labor performed and materials furnish	ed in the carrying forward,
performing, or completing of said contract; we agreeing and assenting the	hat this undertaking shall be
for the benefit of any material man or laborer having a just claim, as we	ell as for the obligee herein;
then this obligation shall be void; otherwise the same shall remain in fu	ull force and effect; it being
expressly understood and agreed that the liability of the surety for any an	nd all claims hereunder shall
in no event exceed the penal amount of this obligation as herein stated	

The said surety hereby stipulates and agrees that no modifications, omissions, or additions, in or to the terms of the said contract or in or to the plans or specifications therefore shall in any wise affect the obligations of said surety on its bond."

SIGNED ANI	D SEALED This day of	, 2011.	
PRINCIPAL:			
BY:			
TITLE:			
SURETY:			
SURETY CO	MPANY ADDRESS:		
BY:			
SURETY AG	ENT'S NAME AND ADDRESS:		
NOTE: of bid.	Failure by any party to sign Bid Gua	ranty and Contract Bond	shall result in rejection

BID BOND AND CONTRACT PERFORMANCE BOND

BID FORM

Project Name: Asbestos Hazard Abatement and Related Work City of St. Marys, Ohio Power Plant Facility City of St. Marys, Ohio

Location of Project & County: 335 North Chestnut Street St. Marys, Ohio 45885 Auglaize County

CONTRACTOR: _____

Having read and examined the Contract Documents, including without limitation the Drawings and Specifications, prepared by the Architect for the above-referenced Project, and the following Addenda:

Addendum Number	Date of Receipt			

The undersigned Bidder proposes to perform all Work for the applicable Contract(s), in accordance with the Contract Documents, for the following sum(s):

ITEM 1. BASE BID – ASBESTOS HAZARD ABATEMENT AND RELATED WORK: CITY OF ST. MARYS, OHIO POWER PLANT FACILITY

<u>ALLOWANCES</u> (Include Allowance amount in the Base Bid below. The Contractor's Fee and costs for additional labor, equipment, materials and other expenses contemplated for the Allowances are included in the Base Bid and not in the Allowance.)

Description

Amount

Abatement Contingency

\$25,000.00

<u>UNIT PRICES</u> (Include the Unit Price extensions in the Base Bid below. Unit prices shall be used solely for the purpose of determining the adjustment to the Contract Sum for differences between the estimated quantities on the Bid Form and the actual quantities provided. The Contractor's Fee on account of Unit Price Work is included in the Base Bid and not in the Unit Price.)

Mobilization (for work performed when not on site)	\$/each
Removal of asbestos-containing lab tabletops	\$/each
Removal of asbestos-containing pipe insulation-Glovebag	\$/lf
Removal of asbestos-containing pipe insulation-Wrap & Cut	\$/lf
Removal of asbestos-containing cement pipe fittings	\$/each
Removal of asbestos-containing acoustical ceiling plaster	\$/sf
Removal of asbestos-containing hard plaster systems	\$/sf
Removal of asbestos-containing mechanical insulation from breeching, tanks, etc.	\$/sf
Removal of suspended asbestos-containing acoustical ceiling panel systems	\$/sf
Removal of asbestos-containing floor tile & mastic adhesive	\$/sf
Removal of asbestos transite cement board	\$/sf
Removal of asbestos-containing fire doors	\$each
Decontamination of asbestos-containing debris from crawlspaces	\$/sf
Decontamination of asbestos-containing pipe chases	\$/sf
Removal of sinks with asbestos-containing mastic coating	\$/each
Removal of asbestos-containing flexible duct connectors	\$/each
Removal of asbestos-containing transite metal clad windows	\$/each
Removal of asbestos-containing media/chalk boards and adhesive	\$/each
Removal of asbestos-containing duct cement	\$/sf
Removal of asbestos-containing window caulk/glazing	\$/lf
Removal of asbestos-containing light insulating paper	\$/each

BASE BID (Including Allowances):

ALL LABOR, EQUIPMENT, MATERIALS and DISPOSAL, for the sum of:

\$_____

Sum in words: _____

BIDDER'S CERTIFICATION

The bidder hereby acknowledges the following:

The bidder has read and understands the technical specifications and agrees to comply with all requirements set forth therein.

The bidder represents that the bid is based on the standards specified in the technical specification and all applicable local, state, and federal regulations.

The bidder has attended the mandatory bid meeting and has become familiar with the project site, local conditions, and has correlated personal observations about the requirements set forth.

The bidder understands that the award of this project will require coordination with other general and specific crafts associated, and on the project site, that may require interface, disruption, hindrance or delay in the progress of the specified work.

The bidder certifies that upon award of the contract, the Contractor will make good faith efforts to ensure the Contractors employee's will not, while working on the project site, posses, purchase, use, or transfer illegal drugs or alcohol or abuse prescription drugs in any way.

The bidder agrees to furnish any information requested by the Owner or Owner's Consultant to evaluate the responsibility of the bidder.

The bidder agrees to furnish all required submittals required herein for execution of the contract, within 10 days of the Notice of Intent to Award.

If the bidder is a corporation, partnership, or sole proprietorship, an officer, partner, or principal of the bidder, as applicable, shall print or type the legal name of the bidder on the line provided and sign the Bid Form. If the bidder is a joint venture, an officer, partner, or principle, as applicable, of each member of the joint venture shall print or type the legal name of the bidder on the line provided and sign the Bid Form. All signatures must be original.

ITEM 2. ALLOWANCES

RELATED DOCUMENTS

Drawings and General Provisions of Contract, including General and Special Conditions and other Division 1 Specification Sections, apply to Work of this Section.

SUMMARY

Types of allowances include the following: Lump sum allowances.

Designate in Schedule of Values separate item for cost allowances for Work.

LUMP SUM ALLOWANCES

Include the following allowance amounts in Base Bid for inclusion in the Contract Sum: Allowance for those items and Work hidden, undetectable, or unforeseen and not visible from pre-bid, onsite observation, or not shown, called for, or reasonably implied in the Contract Documents. \$25,000

Provide Work under allowance only as directed by Allied Environmental and Owner.

Amount of Allowance includes: Net cost of product. Delivery to the site. Applicable taxes. Handling at site including unloading, uncrating, and storage. Protection from elements, from damage. Labor, installation, and finishing. Other expenses (e.g., testing, adjusting, and balancing) required to complete installation. A fixed percentage for overhead and profit. Overhead shall include supervision; superintendence; wages of time keepers, watchmen, and clerks; hand tools, general office expense; and other expenses not included in "cost" under 1. through 7. above.

ADJUSTMENT OF ALLOWANCES

Unused amounts of monies included under allowances shall be credited to the Owner by deduct Change Order prior to approval of Final Application for Payment.

END OF SECTION

NOTICE OF AWARD

To:

PROJECT Description:

The OWNER has considered the BID submitted by you on _____, 20___, for the above described WORK in response to its Advertisement for BIDS and Information for BIDDERS.

You are hereby notified that your BID has been accepted for items in the amount of \$.

You are required by the Information for BIDDERS to execute the Agreement and furnish the required CONTRACTOR'S Contract BOND, if applicable, and Certificates of Insurance within 10 calendar days from the date of this notice to you.

If you fail to execute said Agreement and to furnish said BOND within 10 days from the date of this notice, said OWNER will be entitled to consider all of your rights arising out of the OWNER'S acceptance of your BID as abandoned and as a forfeiture of your BID guaranty subject to the liabilities set forth in Section 153.54 of the Ohio Revised Code. The OWNER will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of this NOTICE OF AWARD to the OWNER.

Dated this _____ day of _____, 20___.

<u>City of St. Marys, Ohio</u> Owner

By:_____

ACCEPTANCE OF NOTICE:

Receipt	of the above NO	TICE OF AWARD is hereby acknowledged by _	
on this	day of	, 20	

By:

Name and Title:

NOTICE TO PROCEED

То:	Date:
PROJECT Description:	
You are hereby notified to commence WORK in a	ccordance with the Agreement dated
, 20 on or before	, 20, and you are to complete the
WORK within sixty (60) consecutive calendar day	vs thereafter. The date of completion of all WORK is
therefore, 20	
	Owner
	By: Name:
	Title: Director of Public Service and Safety
ACCEPTANCE OF NOTICE	
Receipt of the above NOTICE TO PROCEED is hereby acknowledged by, 20	
By:	
Name:	
Title:	

NOTICE OF COMMENCEMENT OF A PUBLIC IMPROVEMENT PURSUANT TO REVISED CODE §1311.252

State of Ohio) County of Auglaiz) ss: e)		
	(the '	'Affiant''), being first duly swo	orn, says that:
1. Affiant is the D (the "Public Author		nd Safety of the City of St. Mar	rys, 101 E. Spring Street, St. Marys, Ohio 45885
2. The Public Aut	thority will be commencin	g a public improvement identi	fied as follows:
3. The following	lists the name, address and	trade of each of the principal c	contractors working on this public improvement:
NAME	ADDRESS	TRADE	DATE OF FIRST EXECUTED CONTRACT FOR THE PUBLIC IMPROVEMENT
-	lists the names and addres	ses of the sureties for all of the	ose principal contractors:
PRINCIPAL CONTRACTOR	NAME	E OF SURETY	ADDRESS OF SURETY

5. For the purpose of serving an affidavit pursuant to Revised Code §1311.26, service may be made upon the following representative of the Public Authority: _______, Director of Public Service and Safety, 101 E. Spring Street, St. Marys, Ohio 45885.

FURTHER AFFIANT SAYETH NAUGHT

Signature

SWORN TO BEFORE ME and subscribed in my presence this _____ day of _____, 20____.

DRUG FREE WORKPLACE COMPLIANCE

THE CITY OF ST. MARYS, A POLITICAL SUBDIVISION OF THE STATE OF OHIO AND A RECIPIENT OF FEDERAL FUNDS, IS REQUIRED TO COMPLY WITH THE DRUG FREE WORKPLACE ACT OF 1988. THE CITY IS CONCERNED WITH THE EFFECTS DRUG OR ALCOHOL ABUSE CAN HAVE ON EMPLOYEES, THEIR FAMILIES, AND THE EMPLOYEE'S ABILITY TO PERFORM THEIR WORK SAFELY AND EFFICIENTLY.

