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SECTION 1. ASBESTOS BIDDING REQUIREMENTS

Part 1.1 - Site Investigations

By submitting a bid for asbestos related

injury and property damage liability combined.

(b) The Owner, Ow

<u>Airlock</u> - A system for permitting ingress and egress with minimum air movement between a contaminated area and an uncontaminated area, typically consisting of two curtained doorw

<u>Bidder</u> - A duly licensed and accredited asbestos contractor who was present at the bid-walk and has submitted a bid.

Cal/OSHA - California Division of Occupational Safety and Health.

<u>Certified Asbestos Consultant (CAC)</u> - A certified asbestos consultant as defined by the Department of Industrial Relations (Cal/OSHA).

<u>Certified Industrial Hygienist (CIH)</u> - An industrial hygienist certified in Comprehensive Practice by the American Board of Industrial Hygiene.

<u>Clean Room</u> - An uncontaminated area or room which is a part of the worker decontamination enclosure system with provisions for storage of workers' street clothes and clean protective equipment.

<u>**Competent Person</u></u> - A person who is an accredited EPA Asbestos Contractor/Supervisor and whose accreditation is current.</u>**

<u>Containment</u> - Isolation of the work area from the rest of the building to prevent escape of asbestos fibers.

<u>Contract Documents</u> - Written contractual agreements between the Owner and the Contractor that pertain to the work on this project.

<u>Contractor</u> - The individual and/or legal entity and its subcontractors and employees of the contractor and subcontractor awarded the contract.

<u>Contractor/Supervisor</u> - A person who successfully completed an initial U.S. EPA and/or state-approved five-day AHERA accreditation course and who has maintained that training through approved annual refresher training, and possesses current and valid AHERA accreditation documentation as a AHERA accredited Contractor/Supervisor.

<u>Class I, II, III, or IV Work</u> - Work classes described in 8 CCR 1529 that describe different levels of asbestos work.

<u>Critical Barrier</u> - Critical Barriers used to restrict water and air flow. Critical Barriers are the barriers placed over openings in the walls and ceilings of a work area in order to ensure that airborne fibers cannot escape the work area via these openings. The Contractor will construct impermeable barriers at all exits or openings, including doorways, duct chases, mechanical shafts, elevator shafts, floor openings, drains, and the like, so that all possible exit or entrance routes are effectively barricaded and sealed. Unless otherwise specified in the Contract documents, critical barriers shall be constructed of at least one layer of 6-mil thick poly.

<u>Critical Barrier Negative Pressure Test</u> - Required test for negative pressure with only critical barriers and air filtration units installed. This test must be conducted prior to the installation of cleaning barriers, but may be conducted with or without the decontamination unit in place.

Decontamination Enclosure System - (Also known as Decon or Waste Transfer Decon) A series of connected rooms designed for the decontamination of workers and equipment that is separated from the work area and from each other by z-flapped curtained doorways. This unit shall be constructed with at least six-mil poly for the floors, walls, and ceiling. All decontamination enclosure systems used for worker entry and exit shall be equipped with a shower.

Demolition - The wrecking or taking out of any load-supporting structural member of a facility together with any related handling operations.

DOP - Dispersed Oil Particulate which are normally used as an agent for testing the efficiency of HEPA filters.

<u>Dust or Debris</u> - Any visible dust or debris remaining in an abatement area will be considered asbestoscontaining residue.

Encapsulant - A liquid material which can be applied to asbestos-containing material which 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).

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<u>Mini-Enclosure</u> - Mini-enclosures shall be constructed of 6 mil polyethylene (attached with tape and/or glue to walls and floors) and shall be small enough for 1-2 workers who can enter the enclosure, complete the abatement exercise, pass out the containerized debris and exit.

Monitoring - May include:

- a) Visual inspection for the presence of visible emissions; or
- b) Air monitoring performerable)

- d. "Asbestos Hazard Emergency Response Act", U. S. Environmental Protection Agency, 40 CFR, Part 763. Final Rule and Notice.
- e. Applicable local county Air Pollution Control Owners and Air Quality Management Districts.

<u>Removal</u> - The stripping of any asbestos-containing materials from surface or components of a facility.

<u>**Renovation**</u> - Altering in any way one or more facility components. Operations in which load-supporting structural members are wrecked or taken out are excluded.

<u>Shower Room</u> - A room between the clean room and the equipment room in the decontamination enclosure with hot and cold or warm running water controllable at the tap and suitably arranged for complete showering during decontamination. The shower room must be equipped with an overflow pan to contain water splashed, leaked or spilled out of the shower unit.

<u>Staging Area</u> - Either the holding area or some area near the waste transfer airlock where containerized asbestos waste has been placed prior to removal from the work area.

<u>Structural Member</u> - Any load-supporting member of a facility, such as beams and load-supporting walls or any non-load-supporting member, such as ceilings and non-load supporting walls.

<u>Submittals</u> - Pre, interim, and post job documents submitted by the contractor to Owner/Owner's Representative as indicated in General Requirements and Bidding Requirements.

Surfactant - A chemical agent added to water to improve wetting and penetration into asbestos materials.

TEM - Transmission Electron Microscopy according to AHERA specifications for Level II analysis.

<u>Visible emissions</u> - Any emissions containing particulate asbestos material that are visually detectable without the aid of instruments. This does not include condensed uncombined water vapor.

<u>Waste Load-out/Transfer System</u> - A decontamination system utilized for transferring containerized waste from inside to outside of the work area. A series of three connected rooms used for the load-out of asbestos-containing materials that have been properly containerize

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SECTION 3. NOTIFICATIONS, SUBMISSIONS, POSTINGS

Part 3.1 - Notification

Prior to commencement of work the Contractor shall send notices of work to be completed to the agencies listed below with a copy of each to be provided to the Owner or its representative at the pre-construction meeting.

