



**CITY OF WACO**

**Purchasing Services**  
Post Office Box 2570  
Waco, Texas 76702-2570  
254 / 750-8098  
Fax: 254 / 750-8063  
www.waco-texas.com

**Date: November 16, 2022**  
**RFQ No: 2022-078**  
**Commodity: Asbestos Abatement & Demolition**

**Closing Time: 2:00 P.M., November 29, 2022**  
**Opening Time: 2:01 P.M., November 29, 2022**

RFQ Opening Location: Purchasing Services Office 1415 N. 4<sup>th</sup> Street, Waco, TX

### **Addendum No. 3**

The above-mentioned RFQ invitation has been changed in the following manner. **Sign and return addendum to the Purchasing Office by the closing time and date with your RFB response.** Returning this page signed by your authorized agent will serve to acknowledge this change. All other requirements of the invitation remain unchanged. If you have any questions, please call or stop by the Purchasing Office at the above address.

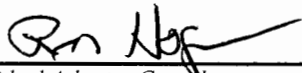
#### **THE FOLLOWING IS BEING ISSUED AS ADDENDUM NO. 3**

#### **PLEASE REVIEW THE FOLLOWING PAGES**

- 1. Asbestos Consultants Job Specifications.

Firm: \_\_\_\_\_  
Address: \_\_\_\_\_  
Signature of Person Authorized to Sign: \_\_\_\_\_  
Bid: \_\_\_\_\_  
Signor's Name and Title (print or type): \_\_\_\_\_  
Date: \_\_\_\_\_ Telephone: \_\_\_\_\_ Fax: \_\_\_\_\_

***Asbestos Abatement Specification  
City of Waco  
Vacant Building at 2128 Edna***



*Individual Asbestos Consultant*

***10-5027***

*License Number*

***01-06-24***

*License Expiration*

**ASBESTOS ABATEMENT SPECIFICATION  
VACANT BUILDING AT 2128 EDNA**

**Prepared for  
City of Waco**

**Prepared by  
Environmental Concerns, Inc.  
Waco, Texas  
November, 2022**

**ASBESTOS ABATEMENT SPECIFICATION  
VACANT BUILDING AT 2128 EDNA**

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**ASBESTOS ABATEMENT SPECIFICATION  
VACANT BUILDING AT 2128 EDNA**

**PART I – GENERAL**

**1.1 DESCRIPTION:**

This section covers labor, materials, facilities, equipment, services, employee training and testing, permits, and agreements necessary to perform asbestos abatement in accordance with these specifications, including but not limited to Environmental Protection Agency (EPA) Regulations, Occupational Safety and Health Administration (OSHA) Regulations, and any other applicable Federal, State, and Local government regulations. Whenever conflict or overlap of the above references exists, the most stringent provisions apply. The Abatement Contractor represents that it has all necessary licenses and permits required for the performance of this contract and the project. The Abatement Contractor shall determine the applicability of any process patents he/she may be employing and be responsible for paying any fees, royalties, and licenses that may be required for the use of the patented processes. The Abatement Contractor further agrees that it will indemnify and hold harmless the City of Waco (COW) and Environmental Concerns, Inc. (ECI) from any and all suits, including the costs of defending said claims or suits including reasonable attorney fees incurred by COW and ECI in connection with said claims or suits which claims or suits allege violations of patent rights or patent infringements arising out of this project or contract whether or not said allegations are valid or ultimately upheld. The Abatement Contractor specifically agrees that it will indemnify COW and ECI from such claims and suits for violation of patent rights or patent infringement even if the alleged violations result from the acts or omissions of COW and ECI or their agents or employees if said claims or suits arise from or are in any way related to or connected to this contract or project.

By submitting a bid, the Abatement Contractor acknowledges that he has investigated and satisfied himself as to a) the conditions affecting the work, including but not limited to physical conditions of the site which may bear upon site access, handling and storage of tools and materials, access to water, electric or other utilities, or otherwise affect performance of required activities; b) the character and quantity of all surface and subsurface materials or obstacles to be encountered in so far as this information is reasonably ascertainable from an inspection of the site, including exploratory work done by the COW or ECI, as well as information presented in this specification and drawings. Any failure by the Abatement Contractor to acquaint himself with available information will not relieve him from the responsibility for estimating properly the difficulty or cost of successfully performing the work. COW is not responsible for any conclusions or interpretations made by the Abatement Contractor on the basis of the information made available by COW.

**1.2 SCOPE OF WORK:**

**1.2.1 Location of Asbestos Abatement:**

The project is located at 2128 Edna in Waco, Texas.

**1.2.2 Description of Asbestos Work:**

Approximately 150 square feet of glued-down carpet, floor tile and associated mastic shall be removed in a full containment utilizing wet methods under a minimum negative pressure of -0.02 inches of water column.

Approximately 4,250 square feet of floor tile and associated mastic shall be removed in a modified full containment utilizing wet methods under a minimum negative pressure of -0.02 inches of water column.

Approximately 1 square feet of mirror mastic on drywall shall be removed in a regulated area.

**1.2.3** The modified full containment shall be equipped with the following:

high efficiency particulate air (HEPA) filtration units, readable manometer, polyethylene (poly) critical barriers, (including on the suspended ceiling if left in place), 4-mil poly splashguards on containment walls, minimum three chamber personnel decontamination unit with shower and water filtration system, and minimum two chamber waste load out facility.

**Previously used decontamination unit chambers (pop-ups) will not be allowed to start the project.**

**1.2.4** All asbestos shall be double packed into appropriately labeled 6-mil poly asbestos waste bags.

**1.2.5** The abatement contractor shall be responsible for securing the work area from unauthorized entry during working and non-working hours.

### **1.3 WORK SCHEDULE:**

The work schedule and access to the work site shall be coordinated with the COW and ECI representatives. Five 8-hour or 4-10 hour shifts will be allowed for abatement.

### **1.4 SEQUENCE OF WORK:**

Removal of asbestos-containing material, associated asbestos consulting services and related activities shall proceed in the following sequence:

**1.4.1** No pre-abatement work shall begin until the ECI representatives have approved all submittals required in this section. The Abatement Contractor shall show evidence of worker training, respiratory protection, employee medical examinations, and employee knowledge of asbestos hazards at/or before this meeting. The Abatement Contractor shall also show ability to provide access, support, and protection to all authorized visitors and inspectors.