BEFORE THE CITY OF ST. MARYS ENTERS INTO A CONTRACT FOR THE PURCHASE OF MATERIALS, EQUIPMENT, SUPPLIES, CONTRACTS OF INSURANCE, OR OTHER SERVICES, THE CONTRACTOR MUST AGREE TO THE FOLLOWING:

- 1. That the contractor or subcontractor employed by the City of St. Marys recognizes alcoholism and drug addiction as illnesses which are treatable, and encourages employees who may have an alcohol or drug problem to seek professional treatment or assistance on their own initiative.
- 2. That the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance by any employee of a contractor or subcontractor which takes place in whole or in part in the City's workplace is strictly prohibited and may result in criminal prosecution and discipline which may include termination of contract.
- 3. That is an employee of the contractor or subcontractor is convicted of any Federal or State criminal drug statute for a workplace related drug offense, the contractor or subcontractor shall notify the City's Director of Public Service and Safety of such within five (5) calendar days of conviction.

THE UNDERSIGNED AFFIRMS THAT THE NAMED CONTRACTOR COMPLIES WITH ALL OF THE REQUIREMENTS SET OUT ABOVE, AND THAT SUCH CONTRACTOR WILL CONTINUE TO COMPLY WITH THESE REQUIREMENTS FOR THE TERM OF THE CURRENT CONTRACT WITH THE CITY OF ST. MARYS AND FOR THE DURATION OF ALL FUTURE CONTRACTS WITH THE CITY.

Company:		
Address:		
Signature:		
Print Name:		
Date:		

STATEMENT AS TO DELINQUENT TAXES OHIO REVISED CODE 5719.042

(Contractor to submit statement as to delinquent taxes, incorporation.)

After the award by a taxing district of any contract let by competitive bid and prior to the time the contract is entered into, the person making a bid shall submit to the district=s fiscal officer a statement affirmed under oath that the person with whom the contract is to be made was not charged at the time the bid was submitted with any delinquent personal property taxes on the general tax list of personal property of any county in which the taxing district has territory or that such person was charged with delinquent personal property taxes on any such tax list, in which case the statement shall also set forth the amount of such due and unpaid delinquent taxes and any due and unpaid penalties and interest thereon. If the statement indicates that the taxpayer was charged with any such taxes, a copy of the statement shall be transmitted by the fiscal officer to the county treasurer within thirty days of the date it is submitted.

A copy of the statement shall also be incorporated into the contract, and no payment shall be made with respect to any contract to which this section applies unless such statement has been so incorporated as a part thereof.

This statement must be completed in its entirety and shall become a part of the contract hereto.

I HEREBY CERTIFY that

			(name of bidder)
	does not owe any del	linquent pers	onal property taxes in the Auglaize County Taxing District.
	does owe delinquent	taxes in the	Auglaize County Taxing District,
	in the amount of :	\$; with penalties and interest
	in the amount of :	\$	
Company:			Address:
Signature:			Print Name:
Phone:			
	: ss:		
	:		
described in and wh free and voluntary a	o executed the within and f act and deed for the uses an	foregoing ins nd purposes t	to be known to be the individual trument, and acknowledged that he/she signed the same as his/her therein mentioned.

EEOC VENDOR COMPLIANCE STATEMENT

THE CITY OF ST. MARYS, AS A POLITICAL SUBDIVISION OF THE STATE AND AS A RECIPIENT OF FEDERAL FUNDS, IS REQUIRED BY EXECUTIVE ORDER 11246 AND OHIO REVISED CODE SECTION 125.111, TO INCLUDE IN ALL CONTRACTS FOR THE PURCHASE OF MATERIALS, EQUIPMENT, SUPPLIES, CONTRACTS OF INSURANCE, OR SERVICES, A CLAUSE IN WHICH THE CONTRACTOR AGREES TO THE FOLLOWING:

- 1. That in the hiring of employees for the performance of work under the contract or subcontract, the contractor or subcontractor shall not discriminate against any citizen by reason of race, color, religion, sex, age, handicap, national origin, or ancestry;
- 2. That no contractor or subcontractor shall in any manner, discriminate against, intimidate, or retaliate against any employee hired for the performance of work under the contract on account of race, color, religion, sex, age, handicap, national origin, or ancestry.

THE UNDERSIGNED AFFIRMS THAT THE CONTRACTOR NAMED COMPLIES WITH ALL OF THE REQUIREMENTS SET OUT ABOVE, AND THAT SUCH CONTRACTOR WILL CONTINUE TO COMPLY WITH THESE REQUIREMENTS FOR THE TERM OF THE CURRENT CONTRACT WITH THE CITY OF ST. MARYS AND FOR THE DURATION OF ALL FUTURE CONTRACTS WITH THE CITY.

Company:	
Address:	
Signature:	
Print Name:	
Date:	

By accepting this contract, the contractor agrees not to discriminate against any person seeking or hired for employment (ref: R.C. 125.111)

FORM OF NON-COLLUSION AFFIDAVIT (Performance Contract)

STATE OF	:			_
				ss:

COUNTY OF :_____

being first duly sworn, deposes and says that he is _______ (Sole Owner, a Partner, President, Secretary, etc.) _______ of the party making the foregoing proposal of bid; that such bid is genuine and not collusive or sham; that said bidder has not colluded, conspired, connived, or agreed, directly or indirectly with any bidder or person, to put in a sham bid, or that such other person shall refrain from bidding, and has not in any manner, directly or indirectly sought by agreement or collusion or communication or conference, with any person, to fix the bid price of affiant or any other bidder, or to fix any overhead, profit, or cost element of said bid price, or of that of any other bidder, or to secure any advantage against the owner, or any person interested in the proposed contract; and that all statements contained in said proposal or bid are true; and further, that such bidder has not, directly or indirectly submitted this bid, or the contents thereof, or divulged information or data relative thereto to any association or to any member or agent thereof.

Affiant

Subscribed and sworn to before me this _____ day of _____, 20___.

Notary Public

Commission Expires :_____ County of Residence :_____

OPERS INDEPENDENT CONTRACTOR ACKNOWLEDGMENT

Ohio Public Employees Retirement System 277 East Town Street, Columbus, Ohio 43215-4642

NOTE TO CONTRACTOR: THIS FORM IS TO BE PROVIDED TO YOUR EMPLOYEES AT THEIR REQUEST IF AWARDED THE CONTRACT.

Employer Outreach: 1-888-400-0965 www.opers.org

This form is to be completed if you are an individual who begins providing personal services to a public employer on or after Jan. 7, 2013 but are not considered by the public employer to be a public employee and will not have contributions made to OPERS. This form must be completed not later than 30 days after you begin providing personal services to the public employer.

STEP 1: Personal Information

Social Security Number:

First Name:

MI:

MI

Last Name:

Last Name

Employer Contact Phone Number

STEP 2: Public Employment Information

Name of Public Employer

Employer Contact: First Name

Employer Code

Service Provided to Public Employer

Start Date of Service

Month Day

Year

End Date of Service Month Day Year

Day

/

STEP 3: Acknowledgment:

The public employer identified in Step 2 has identified you as an independent contractor or another classification other than a public employee. Ohio law requires that you acknowledge in writing that you have been informed that the public employer identified in Step 2 has classified you as an independent contractor or another classification other than a public employee for the services described in Step 2 and that you have been advised that contributions to OPERS will not be made on your behalf for these services.

If you disagree with the public employer's classification, you may contact OPERS to request a determination as to whether you are a public employee eligible for OPERS contributions for these services. Ohio law provides that a request for a determination must be made within five years after you. begin providing personal services to the public employer, unless you are able to demonstrate through medical records to the Board's satisfaction that at the time the five-year period ended, you were physically or mentally incapacitated and unable to request a determination.

By signing this form, you are acknowledging that the public employer for whom you are providing personal services has informed you that you have been classified as an independent contractor or another classification other than a public employee and that no contributions will be remitted to OPERS for the personal services you provide to the public employer. This acknowledgment will remain valid as long as you continue to provide the same services to the same employer with no break in service regardless of whether the initial contract period is extended by any additional agreement of the parties. You also acknowledge that you understand you have the right to request a determination of Your eligibility for OPERS membership you disagree with the public employer's classification.

This form must be retained by the public employer and a copy sent to OPERS. The public employer's failure to retain this acknowledgment may extend your right to request a determination beyond the five years referenced above.

Signature

Do not print or type name

Today's Date

Prevailing Wage Rate Skilled Crafts

Name of Union: Asbestos Local 207 OH

Change #: LCN01-2012fbLoc207OH

Craft : Asbestos Worker Effective Date : 08/29/2012 Last Posted : 08/29/2012

	BHR	Fringe Benefit Payments							cable	Total	Overtime
									nd	PWR	Rate
		H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification											
Asbestos Abatement	\$24.30	\$6.40	\$4.60	\$0.65	\$0.00	\$0.00	\$0.00	\$0.00	\$0.05	\$36.00	\$48.15
Trainee	\$15.70	\$6.40	\$1.25	\$0.65	\$0.00	\$0.00	\$0.00	\$0.00	\$0.05	\$24.05	\$31.90

Special Calculation Note :

Ratio :

2 Journeymen to 1 Trainee

Jurisdiction (* denotes special jurisdictional note) :

ADAMS, ASHLAND, ASHTABULA*, ATHENS, AUGLAIZE, BROWN, BUTLER*, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COLUMBIANA, COSHOCTON, CRAWFORD, CUYAHOGA, DARKE, DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, GEAUGA, GREENE, GUERNSEY, HAMILTON, HARDIN, HARRISON, HIGHLAND, HOCKING, HOLMES, HURON, KNOX, LAKE, LICKING, LOGAN, LORAIN, MADISON, MAHONING, MARION, MEDINA, MIAMI, MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, PERRY, PICKAWAY, PORTAGE, PREBLE, RICHLAND, ROSS,

SHELBY, STARK, SUMMIT, TRUMBULL, TUSCARAWAS, UNION, VINTON, WARREN*, WAYNE

Special Jurisdictional Note : Butler County:(townships of

Fairfield,Hanover,Liberty,Milford,Morgan,Oxford,Ripley,Ross,StClair,Union & Wayne.) (Lemon & Madison) Warren County: (townships of: Deerfield, Hamilton, Harlan, Salem, Union & Washington). (Clear Creek, Franklin, Mossie, Turtle Creek & Wayney). Ashtabula County: (post offices & townships of Ashtabula, Austinburg, Geneva, Harperfield, Jefferson, Plymouth & Saybrook) (townships of Andover, Cherry Valley, Colbrook, Canneaut, Denmark, Dorset, East Orwell, Hartsgrove, Kingville, Lenox, Monroe,Morgan,New Lyme,North Kingsville, Orwell, Pierpoint, Richmond Rock Creek, Rome, Shefield, Trumbull, Wayne, Williamsfield & Windsor) Erie County: (post offices & townships of Berlin, Berlin Heights,Birmingham,Florence,Huron, Milan, Shinrock & Vermilion)

Details :

Asbestos & lead paint abatement including, but not limited to the removal or encapsulation of asbestos & lead paint, all work in conjunction with the preparation of the removal of same & all work in conjunction with the clean up after said removal. The removal of all insulation materials, whether they contain asbestos or not, from mechanical systems (pipes, boilers, ducts, flues, breaching, etc.) is recognized as being the exclusive work of the Asbestos Abatement Workers.