For compliance with 40 CFR part 61.146 of Subpart M, send notice at least 10 working days prior to start of work to the following appropriate agencies if trigger quantities of RACM are met or for a demolition:

Sacramento Metropolitan AQMD 777 12th Street, Third Floor Sacramento, CA 95814-1908 Phone: (916) 874-4800 Fax: (916) 874-4899

U.S. EPA - Region IX Asbestos NESHAP Notification (Air 5) 75 Hawthorne Street San Francisco, California 94105 Tel (415) 947-4182

For compliance with Title 8, California Administrative Code, Construction Safety Order 1529, Asbestos Regulations send written notice at least one day prior to start of work to:

State of California Department of Occupational Safety and Health (Cal/OSHA)

These notices shall include, at a minimum, the name and address of the Contractor, the name and address of the work site, the type of work to be done including the percent asbestos content with the second address of the work site, the type of work to be done including the percent asbestos content with the second address of the work site, the type of work to be done including the percent asbestos content with the second address of the work site, the type of work to be done including the percent asbestos content as bestos content

Submit copies of insurance certificates which meet requirements as outlined in Section 1, Part 1.2, of this Specification.

Submit copies of notifications to government agencies.

Submit proof satisfactory to the Owner that required permits have been acquired applicable to the project being performed agnetimetà

about unusual conditions in the workplace environment (e.g., high temperatures, humidity, chemica

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performance during the project.

Submit upon request during or after completion of the project, documentation deemed by the Owner to be pertinent to the project.

Part 3.4 - On-Site/Clean-Room Area Postings and Documentation

The following items shall be posted at the entrance to "Regulated Areas", "Work Areas", and "Containments", or in the possession of the Contractor's on-site supervisor where respiratory protection or protective clothing is required by this Specification.

A Cal/OSHA Information poster and a Cal/OSHA Construction Site poster.

A copy of the CAL-OSHA and the local AQMD/APCD or EPA NESHAP Notification (if applicable).

Non-emergency telephone numbers, other then 911, for the appropriate Police, Sheriff, and Fire Departments. This list of numbers shall also include the Name, pager or cell phone numbers of the on-site supervisor and his immediate company supervisor. Detailed written directions from the project site to the medical facility to be used in case of an emergency. Also a map which sufficiently shows the route to be taken from the site to the designated medical facility.

Written emergency procedures pertinent to the work to be performed and which can be implemented by site personnel if the need arises.

Written entry/exit procedures shall be posted in the clean room and equipment room. (See Section 12)

List of persons authorized to be in restricted area. The list shall include, among others, the following names with addresses and phone numbers:

Contractor	Air-sampling Professional	Asbestos Project Manager
Testing Laboratory	Owner's representatives	Any other designated by the Owner

Entry/exit log for work performed in all "Regulated Areas", "Work Areas", and "Containments" where respiratory protection or protective clothing is required by this Specification. Contractor shall maintain copies of all entry/exit logs on the site during the performance of asbestos-related work.

All of the Contractor's personnel and area air sampling results shall be posted in the clean room area or in the possession of the Contractor's site supervisor if no decontamination unit is required for the work being performed within 72 hours of collection, and submitted pÖF •

Employees shall be trained in evacuation procedures in the event of workplace emergencies. Telephone numbers of all emergency response personnel shall either be in the possession of the on-site supervisor, or be prominently posted in the clean change area and equipment room, along with the locations of the nearest telephone indicated on a map or diagram.

At least two fire extinguishers shall be present on site and in close proximity to the work being performed regardless of the type of work being conducted. At least one fire extinguisher shall be present outside of any containment. Additional extinguishers shall be distributed according to Cal/OSHA requirements or as identified in this Specification.

When open abatement is being performed, an emergency blast horn (canned air horn) shall be placed inside of containment for emergency evacuation in the event of a fire or other emergency.

If noted in any other section of this Specification, a means of communication shall be established between inside and outside of containment whenever a decontamination setup is required, particularly for all open abatement projects. This requirement may be met through walkie talkies or cell phones.

During hot working conditions, such as in an attic space during summer, or in containments where live steam or hot water lines are exposed, special attention must be given to the possibility of heat stress and burns. The Owner's site representative may make recommendations for work breaks for employees, but the supervisor is ultimately responsible for his workers.

SECTION 6. PRE-CONSTRUCTION MEETING

A pre-construction meeting will be held at a time and location to be determined by the Owner. The successful Bidder, his on-site supervisory personnel, and Air Sampling Professional (if applicable), representatives of the Owner, Owner's Representative, and other individuals as necessary shall be present at this meeting.

At this meeting the Contractor shall provide all required submittals, as indicated above in Section 3, Part 3.2. The Contractor should use the Pre-Construction Submittal List provided in Section 24, Part 24.1 to assure all required submittals are included in his submittal package.

SECTION 7. MATERIALS AND EQUIPMENT

Part 7.1 - Contractor Equipment and Supplies

Deliver all consumable materials in the original packages, containers or bundles bearing the name of the manufacturer and brand name (where applicable). These must be approved by the Owner. Polyethylene (Poly) s) ti

Warning signs as required by OSHA shall be provided and posted per regulations.

Surfactant (wetting agent) shall be a 50/50 mixture of polyoxyethylene ether and polyoxyethylene ester, or equivalent, mixed i

No product or material will be used on the project unless the product data sheets and all SDS's have been submitted, reviewed, and approved by the Owner for use. Any product or material found on the project which has a product data sheet and/or SDS available and has not been approved will be removed from the site by the Contractor until review and approval has been completed by the Owner.

Part 7.2 - Rental Equipment and Supplies

Any equipment rented and delivered to the site for the purpose of conducts asbestos abatement work must be accompanied with documentation verifying that the rental agency has been notified, and acknowledges receipt of notification that the equipment being rented will be used for asbestos abatement work. This documentation must be submitted to the Owner's CAC prior to the equipment being delivered to the job site. Rental equipment, including scaffolding, will be held to the same standard of cleanliness as all other equipment on this project.