- a. Background air samples documenting ambient conditions in the abatement areas shall be collected before any work begins. COW shall be responsible for notifying all outside contractors, as well as COW personnel, of the existence of asbestos-containing materials within the confines of the facility prior to commencement of such work.
- b. The Abatement Contractor shall secure the building and mobilize. The affected areas shall be sealed under provisions of Section 3.3.
- c. The heating, ventilating, and air-conditioning (HVAC) system shall be turned off in the building, or re-routed so that it does not operate in the work areas.
- d. The Abatement Contractor shall construct the containment area and decontamination facilities protecting all furnishings remaining inside the work area.

#### **1.4.2 Abatement Activities: FULL CONTAINMENT**

- a. Asbestos-containing material shall be removed from the affected areas using methods described in Section 3.4.
- b. All asbestos debris shall be packed in appropriately labeled 6-mil poly asbestos waste bags as it accumulates on the floor.
- c. All loose debris shall be cleaned from all surfaces and poly.

**1.4.3** Final inspection and air sampling analyzed by Phase Contrast Microscopy shall be performed as described in Sections 3.5 & 3.6 of this specification.

**1.4.4** All asbestos-containing materials, asbestos-contaminated materials, other waste materials, and unused products shall be disposed of as described in Section 3.8.

**1.4.5** The ECI representative shall notify the abatement contractor concerning clearance sampling analysis for each containment before tear down occurs.

### **1.5 VARIANCE IN QUANTITIES:**

Quantities are to be field verified by the contractor. Any quantities listed are for bid comparison only and should be considered as approximates. Change orders will not be considered unless a minimum 10% variance of quantities is proven prior to commencement of work.

### **1.6 RELATED WORK:**

No demolition or dust-producing activities shall be allowed in the vicinity of the work areas until abatement has been completed.

Power and water will be available on site.

### **1.7 AUTHORITY TO STOP WORK:**

The ECI representative shall have the authority to stop work at any time it becomes apparent that abatement work is not proceeding as required by these specifications. If at any time the ECI representative determines that conditions are not within specifications and applicable regulations, abatement can be stopped. The stoppage of work shall continue until conditions have been corrected to the satisfaction of ECI and COW representatives. Standby time required to resolve the problem shall be at the Abatement Contractor's expense.

### **1.8 DEFINITIONS:**

All terms not included shall have the definition given in applicable Federal, State, and Local publications and regulations.

**ABATEMENT** -- Procedures to control fiber release from asbestos-containing materials that includes removal, encapsulation, enclosure, repair, demolition and renovation activities.

**AGGRESSIVE AIR SAMPLES** -- Air samples collected after floors, ceilings, and walls of the work area have been swept with the exhaust of a one (1)-horsepower leaf blower. Area air shall be agitated each hour while such samples are being collected.

**AMENDED WATER** -- Amended water contains a surfactant or wetting agent, creating a solution with which asbestos fibers bond easily.

**ASBESTOS** -- The asbestiform varieties of serpentine (chrysotile), riebeckite (crocidolite), cummingtonite - grunerite (amosite), anthophyllite, and actinolite, and tremolite.

**ASBESTOS-CONTAINING MATERIAL** -- Material composed of asbestos of any type and in an amount greater than 1% by weight, either alone or mixed with other fibrous or non-fibrous materials.

**ASBESTOS-CONTAINING WASTE MATERIAL** -- Asbestos-containing material or asbestos contaminated objects requiring disposal.

**ASBESTOS FIBERS** -- This expression refers to asbestos fibers having an aspect ratio of 3:1 and longer than 5 micrometers.

**ASBESTOS-SAFE** -- Asbestos present in a building that has been rendered non-hazardous by means of encapsulation or enclosure, or has been determined to be non-friable.

**AUTHORIZED VISITORS** -- Any visitor authorized by the building owner or any representative of a regulatory agency or other agency having jurisdiction over the project.

**CLEAN ROOM** -- An uncontaminated area or room which is a part of the worker decontamination enclosure system with provisions for storage of worker's street clothes and clean protective equipment.

**CONTAINMENT AREA** -- A containment area provides isolation of the work area to prevent escape of asbestos fibers. A containment area is usually devised of floor-to-ceiling four (4) and six (6)-mil thick plastic sheeting, forming an enclosure sealed at corners and seams with duct tape to create an airtight system.

**DECONTAMINATION FACILITIES** -- A series of connected rooms, with airlocks of curtained doorways between any two adjacent rooms, for the decontamination of workers or of materials and equipment. Decontamination systems shall be contiguous and adjacent to the enclosed asbestos control area.

**DIRTY ROOM** -- A contaminated area or room which is part of the worker decontamination enclosure system with provisions for storage of contaminated clothing and equipment.

**ENCAPSULANT** -- A liquid material that when applied to asbestos-containing materials controls the possible release of asbestos fibers from the material either by creating a membrane over the surface (bridging encapsulant) or by penetrating into the material and binding its components together (penetrating encapsulant).

**ENCAPSULATION** -- The application of an encapsulant to asbestos-containing materials to control the release of asbestos fibers into the air.

**FRIABLE ASBESTOS MATERIAL** -- Material containing more than one percent (1%) asbestos by area that can be crumbled, pulverized, or reduced to powder by hand pressure when dry.

**HEPA FILTERED EQUIPMENT** -- High efficiency particulate air (HEPA)-filtered vacuuming equipment with a filter system capable of collecting and retaining asbestos fibers. Filters shall be 99.97 percent efficient for retaining fibers of 0.3 micrometers or larger.

**HEPA FILTERED VENTILATION SYSTEMS** -- The use of negative pressure during asbestos removal protects against large-scale release of fibers to the surrounding area in case of a minor breach in the containment barrier by ensuring air infiltration into the containment area. Consisting of a cabinet with an opening at each end, one for air intake and one for exhaust, the HEPA exhaust unit establishes lower pressure inside than outside the enclosed work area during asbestos abatement.

**LOCKDOWN** -- A procedure of applying a protective coating or sealant to a surface from which asbestos-containing material has been removed. Its primary function is to control and minimize airborne asbestos fiber generation resulting from any non-visible asbestos-containing residue on the substrata.