On all mechanical systems (pipes, boilers, ducts, flues, breaching, etc.) that are going to be demolished, the removal of all insulating materials whether they contain asbestos or not shall be the exclusive work of the Laborers.

An Abatement Journeyman is anyone who has more than 300 hours in the Asbestos Abatement field.

Prevailing Wage Rate **Skilled Crafts**

Name of Union: Asbestos Local 50 Zone 2

Change # : LCN01-2013fbLoc50

Craft: Asbestos Worker Effective Date: 03/06/2013 Last Posted: 03/06/2013

	В	HR		Fringe Benefit Payments						cable nd	Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Clas	sification											
Asbestos Insulation Mechanic	\$2	5.05	\$5.61	\$4.72	\$0.25	\$0.00	\$1.66	\$0.15	\$0.00	\$0.00	\$37.44	\$49.96
Firestop Technician	\$25.05 \$5.		\$5.61	\$4.72	\$0.25	\$0.00	\$1.66	\$0.15	\$0.00	\$0.00	\$37.44	\$49.96
Apprentice	Per	·cent										
1st year	52.90	\$13.25	\$5.61	\$0.00	\$0.25	\$0.00	\$0.00	\$0.15	\$0.00	\$0.00	\$19.26	\$25.89
2nd year	65.65	\$16.45	\$5.61	\$0.60	\$0.25	\$0.00	\$0.00	\$0.15	\$0.00	\$0.00	\$23.06	\$31.28
3rd year	71.45	\$17.90	\$5.61	\$1.19	\$0.25	\$0.00	\$0.00	\$0.15	\$0.00	\$0.00	\$25.10	\$34.05
4th year	80.43	\$20.15	\$5.61	\$1.19	\$0.25	\$0.00	\$0.00	\$0.15	\$0.00	\$0.00	\$27.35	\$37.42

Special Calculation Note : Other is Industry Fund & Labor Management Fund.

Ratio :

no apprentice may work on a job site without a Mechanic.

Jurisdiction (* denotes special jurisdictional note):

4 Journeymen to 1 Apprentice Company Wide except AUGLAIZE, BUTLER*, CHAMPAIGN, CLARK, CLINTON, DARKE, GREENE, LOGAN, MIAMI, MONTGOMERY, PREBLE, SHELBY, WARREN*

Special Jurisdictional Note : In Butler County the following townships are included: (Lemon Twp, Madison Twp) In Warren County the following townships are included: (Clear Creek Twp, Franklin Twp, Massie Twp, Turtle Creek Twp, Wayne Twp)

6/12/13

Details :

Prevailing Wage Rate Skilled Crafts

Name of Union: Labor Local 329

Change #: LCN0-2012fbLoc329

Craft : Laborer Effective Date : 06/13/2012 Last Posted : 06/13/2012

	B	Fringe Benefit Payments							cable nd	Total PWR	Overtime Rate	
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Clas	sification											
Laborer Group 1	\$22	2.51	\$6.00	\$2.90	\$0.30	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$31.81	\$43.07
Group 2	\$22	2.66	\$6.00	\$2.90	\$0.30	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$31.96	\$43.29
Group 3	\$22	2.81	\$6.00	\$2.90	\$0.30	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$32.11	\$43.51
Group 4	\$2:	3.01	\$6.00	\$2.90	\$0.30	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$32.31	\$43.82
Apprentice	Per	cent										
0-1000 hrs & 108 hrs Instruction	60.00	\$13.51	\$6.00	\$2.90	\$0.30	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$22.81	\$29.56
1001-2000 hrs & 216 hrs Instruction	70.00	\$15.76	\$6.00	\$2.90	\$0.30	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$25.06	\$32.94
2001-3000 hrs & 324 hrs Instruction	80.00	\$18.01	\$6.00	\$2.90	\$0.30	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$27.31	\$36.31
3001-4,000 hrs & 432 hrs Instruction	90.00	\$20.26	\$6.00	\$2.90	\$0.30	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$29.56	\$39.69
More than 4000 Hours	100.00	\$22.51	\$6.00	\$2.90	\$0.30	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$31.81	\$43.07

Special Calculation Note : No special calculations for this skilled craft wage rate are required at

this time.

Ratio :

1 Journeyman to 1 Apprentice then 4 to 1 thereafter per project

Special Jurisdictional Note :

Details :

Group 1

Building Laborer, Carpenter Tender, Flagman, Signal Man, Rigging/Hooking/unhooking of construction material, utility construction laborer, guardrail erector, fence installer, landscape laborer, laser beam set-up man, grade checker, power wheelbarrow or power buggy, removal of asbestos, hazardous waste (Levels C & D), drinking water supplier, warehouse/tool man, safety man, confined space/hole watch attendant, fire watch, parking attendant, watchman, time/bookkeeper.

Group 2

Vibrators, Cement Finisher Helper, cement Raker, pump hose nozzle man, Asphalt Raker, Tamper & Packer, Pump Man Under 4", Discharge, Caisson, Cofferdam, Tunnel, Spiker Railroad (By Hand), Pot Tender, Torch Man, Demolition, All Machine Driven Tools (Gas, Electric, Air).

Group 3

Plaster Tender, Mortar Mixer, Cylinder, Shaft, Sewer, Water Conduit, Gas, Oil, Pipeline, Except Mainlines, Sewer Bottom Man, Sewer Pipe Layer, Manhole Builder, Blaster Helper, air track/Wagon Drill Helper, Jack Hammer, Gunnite Operator, Mucker (Tunnel & Caisson) Free Air, Miner, Sand Blaster, Blaster-Powder Man, Wagon drill/Operator, The removal of Lead or Toxic and Hazardous Waste materials (Level A & B).

Group 4

Mason Tender, scaffold builder, truck driver with CDL, welder, skid loader, forklift operator and man lifts.

Jurisdiction (* denotes special jurisdictional note) : ALLEN, AUGLAIZE, MERCER, PAULDING, PUTNAM, SHELBY, VAN WERT

Prevailing Wage Rate Skilled Crafts

Name of Union: Labor HevHwy 3

Change # : LCN01-2013jcLocalHevHwy3

Craft : Laborer Group 1 Effective Date : 05/08/2013 Last Posted : 05/08/2013

	B	HR	Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Clas	sification											
Laborer Group 1	\$20	6.72	\$6.40	\$3.00	\$0.35	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$36.57	\$49.93
Group 2	\$20	5.89	\$6.40	\$3.00	\$0.35	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$36.74	\$50.19
Group 3	\$2	7.22	\$6.40	\$3.00	\$0.35	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$37.07	\$50.68
Group 4	\$2	7.67	\$6.40	\$3.00	\$0.35	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$37.52	\$51.36
Watch Person	\$19	9.45	\$6.40	\$3.00	\$0.35	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$29.30	\$39.03
Apprentice	Per	cent										
0-1000 hrs	60.00	\$16.03	\$6.40	\$3.00	\$0.35	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$25.88	\$33.90
1001-2000 hrs	70.00	\$18.70	\$6.40	\$3.00	\$0.35	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$28.55	\$37.91
2001-3000 hrs	80.00	\$21.38	\$6.40	\$3.00	\$0.35	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$31.23	\$41.91
3001-4000 hrs	90.00	\$24.05	\$6.40	\$3.00	\$0.35	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$33.90	\$45.92
More than 4000 hrs	100.00	\$26.72	\$6.40	\$3.00	\$0.35	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$36.57	\$49.93

Special Calculation Note : Watchmen have no Apprentices

Ratio :

1 Journeymen to 1 Apprentice

4 Journeymen to 1 Apprentice thereafter

Jurisdiction (* denotes special jurisdictional note) :

ADAMS, ALLEN, ASHLAND, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER,

CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COLUMBIANA, COSHOCTON, CRAWFORD, DARKE, DEFIANCE, DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, FULTON, GALLIA, GREENE, GUERNSEY, HAMILTON, HANCOCK, HARDIN, HARRISON, HENRY, HIGHLAND, HOCKING, HOLMES, JACKSON, JEFFERSON, KNOX, LAWRENCE, LICKING, LOGAN, MADISON, MARION, MEIGS, MERCER, MIAMI, MONROE, MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, PAULDING, PERRY, PICKAWAY, PIKE, PREBLE, PUTNAM, RICHLAND, ROSS, SCIOTO, SENECA, SHELBY, TUSCARAWAS, UNION, VAN WERT, VINTON, WARREN, WASHINGTON, WAYNE, WILLIAMS, **WYANDOT**

Special Jurisdictional Note : Hod Carriers and Common Laborers - Heavy, Highway, Sewer, Waterworks, Utility, Airport, Railroad, Industrial and Building Site, Sewer Plant, Waste Water Treatment Facilities Construction

Details:

Group 1

Laborer (Construction); Plant Laborer or Yardman, Right-of-way Laborer, Landscape Laborer, Highway Lighting Worker, Signalization Worker (Swimming) Pool Construction Laborer, Utility Man, Bridge Man, Handyman, Joint Setter, Flagperson, Carpenter Helper, Waterproofing Laborer, Shurry Seal, Seal Coating, Surface Treatment or Road Mix Laborer, Riprap Laborer & Grouter, Asphalt Laborer, Dump Man (batch trucks), Guardrail & Fence Installer, Mesh Handler & Placer, Concrete Curing Applicator, Scaffold Erector, Sign Installer, Hazardous Waste (level D), Diver Helper, Zone Person and Traffic Control.

