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I. PURPOSE

Specifications are intended to be used as a basis for specific projects to describe the scope of work to be performed by the asbestos abatement contractor ("Contractor") during a specific asbestos abatement project.

The use of appropriate engineering controls will be the primary method used by Contractor to help reduce the workers' exposure to airborne asbestos fibers and to reduce the risk of a fiber release outside of containment.

These Specifications and procedures described herein, both general and specific, are intended as additional guidelines for asbestos abatement operations based on local, state and federal regulations. Each point discussed herein may not always apply to each asbestos abatement project, and in such cases, the procedures outlined herein may vary with the specific project. Unique, customized or modified specifications will be issued to cover any such variances for each project. Such modifications shall be issued in collaboration with the UTMDACC Asbestos Consultants.

II. GENERAL AND ADMINISTRATIVE REQUIREMENTS

A. CONTRACT DOCUMENTS

1. LICENSES AND PERMITS: As required, the Contractor shall be responsible for obtaining the necessary licenses and permits pertaining to the removal and disposal of asbestos containing materials.

2. SITE VISITS: Contractor shall visit the site to ensure all dimensions are correct and become familiar with site conditions.

3. CONTRACT CHANGES: All orders or variances to the asbestos control procedures must be approved by the UTMDACC Asbestos Consultant and/or Contract Project Coordinator.

4. CONTRACT MATERIALS: Contractor is responsible for demobilizing all materials and equipment from the site upon project completion. All Asbestos Containing Materials ("ACM") shall be removed from the project at the end of each shift.

5. SUBCONTRACTORS: No subcontracting of any direct asbestos abatement work i.e. labor by workers other than Contractor's employees will be permitted.

6. **INSURANCE:** Contractor shall provide the Owner with proof of asbestos liability insurance written in an "occurrence" type policy in the amount of one million dollars (\$1,000,000), as well as proof of commercial general insurance, workers compensation insurance and

comprehensive auto liability insurance in coverage amounts as described in Rider 103 "Standard Terms & Conditions", Section 16 "Insurance". Contractor prior to starting the job shall submit a copy of the insurance to the appropriate UTMDACC representative.

7. WASTE REMOVAL: Contractor shall be responsible for obtaining a waste disposal site in compliance with all applicable EPA, TDH or local regulations.

8. SERVICES AND EQUIPMENT: Unless otherwise specified by the contract document, Contractor will furnish all labor, materials, services and equipment necessary to carry out the abatement operations in accordance wit OSHA Standards, EPA Guidelines, TDH Regulations or local government regulations at the job site.

9. FIRE AND EMERGENCY: Contractor will develop a fire and emergency action plan for use in connection with the asbestos abatement operation. A copy of Contractor's written emergency action plan will be submitted to the Contract Project Coordinator and the UTMDACC Consultants and to UTMDACC's Project Manager prior to starting the job. Emergencies that may cause harm to human health will have priority over the abatement operations. For employee safety, Contractor shall furnish and maintain a first aid kit designed and stocked for the proper number of employees on the job site at all times.

10. CODES AND REGULATIONS: To comply with local, state and federal requirements, Contractor shall maintain on the job site at all times copies of all required documents, including appropriate EPA Guidelines, OSHA Standards and the Texas Department of Health Regulations. Contractor shall post specific documents required for employee information adjacent to the clean room of the decontamination unit.

11. Material Safety Data Sheets (MSDS): Contractor shall submit MSDS' for all proposed materials to be used prior to start of each project to the UTMDACC Consultants and/or Contract Project Coordinator.

12. Bastrop Campus- Medical Documentation: Contractor is responsible for employee medical clearance prior to traveling to Bastrop campus.

B. APPLICABLE CODES

General applicability of Codes and Regulations: Except to the extent that more explicit or more stringent requirements are written directly into these Guidelines, all applicable codes and regulations will have the same force and effect as if copied directly into these Guidelines.

1 FEDERAL REGULATIONS: Code of Federal Regulations (CFR)

- a. U.S. DEPARTMENT OF LABOR OCCUPATIONAL SAFETY AND HEALTH ASSOCIATION (OSHA)
- Asbestos, General Industry 29 CFR 1910.1001
- Asbestos 29 CFR 1910.1101
- Asbestos, Construction Industry 29 CFR 1926.58
- Respiratory Protection 29 CFR 1910.134
- Access to Employee Exposure & Medical Records 29 CFR 910.20
- Hazard Communication 29 CFR 1910.1200
- Specifications for Accident Prevention Signs & Tags 29 CFR 1910.145
- b. U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)
- Asbestos Abatement Projects: Worker Protection 40 CFR 63.120-126
- Friable Asbestos-Containing Materials in Schools: Identification and Notification - 40 CFR 763.100-119
- National Emission Standards for Hazardous Air Pollutants (NESHAP) - 40 CFR 61 - Subsection A, General Provisions and Subsection M, National Emissions Standard for Asbestos
- Asbestos Hazard Emergency Response Act (AHERA) 40 CFR 763 Part III