**LOOSE DEBRIS** -- This material is described under cleaning of poly in Section 3.5. This term refers to debris that can be picked up with the fingers or become dislodged from the poly.

**NON-FRIABLE ASBESTOS MATERIAL** -- Material containing asbestos in which the fibers have been locked in by a bonding agent, coating, binder, or other material so that the asbestos is well bound and shall not release fibers in excess of the asbestos control limit during any appropriate use, handling, demolition, storage, transportation, processing or disposal.

**PERSONNEL PROTECTIVE EQUIPMENT** -- Included in this category are dual-filter half-face respirators, dual-filter full-face respirators, full-face PAPR respirators, full-face type-C respirator, and full body disposable coveralls with hoods, booties, and gloves.

**SURFACTANT** -- A chemical wetting agent added to water to improve penetration.

**VISIBLE DEBRIS** -- As described for final inspections in Section 3.5, this term refers to any material that can be seen with the unaided eye.

## **1.9 PRE-CONSTRUCTION MEETING:**

Before work begins, the Abatement Contractor is recommended to schedule a pre-construction meeting with the Scott and White Hospital Health and ECI representatives to discuss such items as availability of water, power, and HEPA exhaust locations.



## 1.10 CONTRACTOR QUALIFICATIONS

**1.10.1** The Abatement Contractor shall have a valid and current DSHS Asbestos Abatement Contractor license and have certificate on site.

**1.10.2** Experience: Required experience shall include participation in at least three (3) asbestos abatement projects of similar size and complexity to this Project. Prospective contractors shall be prepared to submit, **upon request**, client name, telephone number, and location for those projects, including air monitoring sample data.

Air sample data submitted shall have been collected and analyzed by an American Industrial Hygiene Association member participating in proficiency analytical testing (PAT). Submit proof of licenses as required under the Texas Civil Statutes, Article 4477-3a, §295.

**1.10.3** Citations and Violations: The Abatement Contractor shall have on site a list of any Department of State Health Services (DSHS) violations.

**1.10.4** The Asbestos Transporter shall have a valid and current DSHS Asbestos Transporter license and have certificate on site.

**1.10.5** Personnel: The Abatement Contractor shall have on site the following personnel documentation:

- a. Valid and current DSHS supervisor license card.
- b. Valid and current DSHS worker registration card.
- c. Valid and current training certificates or cards from DSHS licensed training provider.
- d. Current medical certificate.
- e. Current respirator fit test.

## 1.11 AVAILABILITY OF TRAINED PERSONNEL:

There shall be a sufficient number of trained and qualified workers, foremen, and supervisors to accomplish the work within the required schedule. Because prep work cannot start prior to the successful decontamination of the work area, it is imperative that a sufficient number of trained personnel be engaged throughout the abatement process. **No unlicensed or unapproved person shall be employed to expedite completion of the abatement work.** If additional workers are required to finish the job on schedule after the initial submittals have been ECI representative-approved, the Abatement Contractor shall submit the appropriate documents and receive approval before new workers are permitted inside the work area.

## 1.12 STANDARD OPERATING PROCEDURES:

Development and implementation of a standard operating procedure ensures maximum protection and safeguard from asbestos exposure of workers, visitors, employees, residents, and the environment. The standard operating procedure shall ensure and entail the following:

**1.12.1** Twenty-four hour security from unauthorized entry into the workspace. Containment areas shall be locked when not manned.

**1.12.2** Proper protective clothing and respiratory protection utilized prior to entering the workspace from the outside.

**1.12.3** Safe work practice adherence in the work place, including provisions for inter-room communications, exclusion of eating, drinking, smoking, or in any way breaking respiratory protection.

**1.12.4** Proper exit practices from the workspace through the airlocks, when applicable. Labeling of all exits.

**1.12.5** Removing, encapsulating, or enclosing asbestos in ways that minimize fiber release. Asbestos shall be removed using wet methods in all areas except where noted

**1.12.6** Compliant packing, labeling, loading, transporting, and disposing of contaminated material to minimize exposure and contamination.

**1.12.7** Emergency evacuation planning for medical or safety reasons (fire and smoke) to minimize exposure, including procedures for notifying emergency personnel they are entering an asbestos-contaminated area.

**1.12.8** Safety regulation familiarization to prevent workspace accidents, especially electrical shocks, slippery surfaces, and entanglements in loose hoses and equipment.

**1.12.9** Effective supervision, air monitoring, and personnel monitoring to control exposure during abatement activity.

**1.12.10** Engineering systems maintenance to minimize exposure to work space fibers inside and outside the containment area.

**1.12.11** The number, type, and location of fire extinguishers in work areas satisfying the requirements of OSHA 29 CFR 1910.157 "Portable Fire Suppression Equipment".

### **1.13 NOTIFICATIONS, PERMITS, WARNING SIGNS, AND LABELS:**

**1.13.1** The abatement contractor will be responsible for submitting the state notification. Any change in the scope or schedule in the project shall be communicated by telephone at least 24 hours prior to the change taking place and followed up in writing to DSHS as soon as possible.

**1.13.2** The COW will be responsible for paying the state notification fee.

**1.13.3** All the permits required for the work, including disposal of asbestos in an approved landfill, shall be secured.

**1.13.4** Warning signs shall be erected around the workspace and at every point of potential entry from the outside, showing the words "DANGER, ASBESTOS CANCER AND LUNG DISEASE HAZARD, AUTHORIZED PERSONNEL ONLY, RESPIRATORS AND PROTECTIVE CLOTHING ARE REQUIRED IN THIS AREA". Warning signs shall be displayed in both Spanish and English languages, at all entrances to the regulated areas, and on the outside of critical barriers. Warning signs shall be brightly colored so that they shall be easily noticeable. The size of the signs and the size of the lettering shall be no less than the OSHA requirements.

**1.13.5** Warning signs shall be erected around the workspace and at every point of potential entry from the outside when flammable liquids are in use as defined by OSHA 29 CFR 1910.106(a)(19). Warning signs shall be displayed in both Spanish and English languages and show the words "Caution, Flammable Materials, No Smoking". Warning signs shall be brightly colored so that they shall be easily noticeable. The size of the signs and the size of the lettering shall be no less than the OSHA requirements.