All rented equipment must be inspected and accepted by Owner's CAC as it arrives onsite. Any equipment covered with dust (no matter the source of dust), plaster debris, multiple layers of encapsulant and/or spray glue, or any other debris will not be accepted. Delays caused by a lack of clean equipment will not extend Contractor's schedule. Equipment rejected due to a lack of cleanliness must be removed from Owner's grounds in order to be cleaned. Dirty equipment wrapped in plastic will not be acceptable.

The Owners' agent/site representative must be informed 24 hours prior to the delivery of any rental equipment.

The decision of the Owner or its representative on all rental equipment and supplies shall be final.

SECTION 8. WORK SITE FACILITIES

The Owner shall provide sanitary facilities for abatement personnel outside of the enclosed work area. To use these facilities all workers shall wear street clothes, not bathing suits or disposable coverall while using the facilities.

The Owner shall provide water for construction purposes. Contractor shall c

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Respirator Selection	Protection Factor
Full-face supplied air respirator operated in pressure demand mode, equipped with an auxiliary positive	
pressure self-contained breathing apparatus.	1000

Workers shall be provided respirators equipped with HEPA filters approved by NIOSH to be worn in the designated work area and/or whenever a potential exposure to asbestos exists. Owner or its representative may refuse entry to the work area to a worker with inappropriate respiratory protection.

Sufficient filters shall be provided for replacement as required by the workers or applicable regulations. Disposable respirators shall not be used.

Whenever type C respirator protection is used, compressed air systems shall be designed to provide air volumes and pressures to accommodate respirator manufacturer specifications. The compressed air system shall om

Special on-site training on equipment and procedures unique to this job site shall be performed by the Contractor as required or recommended by the equipment manufacturer.

The Contractor shall provide training in emergency response and evacuation procedures.

Disposable clothing, including head, foot and full body protection, shall be provided in sufficient quantities and adequate sizes for all workers and authorized visitors. Damaged coveralls shall be immediately repaired or replaced.

Hard hats, protective eye-wear, safety shoes, proper protective gloves, rubber boots and/or other footwear shall be provided by the Contractor as required for workers and authorized visitors.

Contractor personnel shall not wear street clothes or clothes of any type underneath the protective disposable clothing during any Class I work where showering is required. Upon exiting the work area, no items worn in the work area, such as clothing, personal protective gear, footwear, or hair coverings will be allowed to be worn past the shower of the decontamination unit. Contractor workers have the option of wearing disposable

A shower is required on any project that involves removal of greater than 25 linear feet of asbestos containing TSI or greater than 10 square feet of asbestos containing surfacing material. In addition, if the scope of works dictates a shower these provisions shall also apply. The shower room shall contain one or more showers as necessary to adequately accommodate workers. The shower enclosure shall be constructed to ensure against leakage of any kind. In addition, the shower shall be a separate unit from the decontamination unit walls. The shower unit cannot be made from poly. Metal or hard plastic is acceptable. An adequate supply of soap, shampoo and towels shall be supplied by the Contractor and available at all times for use by employees. Shower water shall be drained, collected and filtered through a system with at least 5.0 micron particle size collection capability.

The shower pan in the shower chamber shall be, at least, 3' x 3' in size. The shower chamber shall be constructed so that no water from the shower can spray out of the chamber, nor any water run down the sides of the poly and miss the pan. The shower chamber dimensions shall be determined by the size of the shower pan but are not to be smaller than 3' wide by 3' long by 6' tall.

Multiple showers are required if the number of asbestos workers exceeds ten per Title 8 3366 Washing Facilities. When there are less than five employees, the same shower may be used by both sexes if the shower room can be locked from the inside. A minimum of two showers will be required for more than 10 workers.

Each decontamination chamber shall have, at least, a 4" lip of poly from the floor up the wall

SECTION 12. WORKPLACE ENTRY AND EXIT PROCEDURES

All workers and authorized personnel shall enter the work area through the worker decontamination enclosure system.

All personnel who enter the work area must si

EXHIBIT A

All negative pressure units that are installed to the containment system but are shut off or not working, shall be sealed at both the exhaust location and the intake of the machine to prevent back draft which could allow asbestos fiber contamination from the HEPA filter back into the work area.

Part 13.2 - DO

needed for the Owner and representatives.

Part 13.4 - Differential Pressure System

The location of

EXHIBIT A

the rigidity in the exhaust duct.

All interior of containment PDU's and flexible ducts must be wrapped in poly during all abatement activities. This poly wrap is to be removed after "finish detail" work has been completed, but prior to clearance visual.

Flexible ducts must be supported by solid surface at the point of exit from containment. This may require the Contractor to install plywood, or similar, structure at the exhaust point.

SECTION 14. EXECUTION, WORK SCHEDULE

Part 14.1 - Execution

Owner Responsibilities

The Owner shall provide the Contractor with access to the building during scheduled work hours through their representative. This representative is expected to be the General Contractor in charge of the site. The Owner shall also be responsible for arming and disarming alarm systems on buildings where work will be performed.

The Owner shall also provide the Contractor access to water and electrical hook-ups.

Contractor Responsibilities

The Contractor is responsible for all connections, electrical cords, GFCI's, water hoses, and hose bibs necessary for attachment. GFCI's are required to be used by the Contractor on all electrical circuits in use.

The Contractor and Owner's CAC shall investigate the work area and agree (in writing if necessary) on the pre-abatement condition of the work area.

The Contractor shall post danger signs meeting the OSHA specifications at locations and approaches to locations where airborne concentrations of asbestos may exceed ambient background levels including all doors s

Pre-clean all surfaces in all work areas using HEPA filtered vacuums and/or wet cleaning methods as appropriate. Do not disturb asbestos-containing materials during the pre-cleaning phase.

Unless otherwise stated in the scope of work or by agreement with the Owner's CAC all non-asbestoscontaining materials left in the work area shall be covered by with 6-mil polyethylene sheeting. If any nonasbestos containing materials become contaminated with asbestos during removal activities these materials shall be disposed of as asbestos-containing materials by the Contractor. The Owner's CAC shall determine the friability of these materials prior to disposal.