2. STATE AND LOCAL REGULATIONS: All current applicable state and local regulations which are in effect at the time of bidding the asbestos abatement project, and which have a direct bearing upon the project, will be included and incorporated by reference and made a part of the contract document. In addition to all applicable regulations pertaining to asbestos, Contractor will also be required to comply with all applicable hazard communication and right-to-know laws which have not been preempted by the federal hazard communication standard as described in 29 CFR 1910.1200.

C. NOTIFICATION REQUIREMENTS

1. CONTRACTOR RESPONSIBILITY: Contractor shall be responsible to notify, in writing, the DSHS and any other necessary

regulatory agencies of the planned asbestos abatement operation, at least ten (10) working days prior to the start of the asbestos abatement work on the project. In cases of renovation, this notification should be as early as possible before removal begins. A copy of the notification shall be faxed to the UTMDACC Asbestos Consultants immediately upon completion of filing with DSHS. Contractor is also responsible for filing all required amended notifications. Contractor will be liable for all failures to file correct notifications or amended notifications with the DSHS. These notifications must include the following:

a. ASBESTOS ABATEMENT CONTRACTOR: The complete name, address and telephone number of Contractor;

b. DESCRIPTION OR FACILITY NAME: The complete address and description of the location where the asbestos control operation will take place, including the size, age and use of the building and the amount of asbestos material present;

c. FACILITY OWNER: The complete name, address and telephone number of the actual owner of the building, which may differ from the name of the job site;

d. START & STOP DATES: The scheduled starting and completion dates of the asbestos abatement portion of the project;

e. PROCEDURES: The procedures that will be employed to comply with the regulations; and

- f. WASTE TRANSPORT NAME: The complete name, address and telephone number of the waste disposal site where the waste shall be deposited.
- g. NOTICES OF VIOLATION: All notices of violation that applies to asbestos abatement activities. Excluded are violations pertaining to project management.

2. MULTI-EMPLOYER WORK SITES: On multi-employer work sites, where the asbestos abatement operation requires the establishment of a regulated work (containment) area, there is a responsibility to inform other employers on the site of the nature of the Contractor's work, the existence of the regulated area, and the requirements pertaining to this area. Contractor will work with UTMDACC Consultants to insure adequate notice is given to other workers in the areas surrounding the asbestos abatement work.

D WORK PLAN

Contractor will submit a work plan of the procedures proposed for use in complying with the requirements of the asbestos abatement operation. The magnitude of which will depend upon the complexity of the abatement project. Included in the plan will be the sequencing of the asbestos work, methods to be used to assure the safety of Contractor's employees, building occupants and visitors to the site, the disposal site, and a detailed description of the methods to be employed to control contamination.

The work plan will include the use of portable HEPA ventilation systems, shut down of the building's HVAC system, the method of removal to prohibit visible emissions in the work area, and the bagging of removed asbestos debris.

E. CONTINGENCY PLANS

Contractor will prepare a contingency plan for any emergency, which may arise during the course of the project. However, nothing should impede safe exiting or providing adequate medical attention in an emergency.

These procedures will be included in the Contractor's Safety Program. The telephone numbers and locations of emergency services, including but not limited to fire, ambulances, doctor, hospital, police, power company, telephone company, etc., will be located at the job site for employee information.

F. ACCIDENT REPORTING

In reporting employee accidents, Contractor will prepare and document reports of accidents at the job site and anywhere else that work is in progress in connection with the asbestos control operation. For this purpose, an accident is defined to include those injuries and illnesses deemed recordable on the OSHA 300 form, or where a property loss of substance is sustained. In the case of an employee accident or illness, Contractor will submit a completed copy of the OSHA 300 form to the UTMDACC Consultants and/or Contract Project Coordinator.

III. ADMINISTRATIVE AND SUPERVISORY PERSONNEL

A. EDUCATION AND CERTIFICATION

Contractor shall require all its Supervisors to have completed and passed the DSHS licensing exam for Licensed Asbestos Supervisors.

All Supervisors must be licensed by the DSHS and his or her license must be displayed on the job site along with the rest of the necessary postings.

Contractor will furnish UTMDACC with proof of the above referenced certification.

All Supervisors shall be fulltime employees of Contractor. Contractor has submitted a list of its full time employed Supervisors with its bid proposal. Contractor shall only use Supervisors that have been approved by the UTMDACC Consultants to work on UTMDACC projects.