**1.13.6** In case of fire, accident, or other emergency, the Abatement Contractor shall notify emergency personnel of the potential hazards of asbestos before they enter the Containment Area. Emergency personnel shall also be informed of any flammable or toxic chemicals in use in the Containment Area.

**1.13.7** OSHA & NESHAP-required labels for all plastic bags and all drums utilized to transport contaminated material to the landfill shall be provided, including the following:

- a. Owner Name**
- b. Project Address**
- c. Contractor Name**
- d. Contractor's DSHS License Number**
- e. RQ (ASBESTOS), Class 9, NA 2212, P.G. III Label**

**1.13.8** Any other signs, labels, warnings, and posted instructions necessary to protect, inform, and warn people of the hazard from asbestos exposure shall be provided.

**1.13.9** A copy of all of the latest applicable regulations from OSHA, EPA, and DSHS shall be on site in a prominent place for the workers.

#### **1.14 RESPIRATORY SYSTEMS:**

**1.14.1** All workers, foremen, supervisors, authorized visitors, and inspectors shall be provided personally issued and marked respiratory equipment approved by NIOSH or OSHA.

**1.14.2** When respirators with disposable filters are employed, sufficient filters shall be provided on-site for replacement as necessary by the worker, Supervisor or Project Manager.

**1.14.3** The minimum respiratory protection required for this project shall be a half-face dual cartridge negative pressure respirator with high efficiency particulate air (HEPA) filters. A high efficiency filter means a filter that is at least 99.97 percent efficient against mono-dispersed particles of 0.3 micrometers in diameter or larger.

**1.14.4** Respirators assigned for high environmental concentrations may be used at lower concentrations, or when required respirator use is independent of concentration.

#### **1.15 PROTECTIVE CLOTHING:**

**1.15.1** All workers, foremen, supervisors, authorized visitors, and inspectors shall be provided protective disposable clothing consisting of full body coveralls, hoods, gloves, and 18" high boot-type covers or reusable footwear. Eye protection and hard-hats as required by job conditions and safety regulations shall be provided.

**1.15.2** Reusable footwear, hard-hats, and eye protection devices shall be left in the "Contaminated Equipment Room" until the end of the asbestos abatement work, but shall be cleaned daily of all bulk material.

**1.15.3** All disposable protective clothing shall be discarded and disposed of as asbestos waste each time the containment area is exited.

#### **1.16 ENCLOSURES, SHOWERS AND TOILETS:**

**1.16.1** Each containment shall be equipped with a complete three (3) chamber personnel decontamination facility and a minimum two chamber waste load-out facility constructed with a minimum of two (2) layers of 6-mil polyethylene on floors and two (2) layers of 4-mil polyethylene on walls and ceilings unless otherwise specified in this specification. An Airlock system permitting ingress and egress without permitting air movement shall be required. It shall consist of a minimum of two (2) curtained doorways a minimum of three (3) feet apart. Each curtained doorway shall be constructed by placing two (2) overlapping sheets of plastic over a framed doorway, securing each along the top of the doorway. The first sheet shall be secured on one side of the doorway and the second sheet shall be secured on the other side of the doorway.

**1.16.2** The Personnel Decontamination Facility shall consist of a minimum of three chambers.

**a)** The Clean Room shall be used by workers and visitors to change from street clothes to disposable protective clothing and gear prior to entering the contaminated area and to dress into street clothes after they have showered and dried in the shower room as they exit the contaminated area.

**b)** Showering facilities with hot and cold water shall be required in a shower room arranged to service workers and visitors as they exit the contaminated area. The shower shall have an overhead hot and cold mixing showerhead and measure a minimum of 3' x 3' x 7' high. Provisions to prevent any contaminated run-off from the shower room shall be installed. The shower floor shall be elevated approximately 4" above the shower pan with grooves for proper drainage into the pan. Water shall be filtered through a 5-micron filter for proper filtration of contaminated water. Provisions to prevent any contaminated run-off from the shower room shall be installed, including splash guards on both clean room and equipment room sides of the shower to minimize water splashing into adjacent areas. Soap and shampoo shall be provided. Shower room facilities and size shall be adequate to allow decontamination and thorough washing of all workers and visitors within the 15 minute escape time allowed under air compressor failure.

**c)** The Dirty Room with storage for contaminated clothing and equipment shall be required. Workers and visitors shall discard disposable protective clothing, except the respirator, as they prepare to enter the shower room.

**1.16.3** The waste load-out facility shall consist of a minimum of two chambers.

**a)** The bagwash shall be used to rinse off the single bagged waste.

**b)** The clean room shall be used to double bag waste.

### **1.17 PERSONNEL PROTECTION AND DECONTAMINATION:**

All abatement personnel shall be provided with the specified protective clothing and gear. All personnel entering and leaving the workspace shall adhere to procedures as follows:

**1.17.1** Entering from the outside: Change from street clothes into protective clothing and clean protective gear.

**1.17.2** Exiting the Work Area: Dispose of all protective clothing into plastic bags labeled as asbestos waste.

**1.17.3** All personnel shall be trained in the procedures for evacuation of injured workers and handling potential fires. Aid to a seriously injured worker shall be provided without delay for decontamination. Provisions to minimize exposure of rescue workers and contamination shall be instituted during evacuations and fire procedures.

**1.17.4** The Abatement Contractor shall instruct all employees and workers in the proper care of their personally issued respiratory equipment, including daily maintenance, sanitizing procedures, etc.

### **1.18 SAFETY REQUIREMENTS**

**1.18.1** Fire Safety: A minimum of one fire extinguisher with a minimum National Fire Protection Association rating of 10BC (dry chemical) shall be placed within each abatement project containment for every 3,000 square feet, or fraction thereof, of containment area. Each fire extinguisher shall be maintained in a fully charged and operable condition.

**1.18.2** Electrical Safety: All active electrical service lines within the regulated and containment area shall be connected through ground-fault circuit interrupter (GFCI) units.

### **1.19 EXPOSURE CONTROLS:**

**1.19.1** Supply and ventilated exhaust air under HEPA filtration shall be maintained in containment areas to provide one workplace air change every 15 minutes and to create a minimum negative pressure of -0.02" of water as measured by a manometer with working strip chart. Until final clearance samples have been collected and analyzed, the negative air system shall operate 24 hours a day.