Group 2

Asphalt Raker, Screwman or Paver, Concrete Puddler, Kettle Man (pipeline), All Machine-Driven Tools (Gas, Electric, Air), Mason Tender, Brick Paver, Mortar Mixer, Skid Steer, Sheeting & Shoring Person, Surface Grinder Person, Screedperson, Water Blast, Hand Held Wand, Power Buggy or Power Wheelbarrow, Paint Striper, Plastic fusing Machine Operator, Rodding Machine Operator, Pug Mill Operator, Operator of All Vacuum Devices Wet or Dry, Handling of all Pumps 4 inches and under (gas, air or electric), Bottom Person, Welder Helper (pipeline), Concrete Saw Person, Cutting with Burning Torch, Pipe Layer, Hand Spiker (railroad), Underground Person (working in sewer and waterline, cleaning, repairing and reconditioning). Tunnel Laborer (without air), Caisson, Cofferdam (below 25 feet deep), Air Track and Wagon Drill, Sandblaster Nozzle Person, Hazardous Waste (level B), Lead Abatement, Hazardous Waste (level C)

Group 3

Blast and Powder Person, Muckers (with miners), Wrencher (mechanical joints & utility pipeline), Yarner, Top

6/12/13

PW Rate Skilled LCN01-2013jcLocalHevHwy3 Page

Lander, Hazardous Waste (level A), Concrete Specialist, Curb Setter and Cutter, Concrete Crew in Tunnels. Utility pipeline Tappers, Waterline, Caulker, Signal Person, Grade Checker

Group 4 Miner, Welder, Gunnite Nozzle Person

ASBESTOS & HAZARDOUS MATERIALS ABATEMENT

Section 01010	Summary of the Work
Section 02070	Asbestos/Hazardous Materials

SECTION 01010

SUMMARY OF WORK

1.1 PROJECT OWNER

1.1.1 City of St. Marys, Ohio 101 East Spring Street St. Marys, Ohio 45885

1.2 PROJECT LOCATIONS/BUILDING INFORMATION

- 1.2.1 City of St. Marys, Ohio Power Plant 335 North Chestnut Street St. Marys, Ohio 45885
 - a. Building size is approximately 17,000 square feet.
 - b. The age of the building is approximately 53 years old.
 - c. The present and past use of the building is a power plant.
 - d. Ohio Asbestos Evaluation Specialist is Steven D. Carr, Certification No. ES31874.
1.3 PROJECT WORK

1.3.1 Base Bid Items

1.3.1.1 St. Marys, Ohio Power Plant:

- a. Removal and disposal of approximately 270 linear feet of 1" asbestos-containing pipe insulation.
- b. Removal and disposal of approximately 200 linear feet of 1.5" asbestos-containing pipe insulation.
- c. Removal and disposal of approximately 400 linear feet of 2" asbestos-containing pipe insulation.
- d. Removal and disposal of approximately 10 linear feet of 3" asbestos-containing pipe insulation.
- e. Removal and disposal of approximately 615 linear feet of 4" asbestos-containing pipe insulation.
- f. Removal and disposal of approximately 510 linear feet of 6" asbestos-containing pipe insulation.
- g. Removal and disposal of approximately 145 linear feet of 10" asbestos-containing pipe insulation.
- h. Removal and disposal of approximately 290 linear feet of 12" asbestos-containing pipe insulation.
- i. Removal and disposal of approximately 3,010 square feet of asbestos containing breeching insulation.
- j. Removal and disposal of approximately 770 square feet of asbestos-containing tank insulation.
- k. Removal and disposal of approximately 70 square feet of asbestos-containing drum head insulation.
- 1. Removal and disposal of approximately 430 square feet of asbestos-containing exchanger insulaton.
- m. Removal and disposal of approximately 90 square feet of asbestos-containing turbine insulation.
- n. Removal and disposal of approximately five (5) cubic yards of asbestos-contaminated soil.
- o. Removal and disposal of approximately 2,010 square feet of asbestos-containing cylinder insulation.
- p. Removal and disposal of approximately 5,935 square feet of asbestos-containing boiler insulation.

- q. Removal and disposal of approximately 150 square feet of asbestos-containing door gaskets.
- r. Removal and disposal of approximately 100 linear feet of asbestos-containing cable/wire insulation.
- s. Removal and disposal of approximately 470 square feet of asbestos-containing 9" floor tile and mastic adhesive.
- t. Removal and disposal of one (1) sink insulation with asbestos-containing mastic.
- u. Removal and disposal of approximately 3,500 linear feet of asbestos-containing window glazing.
- v. Removal and disposal of approximately 1,905 linear feet of asbestos-containing boiler pipe insulation.
- w. Proper removal, packaging, transportation and disposal of the following universal waste streams:
 - 1. 236 four-foot fluorescent tubes
 - 2. 70 eight-foot fluorescent tubes
 - 3. 153 ballasts
 - 4. 2 incandescent bulbs
 - 5. 6 security lights

1.4 PROJECT SCHEDULE

1.4.1 Work shall commence on August 5, 2013, with a projected time frame for completion of 64 workdays (approximately 13 weeks). Work shall be performed during normal work hours between 7:00 a.m. and 5:00 p.m., five days per week (Monday through Friday), except during emergencies or as authorized by the Consultant. Workdays shall not exceed 10 hours per day. All work, final clearance sampling and demobilization must be completed by November 1, 2013.

1.4.2 SECTION 02070

ASBESTOS ABATEMENT

2.1 ABATEMENT PLAN

- 2.1.1 The Contractor must submit a detailed plan for procedures proposed for use in complying with the requirements of this specification for the areas identified in 1.3 of this Section of the specification.
- 2.1.2 The plan must identify the removal method (i.e., glovebag, mini-enclosure, or gross containment), location and layout of decontamination areas, the sequencing of asbestos abatement work, the interface of trades involved in the performance of work, methods used to ensure the safety of building occupants and visitors to the site, and a disposal plan including location of approved disposal site.
- 2.1.3 The plan must identify and expand upon the use of portable HEPA ventilation systems, isolation of the building's HVAC system, method of removal to prohibit visible emissions in the work area, AFD capacities, quantities, and locations, as well as the packaging of removed asbestos debris.

2.2 UTILITIES

- 2.2.1 The Building Owner shall pay for and provide water access and electrical power until completion of the project.
 - 2.2.1.1 Unless otherwise specified in the Contract Documents, the Contractor shall provide, and maintain in a clean condition, adequate and approved sanitary facilities for use by all Contractor Personnel.
- 2.2.2 The Contractor shall provide, as necessary, a weatherproof, grounded temporary electric power service and distribution system of sufficient size, capacity, and power characteristics to accommodate performance of the work during the construction period.
- 2.2.3 The Contractor shall provide his own extension cords and plumbing hoses to connect his equipment to the utilities furnished by the Building owner. The Contractor shall utilize qualified tradesmen for the installation of temporary services and facilities where required.
 - 2.2.3.1 The Contractor shall employ heavy-duty abrasion-resistant hoses to provide water into each work area and to each work area isolation structure. The Contractor shall utilize heat tape to prevent hoses from freezing where necessary.
 - 2.2.3.2 The Contractor shall provide receptacle outlets equipped with ground-fault circuit interrupters for plug-in connection of power tools and equipment.
 - 2.2.3.3 General service incandescent lamps shall be protected with guard cages or tempered glass enclosures, where fixtures are exposed to breakage by construction operations.
- 2.2.4 The Contractor will provide weatherproof, grounded temporary lighting where needed. The Contractor shall lock out and isolate all existing power to the work area.

- 2.2.5 The Contractor shall provide his own temporary heat as necessary during the course of the project. The Contractor will be required to provide sufficient heat in order to conduct wetmethod removal techniques.
- 2.2.6 The Contractor will be responsible for providing temporary hot water for the decontamination unit through the use of a portable hot water tank.

2.3 CLEANING

- 2.3.1 The initial cleaning (precleaning) required shall be completed by the Building Owner, including the removal of objects from each of the rooms prior to abatement activities. The Contractor shall be responsible for providing written notification to the Owner a minimum of five (5) working days prior to proposed access to abatement areas to allow for the removal of objects from said areas prior to abatement activities.
- 2.3.2 The Contractor shall allow sufficient time on a daily basis to complete a thorough cleanup of areas maintained by the Building Owner (i.e., bathrooms, mechanical room). If the Building Owner finds the common areas notably unsatisfactory with regard to post abatement cleanup, the Contractor will pay for the Building Owner's time spent cleaning the area(s) after a joint contractor/consultant inspection of subject area.
- 2.3.3 The Contractor shall remove all his rubbish from and about the building, and all his tools, scaffolding, and surplus material, and shall leave his work "broom-clean" or its equivalent, unless more exactly specified. In the case of dispute or delinquency, the Building Owner may remove the rubbish and charge the cost to the several contractors, as the consultant shall deter to be just.
- 2.3.4 Should areas adjacent to the work area become contaminated, additional cleaning and sampling will be performed at the expense of the Contractor.
- 2.3.5 The Contractor will be responsible for the removal and cleaning of fluorescent lights flushmounted on acoustical ceiling plaster, asbestos hard plaster ceilings and from drop-ceiling grid-work necessary to access ceiling abatement. All light fixtures will be staged at a location agreed upon by the Contractor and the Consultant. All of the light fixtures that are removed from the work area shall be turned over to the building Owner.

2.4 CONTRACTOR SUBMITTALS

- 2.4.1 The Contractor shall submit the following information within ten (10) days **prior** to the start of the project at the Pre-Abatement meeting.
 - 2.4.1.1 Copy of Certificate of Insurance
 - 2.4.1.2 Copy of Ohio Department of Health Asbestos Abatement Contractor's License.
 - 2.4.1.3 Copy of Bureau of Worker's Compensation Certification.
 - 2.4.1.4 A complete listing of the names and social security numbers of personnel who will be assigned to the project.