Contractor shall seal all windows, doorways, elevator openings, corridor entrances, drains, ducts, grills, grates, diffusers, skylights and other openings between the work area and uncontaminated areas outside of the work area. These openings must be sealed with 6-mil polyethylene sheeting and tape. These protective layers shall be in addition to the two polyethylene layers on floors, ceilings and walls. These openings are referred to as critical barriers. Seal all cracks in critical barrier areas with tape, caulk, or foam prior to sealing critical barriers.

Prior to the Contractor covering critical barriers with additional layers of wall, floor, or ceiling poly, the installation and integrity of critical barrier seals must be approved by the Owner's CAC.

All items attached to asbestos-containing materials and items which cannot be removed without disturbing asbestos-containing materials shall be removed by the Contractor after establishment of containment and negative pressure. If these items are to be "saved and returned" or "reused" by the Owner, the Contractor must remove and clean them without damage. These items must be cataloged using the attached "Return Item Inventory Sheet" provided by the Owner.

Contractor shall cover floors in the work area with polyethylene sheeting. Floors shall be covered with a minimum of two layers of 6-mil polyethylene sheeting. Plastic shall be sized to minimize seams. A distance of at least six (6) feet between seams is sufficient. DO NOT locate any seams at wall/floor joints. Floor sheeting shall extend at least twelve inches (12") up the sidewalls of the work area. Sheeting shall be installed in a fashion so as to prevent slippage between successive layers of material. A layer of 10-mil polyethylene sheeting and/or plywood may be required by the Owner's CAC to protect certain flooring materials -- carpets, hardwood floors, tiles, etc. and will be specified in the scope of work if required. At no time will wall or ceiling materials be permitted to be dropped onto unprotected floors. This includes areas where the floor surfaces contain asbestos.

Contractor shall cover walls in the work area with polyethylene sheeting. Walls shall be covered with a minimum of two layers of 4-mil polyethylene sheeting. Plastic shall be sized to minimize seams. Seams shall be staggered and separated by a distance of at least six feet (6'). DO NOT locate any seams at wall/floor joints. Wall sheeting shall overlap floor sheeting by at least twelve inches (12") beyond the wall/floor joint to provide a better seal against water damage and for pressure differential maintenance. Wall sheeting shall be secured adequately to prevent it from falling away from the walls. This may require additional support/attachment when pressure differential systems are utilized.

In some projects when specified in the scope of work, the Contractor shall cover ceilings in the work area with polyethylene sheeting. Ceilings shall be covered with a minimum of one layer of 4 mil polyethylene sheeting. Plastic shall be sized to minimize seams. Seams shall be staggered and separated by a distance of at least six feet (6'). DO NOT locate seams at wall/ceiling joints. Ceiling sheeting shall overlap wall sheeting by at least twelve inches (12") beyond the ceiling/wall joint to provide a better seal against water damage and for pressure differential maintenance. Ceiling sheeting shall be secured adequately to prevent it from falling away from the walls such as wires attached between walls to provide additional support. Additional support/attachment might be required when pressure differential systems are utilized.

The Contractor shall add clear viewing windows in the containment walls at least 1' x 2' in size. The Owner's CAC will approve quantity and placement of these inspection windows. The Owner's CAC has the right to require more clear viewing windows or require placement of windows to be altered.

The equipment room shall be used for storage of equipment and tools at the end of a shift after they have been decontaminated using a HEPA-filtered vacuum and/or wet-cleaning techniques as appropriate. A six-mil. disposal bag or a drum lined with a labeled 6-mil polyethylene bag for collecti

3. Depart containment area as so0

Waste containers shall be sealed when full. Double bagging of waste material into 6 mil plastic is required. Bags shall not be overfilled. They should be securely sealed to prevent accidental opening and leakage by tying tops of bags in an overhand knot or by taping in gooseneck fashion. Do not seal bags with wire or cord.

Asbestos-containing waste with sharp-edged components (e.g., nails, screws, metal lath, tin sheeting) will tear the polyethylene bags and sheeting and shall be placed into drums or burlap bags and then into leak tight containers for disposal.

After completion of all stripping work, surfaces from which asbestos-containing materials have been removed shall be wet-brushed and sponged or cleaned by some equivalent method to remove all visible residue.

After the work area has been rendered free of visible residues and verified clean by the CAC, a thin coat of a satisfactory encapsulating agent shall be applied to the text of large te

transfer area shall be clean of all debris; all equipment and supplies shall be clean of all debris. The Contractor shall not be released to encapsulate the containment until receiving acceptance by the CAC stating the removal area and the containment have met the criteria of the CAC for completeness of removal and cleanliness of the containment barriers and surfaces.

The Owner's CAC will conduct the final visual inspection of the work area f ced

and the cost of laboratory analysis.

SECTION 19. MONITORING

Owner reserves the right to perform air and performance monitoring at any time.

Contractor shall provide personal air monitoring in accordance with Cal/OSHA regulations. Results shall be made available to the Owner's CAC within 72 hours of collection. Hard copies or electronic copies of these results shall be supplied to the Owner's CAC within 7 days of collection. Failure to supply these sample results in specified time may cause work to be stopped until all delinquent results have been submitted. Loss of Contractor work time because of non compliance with the provisions of this paragraph will not extend the date for work completion.

Owner's CAC may take air samples prior to, during, and after the project. Work shall not be considered complete until all air sampling has been completed and satisfactory levels have been obtained. Satisfactory levels shall be those established by AHERA, unless more stringent requirements have been identified in any other section of this Specification.

In areas where soil contamination may be present, soil samples must meet specified criteria in any other section of this specification prior to clearance air samples collection.

Owner, or Owner's CAC, shall be authorized to issue a STOP WORK order whenever the Contractor's work or protective measures are not in accord with published regulations or contract specifications.