**1.19.2** HEPA ventilation capacity sufficient to provide a minimum of four (4) air changes per hour in the work areas shall be provided.

**1.19.3** The ventilation system shall be in accordance with EPA recommendations in the *Guidance for Controlling Asbestos-Containing Materials in Buildings, Appendix F*. Prior to set-up, the ECI representative shall inspect the ventilation fan assemblies for proper HEPA filtration seals. The filter shall be properly placed into the filter holder and the filter holder shall have a flexible permanent gasket to prevent air leakage around the filter holder. The use of caulking material shall not be permitted in place of a permanent gasket.

**1.19.4** In a multi-room abatement project, supply and exhaust units sufficient to create a stream of air away from the workers' faces (as demonstrated by smoke tube testing) shall be provided in each room. This shall occur without over pressurizing the containment area. Excessive ventilation that could possibly damage plastic isolation barriers or pull poly protection from walls shall be avoided.

**1.19.5** All HEPA-filtered air shall be vented to non-contaminated areas outside the building.

### **1.20 PRE-JOB SUBMITTALS:**

**1.20.1** The pre-job submittals shall be prepared by the Abatement Contractor and shall be on site during the entire abatement process. (Attachment #1). All submittals must be legible copies of the original documents.

**1.20.2** Removal shall not commence until all pre-job submittals have been approved by the ECI representative.

### **1.21 POSTING OF DOCUMENTS:**

The following documents are required to be posted conspicuously by licensees involved in the project to be visible at the entrance to the regulated area and must not be covered by any other documents:

- (a) The asbestos information poster issued by the department.
- (b) Copies of any violations issued as evidence by an order from the federal or state asbestos-regulating authorities within the preceding 12 months from any asbestos project.

### **1.22 ADDITIONAL DOCUMENTS REQUIRED TO BE ON-SITE:**

- (a) If conducting O&M work, a copy of the EPA "Green Book".
- (b) If conducting RFCI work, a copy of "Recommended Work Practices for the Removal of Resilient Floor Coverings"

### **1.23 APPLICABLE PUBLICATIONS:**

The publications listed below form a part of this specification as referenced. The publications are named in text by the basic designation only.

Environmental Protection Agency (EPA): 40 CFR Part 61 - Subpart M, 40 CFR Part 763 - Subpart G, 40 CFR Part 763 - Subpart E - Appendices A, B, C & D, and 40 CFR Part 763 - Subpart F- Appendix A.

Occupational Safety and Health Administration (OSHA): 29 CFR §1926.1101, 29 CFR §1910.134 and 29 CFR §1910.146.

National Institute for Occupational Safety and Health (NIOSH): "Respiratory Protection ... A Guide for the Employee".

National Emissions Standards for Hazardous Air Pollutants (NESHAP): Hazardous Waste Disposal Standards.

## **PART II - PRODUCTS**

### **2.1 MATERIALS: Lockdown Encapsulants**

The lockdown agents shall be penetrating sealants and shall meet the following criteria:

**2.1.1** Contractor-selected lockdown agents (encapsulants) shall demonstrate effective performance under the tests conducted by an EPA-approved independent testing laboratory. Encapsulants shall be acceptable by architectural standards and be ECI representative-approved. Material Safety Data Sheets must be submitted for each proposed encapsulant. (See Attachment #1 - Submittal Checklist)

**2.1.2** Encapsulants shall not be noxious or toxic to application workers or subsequent building occupants and shall possess high flame-retardant characteristics as well as low smoke emission ratings.

**2.1.3** Encapsulants shall exhibit some water vapor permeability to prevent condensation accumulation and common cleaning agent solution resistance.

**2.1.4** Encapsulants shall have acceptable weathering and aging characteristics and withstand most impact or abrasion to protect the encapsulants' surface.

**2.1.5** Encapsulants shall be compatible with all insulating material and acoustic plaster likely to be applied to the stripped surfaces and demonstrate substrata adherence capability.

## **2.2 MATERIALS: Mastic Removers**

Solvents with a flash point of 140 degrees Fahrenheit or below shall not be used.

## **2.3 TOOLS AND EQUIPMENT:**

**Airless Sprayer:** Airless sprayers, suitable for application of encapsulating material, shall be used.

**Asbestos Filtration Device (AFD):** Asbestos filtration devices shall utilize high efficiency particulate air (HEPA) filtration systems.

**Scaffolding:** Scaffolding, as required to accomplish the specified work, shall meet all applicable safety regulations, including OSHA 29 CFR 1910.28.

**Transportation Equipment:** Transportation equipment, as required, shall be suitable for loading, temporary storage, transport, and unloading of contaminated waste without exposure to persons or property.

**Vacuum Equipment:** All vacuum equipment shall utilize HEPA filtration systems.

**Water Sprayer:** The water sprayer shall be an airless or other low-pressure sprayer for amended water application. Hand-held pump spray tanks shall be used only for small jobs.

**Manometer:** A manometer with a working continuous strip chart shall be provided by the Contractor. Using the manometer, the Contractor shall assure that the negative pressure within the full containment area measures a minimum -0.02".

**Other Tools and Equipment:** The Contractor shall provide other suitable tools for the stripping, removal, encapsulation, and disposal activities including but not limited to hand-held scrapers, nylon brushes, sponges, rounded edge shovels, and carts. No spray foam shall be used to seal any openings because of the potential fire hazard associated with this material.

The number, type, and location of fire extinguishers in work areas satisfying the requirements of OSHA 29 CFR 1910.157 "Portable Fire Suppression Equipment".

## **PART III – EXECUTION**

### **3.1 UTILITIES:**

**3.1.1** Provide a weatherproof, ground-faulted temporary electric power service and distribution system of sufficient size, capacity, and power characteristics for each use. Existing power to each abatement area shall be shut off prior to any removal. The cost to establish temporary electrical service for the Abatement Contractor's use shall be borne by the Abatement Contractor.

**3.1.2** Existing electrical service to the building may be used for temporary electrical power during abatement work. The Abatement Contractor shall consult with the COW's representative for the location of available electrical service outside of the work areas and shall tie into the existing system at a location acceptable to the Hospital. Tie-in and disconnection of electrical service shall be completed by a licensed electrician.