- 2.4.1.5 Copies of the course names and dates for the last EPA-accredited abatement worker or contractor/supervisor training for all personnel who will be assigned to the project.
- 2.4.1.6 Copies of proof of respirator fit-testing and medical fitness to use required respiratory protection (signed by a licensed physician) for all Contractor employees and agents who must enter the work areas.
- 2.4.1.7 Documentation of all persons working on the project are licensed and certified by the Ohio Department of Health.
- 2.4.1.8 Material Safety Data Sheets for all products in accordance with 29 CFR 1926.1200.
- 2.4.1.9 Copies of the Contractor Safety Manual and Contractor Respiratory Protection Program.
- 2.4.1.10 Copy of a Site Specific Safety Plan and Emergency Action Plan.
- 2.4.1.11 Copies of 10-day project notifications to the Ohio EPA and the Ohio Department of Health, with copies of the return-receipt requested.
- 2.4.1.12 The name and location of the proposed landfill.
- 2.4.1.13 Completion of "Certificate of Worker's Acknowledgement", which follows this section. Complete one certificate for each employee engaging in asbestos abatement activities at the site.
- 2.4.2 The Contractor shall maintain the following information on a daily basis and will submit it to the Consultant on a daily basis and a project summary within five days of the project completion:
 - 2.4.2.1 A sign-in log of all persons working on the project (name and social security number), date, time in and out.
 - 2.4.2.2 A copy of weekly safety meetings and tool box discussions with a sign-in log of participants.
 - 2.4.2.3 Names and affiliations of all visitors to the site.
 - 2.4.2.4 Records of any accident, emergency evacuation, barrier breach and any safety or health incident.
 - 2.4.2.5 Copies of all Uniform Hazardous Waste Manifests and waste shipment records as provided in 40 CFR 61.149(e). For all asbestos-waste containing waste materials removed from the work area during the abatement process.
 - 2.4.2.6 The employee exposure monitoring results, on a weekly basis.
 - 2.4.2.7 Originals of Waste Shipment Records signed and dated by the waste management facility for each shipment of asbestos containing or contaminated material that leaves the work site. Waste shipment records should be submitted to the consultant no more than 35 days after shipment.

2.5 CONTRACTOR RESPONSIBILITY FOR EMPLOYEES

2.5.1 The Contractor will assume full responsibility for the conduct of his employees, including subcontractors, throughout the course of the project. No employee will be allowed on the Building Owner's premises while under the influence of alcohol, controlled substances or while carrying firearms or other weapons. No employee of the Contractor shall fraternize with any employee of the Owner during work hours. Likewise, all of the Contractor's employees are restricted to those areas of the buildings and grounds directly included in the project. Any employee of the Contractor whose conduct is judged unfit by the Consultant or the Owner shall not be permitted to work on the project.

2.6 CONSULTANT'S STATUS

- 2.6.1 Identification: The Building Owner's Consultant for this project will be Allied Environmental Services, Inc., 1867 South Dixie Highway, Lima, Ohio 45804.
- 2.6.2 Responsibility: The Consultant shall be responsible for monitoring the performance of the Contractor through all phases of the project.
 - 2.6.2.1 The Consultant shall issue all change orders affecting the project.
 - 2.6.2.2 The Consultant shall retain responsibility for providing access to the subject site at all times, unless superceded by the authority of the Construction Manager. This shall include access during off shift operations, and insuring locked closure of the structure at the end of shift. Any variance from an established schedule by the Contractor shall require 24-hour notice to the Consultant.
 - 2.6.2.3 The Consultant or his designee shall inspect the work to identify any situations in violation of these specifications. Unacceptable work practices and/or elevated fiber counts in adjacent areas will be the basis for temporary suspension of work at the Contractor's expense. Work will be suspended until such time as corrections are made and fiber counts from area samples are at or below the background fiber count. The Contractor shall incur all additional costs associated with correcting work practices, including additional time, materials and sampling required by the Consultant.
 - 2.6.2.4 The Consultant or his designee shall inspect all mini-enclosures or gross removal containments prior to initiation of removal work and will verify, with the Contractor's Site Representative, that negative pressure is being maintained as required in these specifications.
 - 2.6.2.5 The Consultant or his designee shall perform the final visual inspection for cleanliness prior to the application of any encapsulating agents following actual removal. The Consultant will conduct final clearance monitoring.
 - 2.6.2.6 The Consultant shall be, in the first instance, the interpreter of the conditions of the Technical Specifications and the judge of its performance. He shall side neither with the Building Owner nor with the Contractor, but

shall use his powers under the Technical Specifications to enforce its faithful performance by both.

2.6.2.7 The Consultant shall, within a reasonable time, make decisions on all claims of the Owner or Contractor and on all other matters relating to the execution and progress of the work of the interpretation of the Technical Specifications.

2.6.3 Personal Protective Equipment

- 2.6.3.1 Respiratory Protection The Contractor will supply half-mask P-100 cartridges or other type respirators, as required, for the use of the Consultant.
- 2.6.3.2 Protective Clothing The Contractor shall provide the Consultant with protective clothing for entry into the work area. Clothing provided should be the same as provided the Contractor's employees, with a minimum of four (4) sets available each day.

2.7 APPLICABLE REGULATIONS

- 2.7.1 The Contractor's quotation and actions on the job must comply with all existing state and federal regulations concerning asbestos abatement projects, including but not limited to:
 - 2.7.1.1 29 CFR 1910.134 (Respiratory Protection)
 - 2.7.1.2 29 CFR 1926.1101 (Construction Industry)
 - 2.7.1.3 40 CFR 61, Subparts A & H (NESHAP's Regulations)
 - 2.7.1.4 40 CFR 763, AHERA Final Rule and Notice
 - 2.7.1.5 49 CFR 172, Subparts B & C (DOT Hazardous Materials Tables)
 - 2.7.1.6 49 CFR 172, Subpart M (DOT Shipping Requirements)
 - 2.7.1.7 29 CFR 1926.1200 (Haz-Com)
 - 2.7.1.8 State of Ohio, Chapter 3701-34, Asbestos Hazard Abatement Rules. These publications form a part of this section to the extent referenced.
- 2.7.2 Notification and fee requirements are the responsibility of the Contractor. Copies of the required notifications will be provided to the Consultant, prior to the commencement of work.
- 2.7.3 The Contractor agrees, by the Owner's acceptance of this proposal, to pay all penalties, fines or other costs associated with any citation or other notice of violation against the Owner and/or the Contractor, resulting from the Contractor's actions (or failure to act) on this project.
- 2.7.4 The Contractor agrees to adhere to site specific regulations and requirements as set forth in the Project Specifications.

2.8 PRE-ABATEMENT MEETING

- 2.8.1 After the Contractor's Bid has been accepted, the Consultant shall arrange for a Pre-Abatement Meeting to be attended by the Contractor.
- 2.8.2 The Contractor is required to attend the Pre-Abatement Meeting. The Contractor shall submit the following documents prior to the meeting for the Consultant's approval at the Pre-Abatement Meeting:
 - 2.8.2.1 Copy of Worker Protection Program developed for use on this project. This program shall include the brand name(s) and model(s) of respirators to be used, individual(s) designated to be responsible for respirator care, cleaning, battery recharging, filter testing and changing, respirator inspection and related respirator matters; personnel responsible for other protective equipment; personnel who will provide necessary training for new workers during the project; storage containers and necessary support equipment. No abatement work shall be performed without the Consultant's written documentation that the Contractor's Worker Protection Program meets document requirements.
 - 2.8.2.2 Copy of proposed Abatement Plans. These plans shall include: drawings of the decontamination facilities and their locations; work area isolation plan with layout of engineering controls (e.g., Asbestos Filtration Device (AFD) units, etc.); security program; routing plan for removal of contaminated material from the building; and a listing of all tools, equipment and supplies proposed for use in the abatement program. The Contractor shall prepare contingency plans for the possible failure of polyethylene barriers, work area isolation structures, failure of negative pressure systems and devices and other circumstances which could lead to escape or contaminated air from within the work area. This contingency plan shall set forth specific procedures the Contractor will follow in the event of a potential or actual escape of contaminated air. The Contractor is encouraged to confer with the Consultant during preparation of these documents.
 - 2.8.2.3 Copy of proposed Progress Schedule. The proposed progress schedule will be submitted to the Consultant at least ten (10) days prior to project start date for at least the following operations of each phase:
 - i. Date of punch list walk through.
 - ii. Start work area preparations.
 - iii. Work area preparation complete, negative pressure containment in operation.
 - iv. Removal operations initiated.
 - v. Final clean complete, work area ready for Consultant's final inspection and clearance sampling.
 - vi. Tear down complete, Owner to reoccupy the work area.
 - 2.8.2.3.1 Proposed landfill for disposal of waste materials.

2.9 EMPLOYEE CONDUCT

- 2.9.1 All of the Contractor's employees shall abide by Federal, State and local laws and by applicable Building Owner policy and rules while on the premises.
- 2.9.2 All of the Contractor's employees are restricted to those areas of buildings and grounds directly included in the project. The contractor shall comply with on-site security measures to include sign in at the office during operating hours of the facility, and the wearing of Identification Badges by all personnel while on site.
- 2.9.3 Smoking by the Contractor's employees shall be restricted to those areas designated by the Consultant (no smoking inside Building Owner's facilities).

2.10 AIR MONITORING REQUIRED BY OSHA REGULATIONS

- 2.10 The Contractor will perform air monitoring in the work area to comply with OSHA regulations for his employee's.
- 2.10.1 The Contractor shall keep a log of all monitoring activities he performs, and an updated copy of the log shall be made available to the Consultant at the end of each workweek. A complete log of all air samples and results will be maintained for the Consultants' inspection during the project. It is the Contractor's responsibility to furnish and maintain all air monitoring equipment for OSHA compliance. The Contractor shall bear all costs in connection with air sampling and reporting under this section.
 - 2.10.1.1 The Consultant may procure personal air samples of Contractor's or Consultant's employee to measure worker exposure levels. Contractor will cooperate with such monitoring activities.

2.11 AIR MONITORING THE WORK AREA

- 2.11.1 The Contractor will be required to provide containment enclosures with appropriate air circulation for asbestos removal operations. The Contractor must monitor and maintain a negative air pressure differential of -0.02 inches of water-column while enclosure is operative.
- 2.11.2 If the Contractor considers using glovebag procedures, the following information must be submitted:
 - 2.11.2.1 Airborne asbestos fiber count data from air monitoring history that will demonstrate the ability to perform work of this section while maintaining an airborne fiber count below 0.1 fibers per cubic centimeter in the breathing zone of the individual performing the work, and;
 - 2.11.2.2 Include the following data for each procedure required by the work:
 - i. Date of measurements,
 - ii. Operations monitored,
 - iii. Sampling and analytical methods used and evidence of their accuracy, and
 - iv. Number, duration, and results of samples taken.

