SCOPE OF WORK

ASBESTOS ABATEMENT

MUSIC BUILDING #20

Victor Valley Community College

The scope of work is to remove the asbestos-containing material (ACM) from the interior spaces of the Music Building. The ACM is in various forms such as sprayed on fire proofing, joint compound, 12 x 12 tile, mastics, etc.

1. Prior to commencing work, the Contractor shall notify Cal/OSHA, EPA, and Mojave Air Quality District, MAQD, (or air quality control district of jurisdiction) within the time frames required. The Contractor will submit copies of all notifications to the District in the close-out documentation, as well as maintain copies in the Contractor’s files for not less than three years. [SCAQMD Rule 1403]

2. The Contractor shall, prior to the commencement of any work under this scope and in conjunction with the pre-construction meeting, conduct a safety conference which will include all the required elements pursuant to 8 CCR 341.11.

3. The Contractor will provide a schedule of completion indicating shifts and manpower loading. The Contractor will notify the District’s abatement consultant, both verbally and in writing, 24-hours in advance of any changes in the schedule.

4. Prior to the start of work, the Contractor shall provide the District and the District’s abatement consultant with equipment specifications and completed MSDS (Material Safety and Data Sheets), for all materials to be used on the job.

5. The Contractor shall provide personnel protection equipment to all workers pursuant to 8 CCR 1529 (i.e., PAPR respirators, suits, boots, gloves, etc.).

6. The Contractor shall provide negative air units which are MAQD (or air quality control district of jurisdiction) registered and meet the requirements pursuant to 8 CCR 1530(a)(1). The Contractor shall maintain at least one backup negative air unit on-site and provide proof of GPAC Negative Air Machine license to use. (Note: Negative air units must come equipped with heat and smoke sensors for emergency shutdown.) The District’s abatement consultant will approve the ventilation scheme. All negative air unit flex duct shall be wrapped in two layers of 10-mil fire-retardant poly. At no time during the project shall debris be allowed to accumulate on the flex ducts.

7. Prior to start of job, the Contractor shall provide a diagram of the proposed air flow with HEPA filtered negative air fan units providing both exhaust and non-powered, HEPA filtered supply air (disabled negative air units).

8. The Contractor shall use a pressure differential monitor to provide proof of constant negative air. (Note: Calibration curves are required in pre-submittal documentation.)

9. The Contractor shall provide appropriate access control and provide other signs required per 8 CCR 341.10(a).
10. The Contractor shall clean, properly bag, and label ACM pursuant to 8 CCR 1529(n) and 22 CCR 66504(c) and remove combustible debris from the area at the end of each shift pursuant to 8 CCR 1513(d).

11. Both hazardous and non-hazardous waste load-out (removal) will be inspected by the District’s abatement consultant.

12. The District’s abatement consultant, in conjunction with the Contractor, will visually clear each phase of the abatement prior to moving to the next phase.

13. The Contractor will submit all manifests to the District’s abatement consultant for the District’s approval and signature 48 hours prior to hauling to the disposal site.

14. All ACM debris shall be transported by a licensed, registered, hazardous waste hauler to Azusa Landfill in Azusa, California for disposal. All dumpsters/haulers will be lined with two layers of 6.0 mil poly after passing I.H. (Industrial Hygienist) inspection for no visible debris. Any non-ACM hazardous waste shall be properly contained, transported, and disposed of at an approved disposal site.

15. The Contractor shall contact the District for dumpster location/parking availability at the site.

16. Power tools shall meet the elements of 8 CCR 1707 and operation (cutting).

17. Hand tools will be used pursuant to 8 CCR 1699.

18. Prior to commencing work, the Contractor shall have submitted to the District an Injury and Illness Prevention Program pursuant to 8 CCR 1509, 1510, 1511.

19. Prior to commencing work, the Contractor shall have submitted to the District a written Hazard Communication Program pursuant to 8 CCR 1531(f)(1).

20. Prior to commencing work, the Contractor shall have submitted to the District a written Respiratory Protection Program pursuant to 8 CCR 1529(l)(3).

21. At the pre-construction meeting (date to be determined), the Contractor shall provide copies of all information required in the pre-submittal portion of the Scope of Work: a) physician’s written opinion letter; b) respirator fit test; c) training certificates; and d) licenses, permits, and registration, including DOSH required worker medical bonds or insurance for all Contractor’s employees assigned to the project. Substitutions in personnel shall require evidence of DOSH compliance for those individuals newly assigned to the project.

22. At the pre-construction meeting, the Contractor shall provide the names of proposed crew members and their social security numbers. Once work has commenced, any substitution in personnel, with reason therefore, shall be reported in writing to the District and the District’s abatement consultant.

23. The final air clearance method for the project is PCM.

**PHASE 1 - SET-UP:**

1. The Contractor shall be responsible for shutting down and locking off the HVAC in the containment area. The Contractor shall post a sign readable at 20 feet at the entrance to the work area pursuant to 8 CCR 341.10(a). The District’s abatement consultant will perform area monitoring, using PCM protocol (NIOSH 7400 Rev.3), to establish background levels of asbestos.
fibers prior to any removal activities.

2. There are no special hazardous materials involved in plumbing demolition that the district is aware of.

3. The Contractor shall be responsible for disconnecting the electrical power and setting up of temporary electrical power supply as needed.


5. The Contractor shall provide scaffolding for access to areas as required. All scaffolding shall conform to 8 CCR 1637 et.seq.