**3.1.3** The service cost of electrical power used from the building shall be paid by COW.

**3.1.4** Provide circuit and branch wiring, with area distribution boxes located so that power and lighting is available throughout the project by the use of construction type power cords. All branch circuits must originate from a ground fault circuit interrupter located outside the containment. In general, run wiring overhead and rise vertically where wiring will be least exposed to damage from construction operations.

**3.1.5** Provide adequate artificial lighting for all areas of work when natural light is not adequate for work.

**3.1.6** Service to decontamination unit subpanel and disconnect shall be sized and equipped to accommodate all electrical equipment required for completion of the work.

**3.1.7** Provide identification warning signs at power outlets, which are other than 110-120 volt power. Provide polarized outlets for plug-in type outlets, to prevent insertion of 110-120 volt plugs into higher voltage outlets. Dry-type transformers shall be provided where required to provide voltages necessary for work operations.

**3.1.8** Provide receptacle outlets equipped with ground-fault circuit interrupters, reset button and pilot light, for plug-in connection of power tools and equipment.

**3.1.9** Use only grounded extension cords; use "hard-service" cords where exposed to abrasion and traffic. Use single lengths or use waterproof connectors to connect separate lengths of electric cords, if single length will not reach areas of work.

**3.1.10** All heating, ventilating, and air conditioning (HVAC) within the work area shall be turned/sealed off or re-routed during abatement activities until satisfactory final clearance has been achieved. All HVAC system filters servicing the work area shall be removed and disposed of as asbestos waste. All filters shall be replaced with a set of new filters at the end of the decontamination work. Exhaust from any internal combustion engines on-site shall be placed so as not to enter respirator or containment supplied-air intake.

**3.1.11** Only explosive-proof electrical equipment may be used in the containment area. All electrical equipment used in containment areas shall meet the safety requirement described in 29 CFR 1910.307.

### **3.2 NOTIFICATION OF EMERGENCY SERVICES:**

Prior to the start of the project, the Abatement Contractor is recommended to notify the Police and Fire Departments of the location and schedule of the project.

### **3.3 PRE-ASBESTOS ABATEMENT PREPARATION:**

**3.3.1** Prior to any abatement work in an area, the area shall be sealed off to anyone other than trained personnel and authorized visitors. Signs shall be erected around the perimeter in accordance with EPA and OSHA regulations and this specification. Twenty-four hour security against unauthorized entry shall be provided during the abatement process. A log shall be maintained of all people entering and exiting the work place.

**3.2.2** All penetrations, electrical boxes, vents, suspended ceilings, and openings, etc., shall be sealed off with one (1) layer of poly critical barriers. If applicable, floor drain covers shall be removed and the drains stopped up with rags. Containment floors not abated shall be covered with two layers of 6-mil poly, and containment walls shall be covered with 4-mil poly splashguards.

**3.2.3** Where feasible, a viewing window will be included in the containment which will permit the viewing of at least 51% of the abatement work area. The window shall be constructed of plexiglass or equivalent which measures approximately 18 inches by 18 inches. The bottom of the window will be at a reasonable viewing height from the outside floor.

### **3.4 ASBESTOS REMOVAL:**

**3.4.1** Each full containment areas shall be prepared as noted in Section 3.3. of this specification.

**3.4.2** In areas with contaminated surfaces, all visible asbestos debris shall be picked up using the procedures outlined below.

- a. Enclose containment area.
- b. Set HEPA filtration.
- c. Pick up debris. This should be done before abatement to reduce the spread of contamination.

**3.4.3** If applicable, before removing any ACM, all furniture and fixtures shall be cleaned with HEPA vacuum and wet wipe methods and removed from containment area. Articles that cannot be removed shall be cleaned thoroughly and protected from water damage.

**3.4.4** Except as noted herein and/or in drawings, the ACM shall be sprayed with water containing a wetting agent. The wetting agent shall be 50% poly-oxethylene ester, or the equivalent, mixed proportionately one ounce to five gallons of water. This amended water shall be applied to the material as a fine low-pressure spray to minimize fiber release. Affected material shall be saturated sufficiently throughout the removal process so that no dry asbestos is removed. All asbestos material shall be pre-saturated prior to removal. A continuous fine mist of amended water shall be maintained in ambient work air and on all containment poly to maximize fiber control. Water shall not be bagged under any circumstances. Standing water shall be removed through a filtered water system. The filtered water system shall be equipped with a minimum 5-micrometer filter for proper filtration of contaminated water.

**3.4.5** Once removal begins, material shall be bagged as it is removed; no accumulation of asbestos debris shall occur. Immediately following floor tile removal and waste load out, the floor may be sprayed with an approved mastic removing agent. The removed mastic material shall be packed into labeled, 6-mil poly bags to prevent drying. **An approved absorbent material shall be added to the bags of removed mastic slurry. Putting the material back into the 5 gallon buckets will not be allowed.**

**3.4.6** Immediately following removal, the material shall be packed, deflated, and sealed inside 6-mil asbestos waste bags with OSHA & NESHAP-required labels as described in Section 1.13.7. Bagged material shall be rinsed off inside the containment area, removing gross contamination, before being carried into the bagwash decontamination unit. Transfer of bagged material through the decontamination unit shall be performed by a minimum of three (3) workers in the following manner:

- a. Bagged material shall be rinsed in the bagwash unit.
- b. The worker rinsing bagged material in the decontamination unit shall take great care to ensure that all rinse water is contained for filtration.
- c. Twice-rinsed bags shall be carried into the clean room, placed in a second bag, excess air evacuated, and sealed with duct tape.
- d. All work shall discontinue in the containment area if visible debris is detected in the clean room. Work shall not resume until the visible debris is removed from the clean room.

**3.4.7** The exterior of the bags shall be thoroughly cleaned prior to loading on the truck for transportation to the landfill. **No asbestos-containing waste shall leave the work site until the Waste Shipment Record is signed by an authorized Abatement Contractor representative.** The ECI project manager will not sign any manifests.

**3.4.8** Disposal shall be made in an EPA-approved and Texas Commission on Environmental Quality (TCEQ) permitted landfill. Bagged material shall not be thrown into landfills in a way that may cause breakage. If bags are being transported in drums and removal from the drums creates breakage, the drum shall be included with bag disposal. The Abatement Contractor shall ensure that bags do not break.