B. COMPETENT PERSON

In each location where an enclosure is built, Contractor shall have a Competent Person as required by OSHA in - 29 CFR 1926.58 (e) (6) (ii), and as such, shall have the necessary training, competency, and written authority to maintain that position.

The Project Manager, General Superintendent or General Foreman or Supervisor as defined below will also be Contractor's representative for compliance with all applicable local, state and federal codes and regulations, particularly those relating to asbestos-containing materials.

C. PROJECT MANAGER/ GENERAL SUPERINTENDENT/ SUPERVISORS (LICENSED ASBESTOS SUPERVISORS)

Contractor shall employ full-time personnel who will have the designation of Project Manager, General Superintendent or General Foremen or Supervisors. These individuals shall be experienced in administration and supervision of asbestos abatement projects, including work practices, protective measures for building and personnel, disposal procedures, respiratory protection, etc. Only Project Managers, General Superintendents and Supervisors that have been approved by the UTMDACC Consultant shall be permitted to work on UTMDACC projects.

D. SAFETY COORDINATOR

Contractor shall designate an individual to have the responsibility for ensuring its workers' compliance with all aspects of the Safety Program. This individual, in addition to having successfully completed an EPA Training Center course in asbestos abatement procedures, shall have also received specialized training in construction safety practices. While not assigned to each asbestos control projects on a full-time basis, the Safety Coordinator will conduct periodic safety audits and worker training at each site.

IV. WORKER PROTECTION

Whenever Contractor's personnel have the potential for exposure to asbestos fibers, the following will apply:

A WORKER TRAINING

In accordance with 29 CFR 1926.58, all Contractor's employees who will be working in asbestos abatement operations shall be informed of the dangers inherent in handling asbestos, in the proper work procedures, and in the use of protective measures. Their training shall include the following topics:

1. HEALTH EFFECTS: Methods of recognizing asbestos and the health effects associated with it;

2. SMOKING: Relationship between smoking and asbestos in producing

lung cancer.

3. NATURE OF OPERATIONS: Nature of operations that could result in the exposure to asbestos.

4. PROTECTIVE CONTROL: Importance of and instruction in the use of necessary protective controls, practices and procedures to minimize exposure. This will include engineering controls, work practices, respirators, housekeeping procedures, hygiene facilities, protective clothing, decontamination procedures, emergency procedures, and waste disposal procedures.

5. RESPIRATORS: Purpose, proper use, fit testing, instruction, care, limitations, and maintenance of respirators in compliance with 29 CFR 1910.134.

6. MEDICAL SURVEILLANCE PROGRAM: Appropriate work practices for the work and the requirements of a medical surveillance program.

7. NEGATIVE AIR SYSTEM: Explanation of the negative air pressure system and personal decontamination procedures.

8. AIR MONITORING: Air monitoring practices and a review of 29 CFR 1926.58.

NOTE: COPIES OF THIS TRAINING WILL BE FURNISHED TO THE UTMDACC CONSULTANTS BEFORE ANY OF CONTRACTOR'S EMPLOYEES ARE PLACED ON THE JOB SITE.

B. RESPIRATORY PROTECTION

Except to the extent that more stringent requirements are written directly into the contract, or required by local ordinance, Contractor's Respiratory Program will have the same force and effect as if copied directly into the contract. Where there is a conflict in the requirements set forth in the Contractor's Respiratory Program and the standards promulgated in the applicable codes listed in the Guidelines, Contractor will adhere to the more stringent requirement.

The respiratory protection intended for use on each abatement project will be, unless otherwise specified by the contract, based upon airborne asbestos fiber counts encountered on previous projects of a similar type of materials to those found of the projected asbestos abatement project, or actual readings when they are current and available.

C. PROTECTIVE EQUIPMENT

In addition to respiratory protection, Contractor requires the following protective equipment for the safety of its workers:

1. COVERALLS: Contractor shall provide disposable full body coveralls and head covers, and require that all persons entering the work area wear them. Contractor shall provide a sufficient amount of protective clothing for the required number of changes for the workers.

2. FOOT COVERS: Contractor shall provide either disposable or washable foot covers which can be used again. Street shoes are prohibited.

3. RUBBER BOOTS: When rubber boots are used in the work area, they are required to remain in the work area until the completion of the project, at which time they must be thoroughly cleaned and decontaminated, both inside and out, and put into a plastic bag before removal from the work area.

4. HARD HATS: Contractor shall provide hard hats and require that they be worn at all times when work has the potential for causing head injuries. Contaminated hard hats must remain in the work area until they can be thoroughly cleaned and decontaminated, and placed into a plastic bag before removal from the work area at the end of the project.

5. GOGGLES: Where required, Contractor shall provide eye protection in the form of goggles for all its employees in the work area when full-face respirators are not being used. The goggles shall remain in the work area until appropriately cleaned or disposed of at the completion of the project.