- 2.11.2.3 The Contractor shall facilitate and cooperate fully with air monitoring and shall take no action intended to distort or falsify measurements of fiber concentrations and shall not take any action to obstruct these air monitoring activities. In the event that the Contractor fails to comply with these provisions, the Consultant has the authority to stop Contractor's work.
- 2.11.2.4 The Contractor shall provide at least two, 20-amp, 120 VAC electrical circuits for the Consultant's use during air sampling activities in the event temporary power is installed.
- 2.11.2.5 All sampling and analytical work shall be in conformance with NIOSH Method 7400 (A Rules).
- 2.11.2.6 Copies of air monitoring records will be submitted to the Consultant on a weekly basis. Air monitoring results will be posted for public viewing at the subject site.
- 2.11.2.7 It is the Contractor's responsibility to furnish and maintain all the monitoring equipment and supplies in connection with his monitoring testing, and reporting for OSHA Compliance.

2.12 AIR SAMPLING FOR COMPLIANCE WITH CLEARANCE STANDARD

- 2.12.1 At the completion of each segment, or as otherwise specified, the Consultant or his employee will procure air samples within the work area(s) for clearance by AHERA specifications (Phase contrast microscopy [PCM] analysis or transmission election microscopy [TEM] analysis). If the analysis indicates that the concentration of asbestos fibers in these samples exceeds clearance levels, (0.01 f/cc for PCM or 70 structures per square millimeter for TEM) the Contractor shall continue to air and surface clean the work area until air monitoring indicates asbestos concentrations have fallen below the appropriate limit.
- 2.12.2 If initial clearance samples fail the criteria established in Section II. 4.3, the Contractor shall be responsible for all consultants' costs required for additional clearance sampling. Additional air monitoring and clearance sampling will be charged at a rate of \$15.00 per PCM sample analysis, and \$150.00 per TEM sample analysis.
- 2.12.3 Where necessary, the Contractor shall provide the Consultant with electrical power within the work area in order to secure clearance samples.

2.13 CONSULTANT'S INSPECTION

- 2.13.1 The Superintendent on-site will conduct daily inspections with the Owner's Consultant (where applicable) regarding: work area isolation coverings, worker protection program, Contractor's air monitoring program, proper performance of asbestos hazard abatement work including work area preparation and isolation, stripping, removal, encapsulation, and DOT, and other regulations, and conformance with these Specifications.
- 2.13.2 The Daily Site Report and Checklist will be completed each workday and copies of the completed form will be maintained at the job site.

2.14 EXECUTION SEQUENCE

- 2.14.1 Prepare the work area.
- 2.14.2 Remove asbestos-containing materials and encapsulate.
- 2.14.3 Remove and dispose of the contaminated waste generated by work area preparation and removal activities.
- 2.14.4 Decontaminate work area and clean site.

2.15 RESPIRATOR SELECTION

2.15.1 The Contractor shall provide workers with, and require the use of, respirators for protection against asbestos as identified in the "Respirator Selection Table." An approved half-mask, air-purifying respirator shall provide the minimum respiratory protection allowable with P-100 cartridges. Disposable, single-use respirators are not allowed. If exposure monitoring dictates, respiratory protection must be upgraded to maintain compliance.

Airborne Fiber Concentration:	Required Respiratory Protection
Not in excess of 1.0 f/cc	Half-mask air purifying with HEPA Cartridges; minimum requirement for all activities.
Not in excess of 5.0 f/cc	Full facepiece respirator with HEPA filters.
Not in excess of 10.0 f/cc	Any tight fitting, full facepiece PAPR with HEPA filters.
Not in excess of 100 f/cc	Full facepiece supplied air respirator operated in pressure demand mode
In excess of 100 f/cc	Any supplied air respirator operated in the pressure-demand mode, equipped with auxiliary SCBA.

RESPIRATOR SELECTION TABLE

NOTE: 0.1 f/cc is the maximum allowable concentration inside a containment area. If exposure levels in containment areas exceed 0.1 f/cc, work will be halted, at the Contractor's expense, until work practices are changed to reduce the fiber concentrations to acceptable levels.

2.15.2 Use of zero-odor chemical emulsifiers for mastic removal shall require the use of proper filter cartridges as provided for within the Material Safety Data Sheet for that product.

- 2.15.3 If at any time during abatement operations the Contractor or his designee determines the airborne fiber concentration is at or above 10.0 f/cc, Type "C", supplied air, pressure-demand respirators shall become mandatory for all workers in the affected area; these respirators shall be equipped with backup HEPA filters that engage if the air supply fails. The Contractor shall be responsible for providing Grade "D" or better breathing air (per 29 CFR 1910.134).
- 2.15.4 Respirators and cartridges must be certified by the National Institute for Occupational Safety and Health (NIOSH).
- 2.15.5 The Contractor, as specified in 29 CFR 1910.134, shall have an established respiratory protection program.
- 2.15.6 Facial hair interfering in the sealing area of the respirator is not allowed. Workers requiring respirators will not be permitted to work if they do not meet this requirement.
- 2.15.7 There shall be a sufficient quantity of replacement respirator filter cartridges so that workers can change filters on a daily basis. Respirator filters shall be stored at the job site in the change room or other authorized area, where they are protected from exposure to asbestos prior to use. Proper respirator decontamination and cleaning shall be performed each time a worker exits from a contaminated work area.
- 2.15.8 Respirators are to be worn during the following activities:

2.15.8.1	Area preparation when asbestos may be disturbed.
2.15.8.2	HEPA vacuuming.
2.15.8.3	Removal or cleaning of any light fixtures, supports, cables, ceiling panels, ductwork, etc.
2.15.8.4	Installation of walls or barriers that could cause the release of asbestos.
2.15.8.5	Any activities inside a contained work area, at all times, even prior to initial removal.
2.15.8.6	Waste container handling and transport.

- 2.15.8.7 While unloading bags or containers at the disposal site.
- 2.15.9 Workers shall wear disposable full-body coveralls and appropriate footwear during all asbestos removal and waste handling activities. When rips or tears are detected in protective suits, they shall be immediately mended, or the work suit shall be immediately replaced. Suits must be zipped up completely and head covers worn at all times. Non-disposable footwear shall be left inside contained work areas at all times and will be disposed of when the job is complete or be decontaminated and brought out of the work area in a sealed plastic bag.
- 2.15.10 The Contractor shall provide each worker engaged in mastic removal with acid resistant rubber boots and gloves, protective eyewear and fume/mist chemical vapor respirator cartridges in addition to the specified HEPA filtered cartridges.

2.15.11 The Contractor shall conspicuously post a list of emergency phone numbers, including fire, police, rescue, etc., and emergency medical facilities outside all entrances to containment structures. It is the Contractor's responsibility to notify all on-site abatement workers of the existence and location of these lists.

2.16 MINI-ENCLOSURES

- 2.16.1 Mini-enclosures: The work area will be precleaned with a HEPA vacuum before construction of the mini-enclosure.
- 2.16.2 Mini-enclosures will be constructed of 6-mil polyethylene including walls, floors and ceilings. All openings in the area will be sealed using polyethylene, duct tape and/or spray adhesive. The area will be maintained under negative pressure using a properly sized HEPA vacuum or negative air filtration device. Negative pressure shall be continuously maintained from the time it is first established until clearance tests meet clearance standards. Negative air units will be exhausted outdoors. Access to the area must be restricted by the use of barricade tape and warning signs.
- 2.16.3 Entrance and exit from the enclosure will be through an attached room, which will have triple flaps on the outside and inside doors.
- 2.16.4 All waste to be removed from the area will be double bagged in properly labeled 6-mil plastic bags.
- 2.16.5 Equipment decontamination will be done in the work area chamber. Contaminated equipment and tools will be HEPA vacuumed and wet wiped before being passed to the attached chamber for final removal from the area.

2.17 GROSS REMOVAL CONTAINMENT

- 2.17.1 In areas where visible debris or contamination exists, or as the Consultant specifies, the area will be precleaned using a HEPA vacuum. Critical barriers and HEPA negative air filtration will be established prior to this cleaning. Fans or other HVAC equipment must be isolated and sealed with 2-layers of 6-mil poly, using duct tape and spray adhesive.
 - 2.17.1.1 After precleaning is completed, the gross removal containment will be constructed of at least 2 layers of 6-mil poly on the floors, extending 12 inches up the sides and at least 1 layer of 6 mil poly for walls, over-lapping the floor plastic by 12 inches. All seams will be taped and glued as necessary.
 - 2.17.1.2 The containment will consist of a work area, clean room, shower, and dirty (or equipment) room.
 - 2.17.1.3 All entranceways will have triple flapped poly. All openings in the area (HVAC, lighting, etc.) must be sealed with poly and tape.
 - 2.17.1.4 All bags will be washed off, dried and excess air vacuumed before final removal from the enclosure.

- 2.17.1.5 The enclosure will be maintained under HEPA negative pressure throughout the removal work until final clearance has been given. HEPA negative pressure equipment will be sized to provide a minimum of six (6) air changes per hour in the contained area (total cubic feet divided by 15 x cfm/unit equals total's required).
 - i. Ventilation shall not damage or compromise the integrity of the isolation barriers.
 - ii. Exhaust air will be discharged outdoors or to another area approved by the Consultant.
- 2.17.1.6 A wall of 1/2" minimum thickness plywood will be constructed around any gross removal containment that must be built in a highly visible and traveled area. Access to the clean room entrance will be through a temporary, lockable, wooden door.
- 2.17.1.7 The Contractor will establish and visibly make emergency and fire exit routes from the work area. Emergency procedures shall have priority over decontamination when rendering aid to seriously injured workers. Emergency response personnel shall be allowed immediate access to the area in case of an emergency. In case of a fire, the Fire Department will have complete jurisdiction over the building.
- 2.17.1.8 The Contractor shall post appropriate barrier tape and warning signs at entrances to, and at appropriate locations around the abatement area.
- 2.17.1.9 The entire containment area will be maintained free of visible accumulations of debris.
- 2.17.1.10 The Contractor will HEPA vacuum and/or wet wipe all removable objects from the contained work area. All objects that cannot be removed will be covered and sealed with 4-mil poly that is securely taped or glued in place.
- 2.17.1.11 Gross removal enclosures must pass a two stage visual inspection: first the top floor layer of poly can be removed after a visual inspection by the Consultant has indicated no visible debris; the plastic must be wet wiped with amended water prior to removal. After removal of the top floor layer of poly, the Consultant will conduct a second visual. After passing this visual, the area can be encapsulated. Aggressive clearance monitoring will be performed after a minimum of a four-hour drying period.
- 2.17.1.12 Following successful passage of a visual inspection, an owner/consultant specified concrete sealer is to be applied to bare concrete floors as an encapsulant.
- 2.17.1.13 If, after final clearance sampling, the Consultant or his designee finds that the work area has not been decontaminated, the Contractor shall repeat the cleaning and encapsulation. This shall be performed until the work area is in compliance, as defined in the Specifications.
- 2.17.1.14 After the work area is found to be in compliance, all entrances and exits are unsealed and the plastic sheeting, tape, and any other waste and debris shall be disposed of as contaminated material.