**3.4.9** All used plastic, tapes, cleaning material, and clothing shall be treated as and disposed of as asbestos waste material.

### **3.5 FINAL DECONTAMINATION AND INSPECTION:**

**3.5.1** Following a thorough wet cleaning of all surfaces, any floor or wall poly shall be removed and the second cleaning initiated. Once second cleaning completed, the Abatement Supervisor shall conduct the initial visual inspection before the ECI representative inspects the area for existing asbestos residue remaining on surfaces.

**3.5.2** If the visual inspection does not reveal any dust or other signs of contamination, the abated area may be sprayed with an approved lockdown encapsulant.

**3.5.3** After sufficient dry time as determined by the ECI representative, final clearance sampling shall be initiated. Final clearance samples shall be collected under aggressive conditions as described in Section 3.6 Final Testing.



### 3.6 FINAL TESTING:

**3.6.1** The final testing shall take place under active agitation of the air in the containment space. Aggressive sampling shall be conducted by the ECI representative to ensure that the space may be certified as asbestos-safe under occupied conditions. A minimum sample volume of 1,250 liters shall be collected, approximately 2 hours of pump running time. Clearance air samples shall be analyzed by Phase Contrast Microscopy (PCM). The area shall be certified clean when air sample results collected under the above conditions reveal fiber levels below 0.010 f/cc. using NIOSH 7400 counting methods.

**3.6.2** After satisfactory final clearance sampling is achieved, decontamination material, duct tape, and disposable contaminated equipment shall be disposed of as asbestos waste. All reusable contaminated equipment, such as masks, hard-hats, scaffolding etc., shall be thoroughly decontaminated using wet cleaning techniques prior to disassembling decontamination facilities. All remaining barriers and the decontamination facility shall be removed. The poly, duct tape, and decontamination facility material shall be disposed of as asbestos waste. A final inspection shall be carried out by the ECI representative to ensure that no debris is produced during the dismantling operations. If evidence of accumulated debris is found behind critical barriers, the area shall be re-cleaned.

**3.6.3** At the discretion of and cost to COW, Transmission Electron Microscopy (TEM) may be employed to confirm final testing results in any abatement area.

**3.6.4** If the results of the final testing are not satisfactory, thorough wet cleaning and/or HEPA vacuuming shall be repeated until the required decontamination levels have been confirmed. The cost of additional clearance sampling and ECI representative labor costs and expenses shall be borne by the Abatement Contractor.

**3.6.5** After all post abatement activities and cleanup have been completed, the Abatement Contractor shall arrange a meeting with the COW and ECI representatives for a final walk-through and inspection of the work area.

### 3.7 PERSONNEL AND AREA MONITORING:

**3.7.1** The ECI representative shall closely monitor abatement performance and execution. Monitoring shall continue both inside the work area and its contiguous environment to ensure full compliance with specifications and all applicable regulations. Air contamination levels shall be maintained outside the containment area at or below 0.010 f/cc.

**3.7.2** Detection of fiber counts above 0.010 f/cc outside a containment area shall result in immediate cessation of abatement activities and decontamination of areas where elevated fiber counts have occurred. Work inside the containment area shall not resume until the contamination source has been detected and corrected and ambient air levels have been re-established outside the containment area at 0.010 f/cc or less.

**3.7.3** The abatement contractor shall be responsible for monitoring employees to comply with 29 CFR 1926.1101. The cost of personal monitoring and lab analysis shall be borne by the abatement contractor. Air sample data submitted shall have been collected and analyzed by an American Industrial Hygiene Association member participating in proficiency analytical testing (PAT). **Personal sample results must be posted by the start of the next shift in order to insure adequate respiratory protection.** Submit proof of licenses as required by TAHP, §295.52.

**3.7.4** The Owner shall bear all costs in connection with the work in Section 1.2.2, performed by the ECI representative for the initial analysis. The costs of all subsequent laboratory analyses shall be borne by the Abatement Contractor.

**3.7.5** Examples of subsequent asbestos consulting costs to be borne by the Abatement Contractor include, but are not limited to, the following:

- a. ECI's labor and analytical cost required because an area became contaminated outside the containment area.
- b. ECI's services and analytical fees necessary to monitor abatement work that takes place due to work stoppage or after the time limits set under Section 1.3 of this specification.
- c. ECI's labor and lab costs required to collect samples because the specified limits were exceeded during the initial tests.

- d. ECI's labor and travel costs required for an inspection called for by Contractor if Contractor fails visual inspection.

### 3.8 DISPOSAL ACTIVITIES:

**3.8.1** It is the responsibility of the Abatement Contractor to determine current waste handling, transportation, and disposal regulations for the work site and for each waste disposal landfill. The Abatement Contractor shall comply fully with these regulations and all U.S. Department of Transportation and EPA requirements.

**3.8.2** All waste materials and unused products that meet the definition of a listed or characteristic hazardous waste shall be disposed of according to requirements set forth by the EPA Resource Conservation and Recovery Act (RCRA) including all necessary permits and other documents. The Abatement Contractor shall coordinate disposal of all hazardous waste generated on the site with the COW. **No hazardous or asbestos-containing waste shall leave the work site until the Waste Shipment Record is signed by an authorized Abatement Contractor representative.**

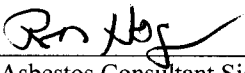
**3.8.3** During handling of the asbestos-containing or contaminated waste at the approved landfill site, the Abatement Contractor shall provide the following services:

- a. Inspect bags and barrels individually for integrity.
- b. Remove bags from the disposal vehicle and place them individually onto the landfill.
- c. Decontaminate disposal vehicle cargo space.
- d. During transport or after burial in an EPA-approved and TCEQ permitted landfill, any contamination throughout the lifetime of the material remains the responsibility of the building owner removing it.  
Active waste disposal sites that receive asbestos-containing waste material shall at the end of each operating day, or at least once every 24-hour period, while the site is in continuous operation, be required to cover ACM that has been deposited at the site during the operating day or previous 24-hour period, with at least six (6) inches of compacted non-ACM or with a resinous or petroleum-based dust suppression agent that effectively binds dust and controls wind erosion.

**3.8.4** The Abatement Contractor shall document actual disposal of the waste at the designated landfill by completing a Disposal Certificate and forwarding the original to the COW.