SECTION 20. DISPOSAL PROCEDURES

Part 20.1 - Disposal Procedures

Disposal bags shall be of 6 mil poly, pre-printed with labels as required by DOT, Cal/OSHA and the Department of Toxic Substance Control (DTSC) regulations.

Disposal drums shall be metal or fiber board with locking ring tops to be used only if required and/or allowed by selected dump site.

Stick-on labels as per OSHA and DTSC requirements for disposal containers shall be provided. All containers shall be labeled in accordance with DOT, Cal/OSHA and the DTSC regulations that require a "Caution" label and a "Hazardous Waste" label with the generator's name, address, and Manifest Document number.

As the work progresses, to prevent exceeding available storage capacity on site, sealed and labeled containers of asbestos-containing waste shall be removed and transported to the prearranged disposal location.

Disposal shall be at permitted waste facilities for the type of waste. Transport vehicles shall be marked with the sign prescribed by OSHA during loading and unloading to warn people of the presence of asbestos.

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Requirements".

All manifests shall be accompanied by a "Notice and Certification". A signed copy of this must be provided to the Owner or its agent.

Part 20.2 - Transportation to the Landfill

Once drums, bags and wrapped components have been removed from the work area, they shall be loaded into a fully enclosed truck or waste container, which has been lined with 6 mil poly sheeting on the walls and floor. The exception top a fully enclosed waste truck is for roofing projects and when waste loads are generated and placed into open top lined waste trucks that will be "burrito wrapped".

When moving containers, utilize hand trucks, carts and proper lifting techniques to avoid back injuries. Trucks with lift gates are helpful for raising drums during truck loading.

Any debris or residue observed on containers or surfaces outside of the work area resulting from clean-up or disposal activities shall be immediately cleaned up using HEPA filtered vacuum equipment and/or wet methods as appropriate.

No waste containers shall be on site which contain other hazardous waste, or hazardous waste from any other source or job site. Waste from multiple sites of the Owner within the same waste container is acceptable; however, it must be manifested separately.

If Contractor is storing waste from various sites of one owner, all transportation vehicles shall be covered by the same regulations as the waste container or truck being used to haul the waste to the dump. If equipment or supplies are to be left in vehicles during hauling of waste to waste container or truck, waste and equipment/supplies must be separated by a solid (wood or metal) barrier which has been sealed as a critical barrier. A poly wall barrier is not sufficient.

Waste container, truck, or storage bin must be locked at all times except when being filled.

It is the Contractor's responsibility to see that all waste containers, trucks, and storage bins arrive on site completely free from debris.

The contractor shall provide a weight receipt that identifies the net weight of the material being discarded.

Part 20.3 - Disposal at the Landfill

Upon reaching the landfill, trucks are to approach the dump location as closely as possible for unloading of the asbestos-containing waste.

Bags, drums and components shall be inspected as they are off-loaded at the disposal site. Material in damaged containers shall be re-packed in empty drums or bags as necessary. Local requirements may not allow the disposal of asbestos waste in drums. Check with appropriate agency and institute appropriate alternative procedures.

Waste containers shall be placed on the ground at the disposal site, not pushed or thrown out of the trucks.

Personnel off-loading containers at the disposal site shall wear protective equipment consisting of disposable head, body and foot protection and, at a minimum, half-face, air-purifying, dual cartridge respirators equipped with high-efficiency filters.

Following the removal of all containerized waste, the truck cargo area shall be decontaminated using HEPA vacuums and/or wet methods to meet the no visible residue criteria. Poly sheeting shall be removed and discarded, along with contaminated cleaning materials and protective clothing, in bags or drums at the

disposal site.

SECTION 21. PATENTS AND PREVAILING WAGES

Part 21.1 - Patents

Contractor shall pay all royalties and license fees required for the performance of the work. Contractor shall defend suits or claims resulting from Contractor's or any Sub-contractor's infringement of patent rights and shall indemnify Owner and Owner's representative from losses on account thereof.

Part 21.2 - Prevailing Wage Requirements

The asbestos abatement contractor is fully and totally responsible at all times for compliance with payment of prevailing wage rates pursuant to provisions of the California Labor Code, for compliance with Division 2, Part 7, Chapter 1, California Labor Code, including but not limited to Section 1776; and for compliance with California Labor Code, Section 1777.5 for all apprentice able occupations.

SECTION 22. PERMITS AND FEES

If any permits are required to be issued for any of the Work to be performed by Contractor, Sub-contractor(s) or Sub-subcontractor(s) as part of the Project, it shall be the sole responsibility of the Contractor to expeditiously obtain all such permits and any costs incurred by the Contractor in obtaining such Permits shall be included within the Contract Price.

SECTION 23. SPECIFIC PROCEDURES AND REQUIREMENTS

NOTE: All Specifial

damaged section, or in the event of a mishap.

- 6. If work is performed indoors, the ventilation system shall be off in the areas worked in to prevent fiber distribution. The ventilation supply, return and exhaust ducts shall be sealed with 6 mil plastic sheeting and duct tape.
- 7. It may be necessary to remove small sections of other insulation material, such as fiberglass, if debris from the damaged pipe covering has contaminated it.
- 8. In some cases HEPA vacuuming the damaged section will collect all loose,

- 8. A HEPA filtered vacuum shall be in the immediate area for use in conjunction with the bags or in case of a spill.
- 9. Glove bags may not be used on surfaces where temperatures exceed 150 degrees Fahrenheit.
- 10. Glove bags may be used only once, and may not be moved or slid for removal of a second section of TSI.
- 11. At least two persons shall perform Class I glove bag removal as defined by Federal and Cal/OSHA.
- 12. Before beginning the operation, loose and friable material adjacent to the glove bag operation shall be wrapped and sealed in two layers of 6 mil poly sheeting or otherwise rendered intact.
- 13. The Contractor shall apply a sufficient volume of amended water to all pipe covering scheduled for removal while it is enclosed in the glove bag.
- 14. Prior to placement in the disposal bag, glove bags shall be collapsed by removing air within them using a HEPA filtered vacuum.
- 15. Upon detachment, the glove bag must be immediately placed into at least two 6 mil thick disposal bags. The disposal bags must be sealed using the "gooseneck" sealing technique.
- 16. Where pipes enter walls, floors, or ceilings which are not within the scope of the project, the pipe covering shall be removed at least 1" into the structure and the pipe covering end must be sealed with bridging encapsulant and/or wettable cloth.
- 17. If the Contractor chooses to use a Negative Pressure Glove Bag System, Negative Pressure Glove Box System, or Water Spray Process System in lieu of the traditional Glove Bag System, the Contractor shall submit to Owner's CAC detailed written procedures on those systems which will be