6. The Contractor shall provide and install critical barriers of 6.0 mil fire-retardant poly over doors not in use. Poly over doors shall bear a sign that contains the specific language pursuant to 8 CCR 341.10(a).

7. The Contractor shall provide dual "Z" flapped entry/exit in front of access to each area to be abated. Flaps must be separated by a five feet (5') minimum decontamination area which is supplied with a water source for personnel decontamination.

8. The Contractor will utilize dual (back to back) HEPA filtered negative air units and duct the discharge away from occupied areas.

9. The Contractor shall utilize Powered Air Purifying Respirator (PAPR) units for respiratory protection of all workers.

10. Prior to establishing containment, the Contractor shall pre-clean all vertical and horizontal surfaces within the area of the work site using HEPA-filtered vacuums and wet wipe methods.

11. The Contractor shall remove and reinstall new light fixtures. (Refer to Section 16510 - Interior Luminaires.)

12. All lockers shall be salvaged as part of the demolition and removed to the District Maintenance Department then reinstalled as part of the reconstruction.

13. Upon completion of pre-clean, the Contractor shall present the area to the District’s abatement consultant for a visual inspection. All vertical and horizontal surfaces and scaffolding shall be visually inspected to determine there is no visible debris and to determine conformance to Cal/OSHA standards as referenced above.

**PHASE II - ESTABLISHING CONTAINMENT:**

1. The Contractor will provide a decontamination and load out (removal) for entry into and exit from the contained area. Where the decontamination unit cannot be constructed inside a lockable area and made safe from possible vandalism when Contractor is off site, the decontamination unit shall be constructed of flame-retardant wood with a lockable entry. The decontamination area will also consist of three chambers, separated by air locks. These will be:

   a. A clean room, for removing and donning clean disposable suits/street clothes. This room will contain a negative air shut off switch to shut down negative air machines simultaneously.

   b. A shower area, for cleaning personnel after working in containment pursuant to 8 CCR 1529 (1)(3)(c).
c. An equipment storage area in which to store equipment used in the contained area and for the removal of contaminated disposable suits with hoods, boots (hard soled), rubber boots, etc., pursuant to 8 CCR 1529(1)(3)(d).

2. The Contractor will provide a critical barrier area for visual inspection by the District’s abatement consultant by using three layers of 6.0 mil fire retardant poly over all critical barriers. Two layers of 6.0 mil poly shall be used to cover the walls and three layers of 6.0 mil poly on the floor, one being a drop cloth.

3. The Contractor will establish a negative pressure to achieve four air changes/hour (ACH) through HEPA filtered fan units. All negative air flex ducts must be wrapped in two (2) layers of 6.0 mil poly. The discharge air will be directed away from habitable places.

4. Once the Contractor has completed setting up the containment area, the District’s abatement consultant shall perform a visual inspection to determine the integrity of the contained area.

**PHASE III - ASBESTOS CONTAINING MATERIAL REMOVAL:**

1. All work shall be performed using, at a minimum, Powered Air Purifying Respirators (PAPRs). In addition, disposable, full body protective coveralls; steel-toed/steel shanked anti-skid/rubber boots, hard hats, and protective gloves will be required.

2. A wet-down shall be performed one hour (1 hour) prior to removal of ACM, using a pre-approved wetting agent.

3. All asbestos abatement shall comply with all relevant portions of 8 CCR 1529.

4. Hazardous material load out (removal) shall be at the end of each shift.

5. In conjunction with the Contractor, the District’s abatement consultant shall visually clear each phase of the abatement process prior to moving to the next portion of work.

6. Any asbestos abatement related activity shall be performed using constant wetting methods.

**PHASE IV - CLEANING AND CLEARING CONTAINED AREA:**

1. Upon completion of ACM removal, the Contractor shall perform a final cleaning of all vertical and horizontal surfaces within the contained work area using wet wiping and HEPA filtered vacuum methods.

2. Upon completion of final cleaning, the District’s abatement consultant shall perform an inspection of the entire containment work area for "No Visible Debris".

3. All but one layer of poly shall remain throughout the entire work area.

4. If the work of the Contractor passes visual inspection, encapsulation shall begin. (Note: If Contractor does not meet the criteria of "No Visible ACM", the entire work area must be re-cleaned.)

5. Where incidental encapsulation may be approved, the Contractor shall encapsulate the entire work area using a pre-approved encapsulant.
6. Where incidental encapsulation may be approved, encapsulant must be allowed sufficient time to dry, not to exceed twelve (12) hours.

7. The District’s abatement consultant shall perform clearance air sampling, using aggressive methodology. Clearance criteria shall be 0.01 f/cc using the NIOSH 7400 method “A” counting rules for PCM analysis.

8. Approved fire proofing material will be reapplied to all metal beams in the attic areas as required by building code by the abatement contractor. This will be completed per current building code standards for application and thickness.

**PHASE V - DEMOBILIZING AND TEAR DOWN:**

1. Upon clearance, the area and equipment will be cleaned of all debris using wet methods and HEPA-filtered vacuum procedures.

2. The Contractor will remove all poly and critical barriers as hazardous waste. These materials shall be properly manifested and transported by a licensed, registered, hazardous waste hauler and disposed of at an approved disposal site.

3. All remaining equipment and non-hazardous materials are to be removed from the job site.

4. The Contractor is responsible for returning the containment area to the District in a clean and tidy condition.

5. The Contractor shall provide full close-out documentation, including but not limited to, supervisor's daily job logs, waste manifests and waste site tickets showing exact weights in tons, sign in/out sheets, and personal air monitoring results.