2.18 GLOVEBAG REMOVAL

- 2.18.1 Precleaning by HEPA vacuuming will be done in a six-foot radius of the material to be removed. It may be necessary to lightly mist the surrounding areas with amended water in order to suppress dust that could affect air sample results.
 - 2.18.1.1 Surfaces to be pre-cleaned include but are not limited to: ceiling tiles, pipe wrap, other fixtures or fillings, floor, light fixtures, etc.
 - 2.18.1.2 Place asbestos warning signs at every exit and entrance to the work area.
 - 2.18.1.3 Place 4 or 6-mil plastic under the work area in a radius sufficient to contain any material that may fall to the floor.
 - 2.18.1.4 Wrap and seal all asbestos-insulated pipes with 4 or 6-mil plastic before beginning the glovebag procedure.
 - 2.18.1.5 Use only glovebags with impermeable sleeves and sealed seams.
 - 2.18.1.6 Seal off HVAC vents in the area; shut off the HVAC if possible.
 - 2.18.1.7 Follow standard glovebag procedure, including the use of amended water and HEPA vacuum equipment.
 - 2.18.1.8 Wet-wipe all surfaces inside the bag before removal of the glovebag. Apply an encapsulant to all surfaces and exposed insulation ends.
 - 2.18.1.9 HEPA cartridge respirators and disposable full-body coveralls must be worn during glovebag work.
 - 2.18.1.10 Glovebag work must be halted if unprotected workers enter the area.
 - 2.18.1.11 All glovebags must be double bagged in properly labeled 6-mil plastic bags.
 - 2.18.1.12 Glovebags may not be reused on more than one fitting or section of pipe insulation unless they are kept under HEPA negative pressure while being moved. Glovebags cannot be used on hot steam lines or pipes.
 - 2.18.1.13 The Contractor must monitor and maintain a negative air pressure differential of -0.02 inches of water-column while enclosure is operative.
 - 2.18.1.14 Potentially contaminated disposable coveralls must be removed and disposed of as asbestos waste before the worker leaves the immediate work area. A clean suit must be put on to move waste out of the area.
- 2.18.2 "Wrap and Cut" Removal.
 - 2.18.2.1 Wrap and cut removal method may only be used as approved by the Consultant.

- 2.18.2.2 After wetting material, wrap pipe and asbestos-containing pipe insulation with two layers of polyethylene film sealed with tape.
- 2.18.2.3 Cut pipe at sections where no asbestos-containing pipe insulation is present.

2.19 FLOOR TILE REMOVAL CONTAINMENT

- 2.19.1 In areas where visible debris or contamination exists, or as the Consultant specifies, the area will be pre-cleaned using a HEPA vacuum. Critical barriers and HEPA negative air filtration will be established prior to this cleaning. Fans or other HVAC equipment must be isolated and sealed with 2-layers of 6-mil poly, using duct tape and spray adhesive.
 - 2.19.1.1 After precleaning is completed, the removal containment shall be constructed of at least 1 layer of 6 mil poly on the walls, over-lapping at the seams by 12 inches, with all seams and open edges to be taped and glued.
 - 2.19.1.2 The containment will consist of a work area, clean room, shower, and dirty (or equipment) room.
 - 2.19.1.3 All entranceways will have triple flapped poly. All openings in the area (HVAC, lighting, etc.) must be sealed with poly and tape.
 - 2.19.1.4 All bags will be washed off, dried and excess air vacuumed before final removal from the enclosure.
 - 2.19.1.5 The enclosure will be maintained under HEPA negative pressure throughout the removal work until final clearance has been given. HEPA negative pressure equipment will be sized to provide a minimum of six (6) air changes per hour in the contained area (total cubic feet divided by 15 x cfm/unit equals total's required).
 - i. Ventilation shall not damage or compromise the integrity of the isolation barriers.
 - ii. Exhaust air will be discharged outdoors or to another area approved by the Consultant.
 - 2.19.1.6 A wall of 1/2" minimum thickness plywood will be constructed around any gross removal containment that must be built in a highly visible and traveled area. Access to the clean room entrance will be through a temporary, lockable, wooden door.
 - 2.19.1.7 The Contractor will establish and visibly make emergency and fire exit routes from the work area. Emergency procedures shall have priority over decontamination when rendering aid to seriously injured workers. Emergency response personnel shall be allowed immediate access to the area in case of an emergency. In case of a fire, the Fire Department will have complete jurisdiction over the building.
 - 2.19.1.8 The Contractor shall post appropriate barrier tape and warning signs at entrances to, and at appropriate locations around the abatement area.

- 2.19.1.9 The entire containment area will be maintained free of visible accumulations of debris.
- 2.19.1.10 The Contractor will HEPA vacuum and/or wet wipe all removable objects from the contained work area. All objects that cannot be removed will be covered and sealed with 6-mil plastic that is securely taped or glued in place.
- 2.19.1.11 Removal of floor tile mastic:
 - i. Remove all asbestos-containing floor tile mastic from the areas specified.
 - ii. The floor tile adhesive (mastic) exposed by the removal of the floor tile shall be removed using a **low odor mastic remover**. The solvent should be applied per the manufacturer recommendations. No visible residue shall remain.
 - iii. All absorbent media used to clean up the solvent/adhesive mixture shall be disposed of as contaminated waste.
 - iv. The Contractor shall keep the solvent/adhesive mixtures from seeping into any adjacent areas.
 - v. For areas of reoccupation, once mastic adhesive has been removed the contractor shall clean the concrete floor with trisodium phosphate (TSP).
 - vi. Vapors produced by the work shall be ventilated to the outside of the building away from passers by.
- 2.19.1.12 Removal enclosures must pass a visual inspection by the Consultant verifying no visible debris; the plastic must be wet wiped with amended water prior to removal. After passing this visual, the area can be encapsulated.
- 2.19.1.13 If, after final clearance sampling, the Consultant or his designee finds that the work area has not been decontaminated, the Contractor shall repeat the cleaning of the containment. This shall be performed until the work area is in compliance, as defined in the Specifications.
- 2.19.1.14 After the work area is found to be in compliance, all entrances and exits are unsealed and the plastic sheeting, tape, and any other waste and debris shall be disposed of as contaminated material.

2.20 DECONTAMINATION OF ASBESTOS-CONTAMINATED PIPE CHASES

- 2.20.1 In areas consisting of asbestos-containing debris and contamination, wet asbestos containing debris, pick up pieces of gross debris, and dispose of as contaminated waste.
- 2.20.2 Asbestos containing debris and contamination on pipe chase floors shall be removed utilizing vacuums equipped with HEPA filters and by wet methods and disposed of prior to the start of other removal activities in the pipe chase.

2.21 DECONTAMINATION OF ASBESTOS-CONTAMINATED CRAWLSPACES

- 2.21.1 Decontaminate soil working towards the AFD's. In areas consisting of asbestos containing debris and contamination, wet asbestos-containing debris, pick up pieces of gross debris and dispose of as contaminated waste. Carefully rake loose soil to at least a depth of 3" until no further debris is identified. Remove any revealed asbestos containing debris.
- 2.22 Asbestos containing debris and contamination on crawlspace floor shall be removed using vacuums equipped with HEPA filters and by wet methods and disposed of prior to the start of other removal activities in the crawlspace.

2.22 TRANSITE REMOVAL

- 2.22.1 Transite panels shall be removed utilizing wet methods and shall be removed in a manner that renders the material substantially intact. Where possible, screws or nails utilized to anchor the transite panels shall be removed while operating localized HEPA-equipped ventilation or exhaust.
- 2.22.2 Cutting, abrading or breaking transite panels is prohibited unless the contractor can demonstrate that methods less likely to result in asbestos fiber release cannot be utilized.
- 2.22.3 Transite panels shall be immediately lowered to the ground and placed in leak tight containers or wrapped in two layers of 6-mil polyethylene sheeting.
- 2.22.4 All containers or packages containing transite panels shall be labeled appropriately and disposed of at a construction debris facility that accepts non-friable asbestos-containing materials. The contractor will be responsible for notifying the construction debris landfill that non-friable asbestos is being disposed of.
- 2.22.5 The contractor will be responsible for providing the building owner and consultant with a bill of lading demonstrating disposal of the material. Bill of lading must be signed by the construction debris landfill accepting the non-friable asbestos material.
- 2.22.6 For removal of transite panels indoors, the contractor will, at minimum, place critical barriers over all openings to the regulated area. Additional barriers may be required to prevent the migration of airborne asbestos fibers. Drop cloths shall be placed on all surfaces beneath the work area.

2.23 METHODS OF REMOVAL

- 2.23.1 All asbestos-containing surfaces shall be sprayed with water containing an additive to enhance penetration. The additive (wetting agent) shall be 50% polyoxyethylene ether or the equivalent, at a concentration of one ounce per five gallons of water. A fine spray of this solution must be applied to prevent fiber liberation preceding the removal of the asbestos-containing material. The material shall be sufficiently saturated to prevent/limit emission of airborne fibers.
- 2.23.2 Asbestos-containing materials shall be removed in sections appropriate for placement, while still wet, in 6-mil polyethylene bags. Bags will be marked with appropriate hazard warnings for asbestos fibers. All bags will then be placed in a second labeled bag or fiber drum and sealed with tape in accordance with applicable

regulations. Outside bags or fiber drums will be labeled with proper OSHA asbestos wording and will also have affixed the proper DOT label.