- 3. Enclosure walls and floors must be constructed of at least one layer of fire-rated 6 mil poly sheeting. No visible holes, cracks, penetrations, etc. shall be within this enclosure. The upright frame shall be adjustable in order to butt the top of the enclosure to the wall or ceiling area. A single drop layer of 6 mil poly sheeting shall be put down and removed daily at the end of the work shift.
- 4. Since the top of the enclosure must be open in the chamber where ceiling access will take place, special care must be taken prior to moving the enclosure. If the mini-enclosure is designed to be portable, the enclosure must be sealed at the top prior to being moved to the next location. This may be achieved by temporarily sealing the top with poly and tape from the inside.
- 5. For access to an attic space, position the enclosure at the location to be worked. The enclosure must be butted up to the ceiling surface to form a semi-seal between the top of the enclosure and the ceiling. The enclosure can then be completely sealed to the ceiling, using tape. After a seal has been established, access into the ceiling can then proceed.
- 6. A HEPA vacuum shall be used to establish "negative pressure" or airflow into the enclosure. This shall be verified by using ventilation smoke tubes.
- 7. The following equipment and materials, at a minimum, must be present inside the mini-enclosure "dirty" chamber:

6 mil poly bag for waste.

EXHIBIT A

Part 23.4 - Roofing Abatement Requirements

Not Applicable

Part 23.5 - Vinyl Floor Tile (VFT) & Associated Adhesive Abatement Requirements

General Requirements

Except as amended here and in Section 24, Asbestos Specification/ Procedures, in all other Sections of this Exhibit shall be followed.

For the purposes of this project any direction to remove asbestos-containing or assumed asbestos-containing VFT shall include the removal of the base cove, as well as, the adhesive/mastic used to secure the VFT and/base cove regardless of its asbestos content. Any mastic which has not been tested for asbestos content must be assumed to contain asbestos and removed by the abatement contractor prior to the performance of a final visual by the Owner's CAC, and final air testing of the containment.

Removal of asbestos-containing VFT shall require a negative pressure enclosure/containment be constructed prior to removal, including installation of critical barriers, a splash guard of plastic at the lower 3' of wall from floor level, a sufficient number of DOP tested negative air units to attain a level of at least -0.030" of negative air pressure within the containment, a manometer, and at a minimum, a three-stage decontamination unit with an operational shower and water filtration system. Smaller areas of floor tile and mastic removal may only required a single stage decontamination area without the shower and will be described in the scope of work.

Whenever and wherever possible, the Contractor shall enclose multiple rooms within a building or wing into a single containment. Where rooms are joined by a common interior hallway or have a common exterior walkway, multiple spaces shall be joined together creating one containment using poly encloved ware containment using poly encloved ware

equipment removed from the site for more than 10 working days must be DOP tested again prior to re-use on the project.

- 3. DOP certification testing shall be observed and witnessed by an Owner's CAC. Copies of DOP test results and certification must be submitted to Owner's CAC within 24 hours of the testing being performed.
- 4. All poly sheeting to be used for the construction of full enclosures/containments must be fire retardant. SDS information reflecting this requirement must be submitted prior to use.
- 5. The Contractor shall be responsible for all clean-up and costs associated with the decontamination of occupied spaces adjacent to any containment where removal of asbestos-containing material is conducted. The Contractor shall also be responsible for damage to building finishes and costs as

drum. The drum shall be sealed when filled and placed into a waste container for disposal.

- 9. Method of removal pertaining to asbestos-containing adhesive/mastic shall be at the discretion of the Contractor, except methods which are noted in this Exhibit that are prohibited. Hand scraping, solvents, and wet buffing with solvents are acceptable methods. If the Contractor chooses to use solvents, exhaust of negative air units shall be directed downwind as much as possible, or a sufficient length of exhaust hose will be required to prevent re-entrainment of the vapors.
- 10. To minimize damage to the existing paint above the base cove, the contractor shall use a utility knife to cut score the paint at the intersection of the base cove. This will allow removal of the base cove with minimal damage to the paint layer.
- 11. Any solvents used for removing adhesive/mastic shall be non-toxic, low odor, and non-flammable. A SDS for the solvent shall be provided and subject to approval by the Owner's CAC prior to use.
- 12. Upon completing the removal of all floor tiles and adhesive/mastic, the Contractor shall remove the splash guard from the containment walls, and conduct wet wiping on all surfaces within the containment/enclosure.
- 13. If a solvent was used to remove any VFT adhesive/mastic, the Contractor shall wash the floors thoroughly using a solution of trisodium phosphate (TSP), or equivalent, and water. Sufficient water shall be used for final rinsing of the floor for a clean finish.
- 14. It is the sole responsibility of the Contractor to reduce concentrations of any solvents used to a level which will allow new adhesive/mastic to be applied, if new flooring is to be installed. Owner's CAC will not test the floor for PH levels, and will not attest that the solvents used have been reduced in any way.
- 15. Solvent removal may only be performed on substrate that will be demolished. District requires the use of media blasting or abrasive grinding with HEPA vacuum attachment on any concrete substrate that will remain to accept new flooring.