### 3.9 RESPONSIBILITY FOR DAMAGES:

The Abatement Contractor shall be responsible for protecting ECI's sampling pumps, and any damage resulting from Abatement Contractor personnel actions shall be repaired at the expense of the Abatement Contractor.

	<u>11-15-22</u>
Individual Asbestos Consultant Signature	Date
<u>Ron Hogan</u>	<u>10-5027</u>
Individual Asbestos Consultant Name (Print)	DSHS - IAC No.

--- END ---

## **ATTACHMENTS**

## PRE-JOB SUBMITTAL CHECKLIST

### CITY OF WACO VACANT BUILDING AT 2128 EDNA

Abatement Contractor shall have on site descriptions of the following products and procedures before work commences:

	App'd		
	Y	N	NA
1. Security system, warning signs, and generator labels for bags and/or drums.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Material Safety Data Sheets for all encapsulants, wetting agents, and other chemicals to be used.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Standard Operating Procedure showing how workmen, visitors, and employees shall be protected from exposure, how spaces outside the work area shall be protected from contamination until completion of the work and how the containment area shall be secured when the contractor is not on-site.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. A written program describing the Abatement Contractor's use and maintenance of the personnel respirators shall be included.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Description of approved HEPA filtration machines to be used. Manufacturer's certification that equipment meets all requirements of all applicable regulations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Fire and emergency evacuation plan, including plans for emergency exit from the work areas. Plan shall be in accordance with OSHA 29 CFR 1910.157 "Portable Fire Suppression Equipment".	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Current Texas Department of State Health Services (TDHSH) Physicians Written Statements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Current Training Certificates.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Current DSHS Licenses or Registration. (Contractor, Employees, Transporter, AMT, Laboratory)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Current Respiratory Fit Test for each employee.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Name and location of proposed landfill. Landfill must be approved by the EPA and permitted by Texas Commission on Environmental Quality (TCEQ).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Valid DSHS notification required by federal and state regulations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Copies of notices sent to suppliers of rental equipment and vehicles informing them of the nature of the use of their equipment.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Copy of Current Insurance Certificate.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Environmental Concerns, Inc. Representative Signature

Date

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Abatement Contractor

On Site Supervisor

Attachment #1

**CITY OF WACO  
VACANT BUILDING AT 2128 EDNA**

A = Air Monitoring Technician

# PRE-ABATEMENT INSPECTION CHECKLIST

## CITY OF WACO VACANT BUILDING AT 2128 EDNA

I = In Compliance

N = Not In Compliance

N/A = Not applicable

	I	N	N/A
1. DSHS Demolition/Renovation Notification on site	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Contractor and personnel licensing, training, medical, fit test	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. OSHA, EPA, NESHAP, NIOSH, and TDSHS regulations on-site	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Posters – TDH, minimum wage, worker's comp., etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Contractor SOP's and Respirator program on site	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Emergency telephone numbers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Toilet facilities provided	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Work site barriers and warning signs (Spanish/English)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Ventilation serving or passing through the abatement area turned off	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Electrical system in abatement area turned off	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Electrical panel outside the work area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Temporary GFCI panel installed by licensed electrician	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Temporary panel boards properly grounded	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Ground fault interruption provided on all equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Extension cords in acceptable condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Equipment properly grounded	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Minimum 3-chamber Decontamination facility with airlocks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Shower with hot water supply and stable non-skid surface	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. Shower drains, 5-micron filter, and proper water disposal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. Soap from dispenser and towels provided	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Approved respirators, new respirator cartridges, disposable clothing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Critical barriers, floor/wall poly and viewing window in place	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23. Preparation work secure with HEPA filtration units on	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Negative air quantity and pressure drop confirmed on site	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. Minimum of four air changes per hour with a pressure differential of at least a -.02 inches of water column	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26. Negative air machines have properly installed filters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27. Make-up air sources provide adequate circulation and air cleaning	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28. Ladders are non-conducting and stable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29. HEPA vacuum is clean with filters properly installed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30. Temporary lighting is adequate and properly wired and grounded	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31. Fire extinguishers of proper size and rating	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32. Adequate escape routes properly marked with illuminating paint	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33. Acceptable amended water sprayers and chemicals provided	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34. Load-out sealed unless needed for make-up air	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35. Disposal bags and/or barrels provided and properly labeled	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36. Disposal vehicle properly lined and has proper U.S. DOT markings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37. Access controlled	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ECI Representative Name (Print)

Signature

Date

Abatement Contractor

On Site Supervisor

Attachment #3

## INITIAL VISUAL INSPECTION

CITY OF WACO  
VACANT BUILDING AT 2128 EDNA

CONTAINMENT AREA: \_\_\_\_\_

1. Ceiling Clean	Yes	No	N/A
2. Pipes Clean	Yes	No	N/A
3. Vents and/or Ducts Clean	Yes	No	N/A
4. Top of False Ceiling Clean	Yes	No	N/A
5. Fixtures Clean	Yes	No	N/A
6. Structural Members Clean	Yes	No	N/A
7. Walls Clean	Yes	No	N/A
8. Floors Clean	Yes	No	N/A
9. Personnel Decon and Bagwash Clean	Yes	No	N/A

ECI Representative: \_\_\_\_\_ Date: \_\_\_\_\_

Contractor: \_\_\_\_\_ Supervisor on site: \_\_\_\_\_

Attachment #4

## FINAL POST ABATEMENT INSPECTION

### CITY OF WACO VACANT BUILDING AT 2128 EDNA

1. Removal completed as specified:	Yes	No	N/A
2. All poly and tape removed:	Yes	No	N/A
3. Tape residue removed:	Yes	No	N/A
4. Loose debris from tear down removed:	Yes	No	N/A
5. Floor mopped with disinfectant:	Yes	No	N/A
6. Abatement Contractors trash removed:	Yes	No	N/A
7. Asbestos Waste container off site:	Yes	No	N/A
8. Non-Asbestos Waste container off site:	Yes	No	N/A

ECI Representative: \_\_\_\_\_ Date: \_\_\_\_\_

Contractor: \_\_\_\_\_

Supervisor on site: \_\_\_\_\_



## **ABATEMENT DRAWING**

YMCA Learning Center  
2128 Edna