- 2.23.3 Asbestos-containing or contaminated materials (i.e., metal lath, metal pipe covering, etc.) that might puncture plastic bags must be placed in a fiber or metal drum or other container capable of preventing puncture. The container must be properly sealed and labeled.
- 2.23.4 Miscellaneous materials designated for abandonment, which are left in the work area, will be treated as asbestos-contaminated and removed and disposed of accordingly, unless otherwise specified.
- 2.23.5 Asbestos-containing materials shall not be removed with power tools.
- 2.23.6 At no time, including during daily cleanup and final decontamination, will dry sweeping be allowed.
- 2.23.7 All equipment used during asbestos removal shall be wet cleaned before it is removed from the work area. This includes, but is not limited to, scrapers, ladders, scaffold, HEPA vacuum and air filtration units, etc. Intake and exhaust ducts for the HEPA units shall be taped closed before removal from the area.
- 2.23.8 All plastic sheeting, tape, cleaning material, clothing and other disposable items used in the work area shall be double bagged and marked with appropriate asbestos labels, to be disposed of as asbestos-containing waste.
- 2.23.9 Asbestos waste that is awaiting transport to the disposal site will be kept in a weather-protected, locked location until a sufficient quantity has accumulated for a trip to the landfill.
- 2.23.10 Sealed drums and/or bags shall be transported to the approved waste disposal site in enclosed vehicles. The vehicle transport area must be completely lined with 6-mil poly. When all waste has been taken to the landfill, this poly will be removed, bagged and properly disposed of as asbestos-contaminated waste. The vehicle will be HEPA vacuumed to remove any debris.
- 2.23.11 All asbestos waste manifests shall contain the following shipping description: Hazardous Substance, Solid, N.O.S. ORM E, NA9188 (Asbestos).

2.24 WORKER DECONTAMINATION FOR CONTAINED AREAS

- 2.24.1 The Contractor shall establish a decontamination area in accordance with 29 CFR 1926.1101.
- 2.24.2 Contractor employees shall remove street clothes in the clean change room and dress in disposable full-body coveralls and respiratory protection prior to entering the work area.
- 2.24.3 The equipment room shall be used as the initial decontamination point for contaminated items (tool, equipment, waste containers) and personnel. This area is to be HEPA vacuumed or wet cleaned daily to prevent accumulation of asbestos dust. Workers will be HEPA vacuumed in this area before they enter the shower.

- 2.24.4 Upon exiting the work area, workers shall remove disposable coveralls in the equipment room. While still wearing their respirators, workers shall proceed to the shower. Adequate quantities of soap, shampoo and towels will be provided to accommodate each person who exits from the enclosure area. Respirators shall be removed while showering with soap and water. The contractor will ensure that the shower has an adequate supply of hot water (at least 105⁰ F).
- 2.24.5 Workers shall shower as a minimum:
 - 2.24.5.1 Before lunch.
 - 2.24.5.2 At the end of the workday.

Note: The shower will be maintained by the Contractor in a clean and sanitary manner. Asbestos material will not be allowed to accumulate in the shower area.

- 2.24.6 All shower water shall be filtered through 20-micron pore size filters and then a 0.5 micrometer filter before being discharged to the sanitary sewer system.
- 2.24.7 Workers shall then dress in new, clean, disposable coveralls for continued work or into street clothes at the end of the workday.
- 2.24.8 This shower and hygiene facility will be kept clean by the Contractor on a daily basis. The area will be subject to air monitoring; fiber concentrations in excess of the established background level will cause the area to be immediately shut down and decontaminated.

2.25 WORKER DECONTAMINATION FOR GLOVEBAG AND MINI-ENCLOSURES

- 2.25.1 The Contractor shall provide shower and hygiene facilities for all workers involved in glovebag and mini-enclosure work. These facilities will be set up in an area approved by the Consultant. When in use, the facility must be under HEPA negative pressure.
- 2.25.2 At a minimum, such employees will thoroughly shower, using soap and shampoo, at the end of each work shift. No employee in these activities may leave the premises until they have completed showering. The Contractor will provide the necessary soap, shampoo and disposable towels. The Contractor will ensure that the shower has an adequate supply of hot water (at least 105° F).
- 2.25.3 At a minimum, employees involved in glovebag and mini-enclosure work will wash their hands and face before rest breaks, lunch or dinner.
- 2.25.4 Shower water must be filtered first through 20-micron filters and finally through a 0.5-micron filter before being discharged to the sanitary sewer system.
- 2.25.5 This shower and hygiene facility will be kept clean by the Contractor on a daily basis.

2.26 AIR MONITORING

- 2.26.1 Representative air monitoring shall be conducted by the Consultant or his designee to determine background levels of airborne fibers before abatement begins.
- 2.26.2 During all removal and cleaning operations, the Contractor shall conduct OSHA personal monitoring. Air monitoring during abatement shall be conducted in accordance with the NIOSH Analytical Method #7400 (Revised) and shall be performed in compliance with the requirements of 29 CFR 1926.1101 (f) except as otherwise specified.
- 2.26.3 The Contractor shall conduct personal air monitoring on one (1) in four (4) of his employees conducting removal activities within a regulated area (25%).
- 2.26.4 The Consultant or its designee will be responsible for clearance monitoring.
- 2.26.5 The Consultant or his designee may conduct air monitoring in areas adjacent to and outside of the containment.
- 2.26.6 Removal shall also be stopped if any samples outside of containment enclosures exceed background concentrations. Work shall resume only when there is adequate assurance that the cause of source of excessive exposure has been identified and corrected. Authorization to resume work shall be given in writing by the Consultant.
- 2.26.7 During glovebag removal, personal sampling pumps will be worn. Any fiber counts above 0.1 f/cc from these personal samples will, at the discretion of the Consultant, require that glovebag work is halted, the area HEPA vacuumed and misted with amended water. Work may resume once these actions are complete but may be halted again if counts are above 0.1 f/cc.
- 2.26.8 Clearance Monitoring (Where Applicable)
 - 2.26.8.1 In asbestos removal areas comprised of less than 160 square feet or 260 linear feet, but greater than 50 square feet or 50 linear feet, clearance sampling shall be employed to determine that airborne fiber concentrations have been reduced via decontamination to 0.01 f/cc or less. The work area shall be certified as clean when airborne fiber concentrations, as determined by NIOSH analytical method 7400 (revised), are reduced to this level which is the compliance level established by the EPA in 40 CFR 763, AHERA. A minimum of five samples shall be collected inside each area for clearance purposes. The minimum sample volume shall be 1,200 liters/minute. Each of the five samples must be at or below 0.01 f/cc before the area will be declared clean.
 - 2.26.8.2 In asbestos removal areas greater than 160 square feet or 260 linear feet, aggressive clearance sampling techniques, using a 1 hp leafblower and 20" box fans, shall be employed to determine that airborne fiber concentrations have been reduced via decontamination to 70 structures per square millimeter (70 s/mm) or less. This compliance level is defined by the EPA in 40 CFR 763.90, AHERA TEM method. A minimum of five samples shall

be collected inside each area for clearance purposes. The minimum sample volume shall be 1,200 liters and the maximum sampling rate shall be less than 10 liters/minute. Each of the five samples must be at or below 70 s/mm or not statistically significantly different from the average of five (5) samples collected at the same time outside the affected functional space and the average asbestos concentration of the three (3) field blanks as determined by z-test calculations before the area will be declared clean.

- 2.26.8.3 PCM air samples will be analyzed by a laboratory that is a successful participant in the AIHA/NIOSH P.A.T. Program. Results will be made available within 16 hours of the sample collection.
- 2.26.8.4 TEM air samples will be analyzed by a laboratory that is accredited by the National Institute for Standards and Testing or, until accreditation is complete, a laboratory that uses the protocol specified in 40 CFR 763, Subpart "E", Appendix "A". Results will be made available in less than 24 hours of the sample collection.
- 2.26.8.5 Any area that does not pass the final clearance test will be recleaned and re-sampled at the contractor's expense.

2.27 WASTE DISPOSAL

- 2.27.1 Disposal containers shall be suitable to receive and retain any asbestos-containing materials until disposal at an approved site. The containers shall be labeled in accordance with OSHA, EPA, and DOT regulations. Containers must be airtight and watertight. Shipping manifests should be submitted to Consultant as well as disposal documentation.
- 2.27.2 As disposal containers are filled, they shall be sealed and moved to a staging area adjacent to decontamination area or equipment area. Remove waste materials from work area on a regular basis, and do not permit accumulation of disposal containers to obstruct work progress or exit ways. Containers shall be stored in a manufactured solid top van-type or semi-trailer truck completely lined with polyethylene film, including a curtained doorway at opening, and shall be locked. A similarly sealed, enclosed, and locked container is also acceptable. *Use of roll-off open topped dumpsters is prohibited*.
- 2.27.3 All bags or barrels of asbestos-containing waste should be labeled with the following information: building area, bag or barrel number, and date.
- 2.27.4 The Contractor must keep an accurate count of bags and barrels generated as waste. This count must be provided on a daily basis to the Consultant.
- 2.27.5 Both the Contractor and Landfill Operator must sign landfill receipts. The receipt must accurately indicate the number of bags and/or barrels received by the landfill. These totals must match the daily totals supplied to the Consultant.
- 2.27.6 The Landfill receipts must be provided to the Consultant within 35 days of project completion.

- 2.27.7 The Contractor will be responsible for transporting all of the waste to the landfill. Vehicles used to transport asbestos-containing waste shall be marked in accordance with EPA, DOT, and OSHA regulations during loading, transportation and unloading o waste.
- 2.27.8 The Contractor will be responsible for assuring that the Landfill Operator has a current copy of NESHAP's 40 CFR 61.156, covering disposal procedures.
- 2.27.9 The Contractor shall arrange for disposal of waste at a facility extending indemnification to the Building Owner at the Owners request.
- 2.27.10 For universal waste, the consultant for the project will pre-approve the final disposal destination. Contractor shall provide this information in writing to the consultant five days prior to commencing removal of items for packaging.
- 2.27.11 Contractor shall provide appropriate packaging and containers for disposal of the universal waste streams and obtain appropriate waste stream approvals prior to transportation and disposal. All universal waste shall be properly manifested.
- 2.27.12 The disposal facility must provide signed manifests to the Owner within 35 days of disposal.