Final Visual Inspection

- 1. Upon the completion of all activities listed above, the asbestos contractor shall provide their own visual inspection prior to Owner's CAC, and shall be present during the inspection by Owner's CAC to remove/clean additional surfaces as needed, prior to encapsulation.
- 2. The final visual inspection will include an evaluation fcpinpbpg of

- **EXHIBIT A**
- 2. The Contractor SHALL NOT sign any Hazardous Waste Manifests for the Owner. It shall be the responsibility of the Contractor to notify the Owner's CAC and coordinate having any manifest properly signed by a Owner representative.

Part 23.6 - Carpet Removal over Vinyl Floor Tile (VFT)/Tile Adhesive Requirements

Not Applicable

Part 23.7 - Boiler Unit Removal Requirements

Not Applicable

Part 23.8 - Sheetrock and Joint Compound Abatement Requirements

General Requirements

Except as amended here and in Section 24, Asbestos Specification/ Procedures, in all other Sections of

- EXHIBIT A
- 6. Sufficiently wet sheetrock and joint compound wall and ceiling systems to be removed with amended water prior to and during the removal phase of work, and place into waste containers for disposal.
- 7. Upon completing the removal of all sheetrock and joint compound wall and ceiling systems, the Contractor shall conduct wet wiping on all remaining surfaces within the containment/enclosure.

Disposal Requirements

- 1. All sheetrock and joint compound wall and ceiling system waste that has been tested and found to contain <1% asbestos by the 400 Point Count method may be disposed as non-hazardous asbestos waste, in a landfill permitted to accept non-friable, non-hazardous asbestos containing material.
- 2. Waste material containers, including "burrito wrapped" material, shall have warning labels affixed. Contractor may either use the Cal/OSHA Title 8, 1529 (k)(8)(A-D) warning:

DANGER CONTAINS ASBESTOS FIBERS MAY CAUSE CANCER CAUSES DAMAGE TO LUNGS DO NOT BREATHE DUST AVOID CREATING DUST

3. All non-hazardous asbestos containing waste shall be tracked utilizing some form of system which at a minimum includes: date, document number, generator name and mailing address, description of the waste, waste generating site address, contractor company name and address, special handling

To comply with the various regulations pertaining to this type of work in contaminated attic spaces, the following procedures are to be followed by individuals entering these areas.

- 1. Personnel assigned to enter contaminated attic spaces shall receive a minimum of two hours of asbestos awareness training pursuant to Title 8 1529.
- 2. Personnel assigned to wear respirators must be included in a respirator protection program as outlined in California General Industry Safety Order 8 CCR 1544. If the person must enter the attic space it will require use of at least a half-face negative pressure respirator with HEPA filters and disposable coveralls.
- 3. Prior to entry of a contaminated attic space each employee must pass a medical evaluation to ensure their fitness to wear a respirator.
- 4. A certified asbestos competent person must select the appropriate type of respirator(s) for the airborne asbestos levels anticipated to be encountered during such work.
- 5. Each employee assigned a respirator must successfully pass a qualitative or quantitative fit test prior to entry of a contaminated space.
- 6. A six (6) mil poly drop sheet must be placed at the entry to the space (approximately 6' X 6' in size) prior to entry.
- 7. Clean, potable water must be made available at the entry/exit for use to wash hands

Part 23.12 - Non-Friable, Non-Hazardous, Glazing Abatement Requirements

Not Applicable

Part 23.13 - Subfloor Crawl Space Dirt Removal Requirements

Not Applicable

Part 23.14 - Subfloor Enclosure Requirements

Not Applicable

Part 23.15 - Installation of "Rat Slab" in Sublfoor Crawl Space Requirements

Not Applicable

Part 23.16 - Stucco/Texture/Plaster Removal and Containment Requirements

General Requirements

Except as amended here and in Section 24, Asbestos Specification/ Procedures, in all other Sections of this Exhibit shall be followed.

Stucco/texture surfacing materials regardless of asbestos content from exterior building components shall be removed by either by hand or by other mechanical methods within a negative pressure enclosure with a manometer and following all requirements in these specifications including a three stage worker decontamination unit.

- 1. Rigid scaffolding or framing shall be constructed on the exterior of buildings where a negative pressure enclosure is required. All plastic sheeting shall be secured to the scaffold or framing in a manner sufficient to maintain structural integrity of the enclosure at all times.
- 2. Removal of stucco/texture regardless of asbestos content over a surface area greater than 10 square feet will require the construction and use of a three stage decontamination unit. This decontamination unit must be directly attached to the entrance of the containment enclosure and fully operable with working shower and hot water heater, as well as properly stocked with towels, soap, and shampoo.
- 3. Sufficient negative air units shall be installed which will provide a minimum of 4 air changes per hour and -0.030" air pressure differential measured with an attached manometer.
- 4. Fencing or other physical barriers shall be positioned in order to prevent access to exterior containment enclosures by any non-asbestos trained personnel.
- 5. Upon completing removal of all stucco/texture, the Contractor shall conduct wet wiping of all remaining wall surfaces, poly barriers, scaffolding, etc. to remove settled dust from those surfaces.

Final Lockdown-Encapsulation

- 1. Lock down-encapsulation of the containment shall be performed using one of two methods based on the needs of the project.
 - A. <u>Hand Wipe Method:</u> The needs of the project may require the remaining building component surfaces have no new film materials applied to them. If this is required the asbestos abatement contractor shall use clean wet cloths/towels to wipe existing surface dust off of remaining building components. These cloths/towels will be wetted with clean water and no

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should refer to Section 25, Asbestos Results List for information pertaining to specific Asbestos Containing Materials (ACM) or products known to exist on the site. Materials suspected of containing asbestos but which have not been tested are "assumed" to contain asbestos.

A hazardous materials inspection was conducted by Entek Consulting Group, Inc. for the Luther Burbank High School cafeteria renovation project. The contractor shall refer to the Hazardous Materials Survey report prepared on September 4, 2024, which includes all suspect building materials that were sampled and analyzed for asbestos and included an assessment for lead in paint and ceramic products. The report also includes discussion on Freon, PCB in ballasts, and fluorescent light tubes.

Materials commonly excluded from being suspected for containing asbestos include but are not limited to: unwrapped pink and yellow fiberglass insulating materials or products, foam insulation, wood, metal, plastic, or glass. All other types of building materials or coatings on the materials listed above are commonly listed as "suspect" and must be tested prior to impact by a Contractor.

Attic spaces at this site may already be contaminated with asbestos roofing debris from prior roofing replacement projects, but is unknown. If ceiling systems are removed and it is discovered that suspect roofing debris is present, the contractor shall stop work and bring it to the attention of the project manager to assess the potential for asbestos.

Part 24.4 - Containment and Abatement Requirements

The general guidelines in these specifications shall be followed by the asbestos abatement contractor for all work on this project. All requirements of Cal/OSHA Section 1529 and US EPA AHERA regulations apply, and shall be followed, as well as, other applicable regulations.

The Contractor shall follow all requirements set forth in Section 23, Specific Procedures and Requirements when disturbing or removing specific asbestos containing materials.

All asbestos related work shall be performed within negative pressure work enclosures for any class of asbestos work. The term "containment" or "enclosure" shall be construed to mean a containment which is constructed to enclose a work area (as defined in Section 2), and meet all applicable requirements set forth in Sections 2 through 22 of this Specification and all governing regulatory agency requirements. Each containment shall be tailored to meet the needs of the "work area" to be enclosed and include all requirements as set forth in the above related sections and government regulations applicable to asbestos related work.

Sufficient negative air units shall be installed which will provide a minimum of 4 air changes per hour and a minimum of -0.030" air pressure differential, while the zippered doors are opened for bag-out of waste. A digital manometer recording shall be made of all days when in use. The digital recording manometer shall 2 rate of a @Oa@ontrac

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Part 24.10 - Disposal Requirements

Disposal of all friable hazardous asbestos containing waste must be tracked utilizing a current copy of a Uniform Hazardous Waste form. These forms are to be properly filled out by the Contractor and signed by an authorized Owner's representative. All non-friable non-hazardous asbestos waste shall be tracked using a Bill of Lading or equivalent and signed by an authorized Owner's representative. No individual or representative other than the Owner's designated representative is permitted to sign Uniform Hazardous Waste formss

EXHIBIT A

Part 24.12 - Pre-Construction Submittal List

- 1._____ Copy of State of California - Contractor's State License
- 2. Copy of State of California CSLB Active License
- 3. _____ Copy of State of California CSLB Asbestos Certification
- 4. _____ Copy of Department of Industrial Relations; Division of Occupational Safety and Health; Certificate of Registration for Asbestos-related Work
- 5._____ Copy of signed statement from company officer listing citations and pending proceedings against the Contractor, or if there have been no citations, a copy of the statement that no actions by regulatory agencies have occurred in the last three years signed by an officer of the company.
- General Liability Insurance Certificate 6. _____
 - a) ____ Occurrence
 - b) _____ Asbestos/Lead Activities or Abatement Certificate

 - c) _____ Owner Named as Additional Insured
 d) _____ Consultant Named as Additional Insured
- 7. Auto Insurance

EXHIBIT A

14	Non-Emergency Telephone Numbers				
	 a) Local Police Department b) Sheriff Department c) Fire Department d) Emergency Medical Facility and Directions to That Facility From the Site 				
15	Written Emergency Plans				
16	Written Work Plan				
17	Written Schedule				
18	Worker Documentation (Must Include at Least One Supervisor)				
	a) Training Records for Asbestos - AHERA (Supervisor and Worker)* b) Medical Examination Written Opinion Final Report for Each Employee* cPI				

Part 24.13 - Interim Construction Submittals

Upon request by the Owner or Owner's Representative, the Contractor shall provide copies of documentation identified to be pertinent to the project.

Part 24.14 - Post Construction Submittal List

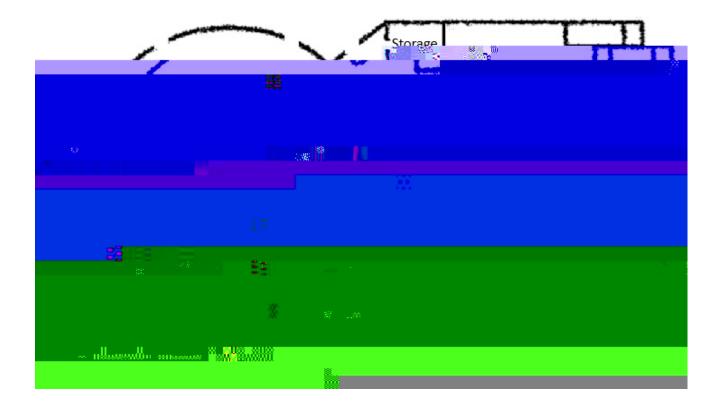
Contractor shall provide the following post-construction submittals to Owner's Representative within thirty (30) days of the comple ÖöĐ

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Suspect Materials Found NOT TO Contain Asbestos or Considered Non-Suspect							
Sample ID#'s	Suspect Material	EPA AHERA "Suspected" ACBM	Asbestos Content	Location			

- Note 3.: **Regulated Asbestos-Containing Material (RACM)** is any friable material, any Category I non-friable ACM which has become friable, any Category I non-friable ACM which will be or has been subjected to sanding, grinding, cutting, or abrading, any Class II non-friable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to a powder by the forces expected to act on the material in the course of demolition or renovation operations.
- Note 4.: Asbestos Containing Construction Materials (ACCM) is a manufactured construction material containing greater than 0.1% asbestos by weight by the PLM method.
- Note 5.: The terms "assume" and "presume" mean the named material is considered positive for containing asbestos and must be treated accordingly, until properly sampled in compliance with 40 CFR, Part 763 Asbestos-Containing Materials in Schools; Final Rule and Notice.

SECTION 26. SITE MAP



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