6. WORK GLOVES: Contractor shall provide appropriate work gloves to all personnel in the work area. The gloves must remain in the work area until the completion of the project, at which time they shall be appropriately cleaned or disposed of as disposed of as contaminated.

D. MATERIALS AND EQUIPMENT

Contractor shall provide either new or used materials or equipment that is undamaged and in serviceable condition, and only equipment that is recognized as suitable for the intended use and in compliance with the appropriate standards. MSDS sheets on materials used on site shall have been submitted by Contractor to UTMDACC as part of its bid documents for inclusion in the permanent job files.

1. SCAFFOLDING: Contractor shall provide all scaffolding, ladders and/or staging, etc. as necessary to accomplish the abatement project. The scaffolding may be of the suspension or standing type, such as metal tube and coupler, tubular welded frame, pole, outrigger or cantilever type. The type, erection and use of all scaffolding will comply with OSHA standards. The scaffolding used will be decontaminated before being removed from the work area.

2. WATER SERVICE: Where required by the contract, all connections

to UTMDACC's water system shall include valves that are temperature and pressure rated for operation of the temperatures and pressures encountered. After completion of use, connections and fittings will be removed without damage or alteration to existing water piping and equipment. Only heavy duty abrasion-resistant hoses with a pressure rating greater that the maximum pressure of the water distribution system will be used to provide water to the work area or the decontamination facilities.

3. HOT WATER HEATER: In the absence of hot water, Contractor shall provide a UL rated electric hot water heater for the decontamination unit shower. Wiring of the hot water heater will be in compliance with all applicable codes of the National Fire Protection Association National Electric Code (NEC).

4. ELECTRICAL SERVICE: Except to the extent that other conditions are written directly into the contract, UTMDACC will provide electrical service. Contractor will notify UTMDACC of the electrical requirements at least 10 days prior to starting the job. Electrical safety, in the Contractor's Safety Program, shall have the same force and effect as if copied directly into the contract.

5. GROUND FAULT CIRCUIT INTERRUPTER (GFCI): Contractor's employees shall not be permitted to work in any asbestos containment area, in proximity to any part of an electric power circuit in which they may come in contact during the course of this work, unless the employee is protected against electric shock by use of a GFCI.

6. LIGHTING: Contractor shall provide sufficient temporary lighting to ensure proper workmanship throughout the work area. This lighting shall include the use of daylight, general lighting, or portable plug-in lighting, or any combination of the above.

- 7. FIRE EXTINGUISHER: Contractor shall comply with all governing regulations and recognized recommendation within the construction industry for one fire extinguisher per thousand feet on abatement site. The fire extinguisher will be located in the most convenient and effective place for its intended purpose, with at least one (1) extinguisher in the work area and one (1) outside the work area. Each extinguisher shall be at least a minimum 10lbs. rated ABC. All personnel will be cautioned to use fire extinguisher to combat fires that are in their incipient or beginning stages only. If the fire becomes life threatening all personnel are to evacuate the area immediately.
- 8. All polyethylene sheeting utilized in construction of containments, including critical barriers shall be fire retardant.
- E. ENTRY PROCEDURES

1. JOB SITE: Workers entering the job site shall be required to wear clothing applicable to a construction job site. This includes appropriate

footwear, trousers, long sleeve shirts, and hard hats if necessary.

2. WORK AREA (CONTAINMENT): All personnel entering the work area, where respiratory protection is required, must first meet the following criteria. They must have received a medical examination in compliance with the medical examination requirements of OSHA standard - 29 CFR 1926.58 within the past twelve (12) months and have a written certificate, or facsimile, from the physician attesting to his opinion that the individual may enter an area where asbestos fibers are present and use a respiratory device. They must be trained in the use of the respiratory devices and when applicable, must be fit-tested for the respiratory device; and they must receive adequate training for entry into an asbestos containment area.

After they have met the above criteria, all personnel must enter the Clean Room and remove all street clothing, including underwear and socks, depending upon the individual's preference, they can continue to the next step in the nude, put on disposable underwear, or use a nylon bathing suit. The bathing suit is generally furnished by the individual.

A clean set of protective clothing must then be put on, leaving the head covering off. The individual must then don a respirator approved for the project and conduct the necessary field checks to determine the face piece toface seal. The head covering is then secured over the top of the respirator straps. The individual should then leave the clean room and proceed through the shower area and enter the equipment room.

In those cases where the worker has been using any additional clothing or work tools that have been left in the contaminated end of the equipment room, these should be put on at this time before leaving the equipment room.

All donning of respiratory protective equipment and protective work clothing should be accomplished using the "partner" system involving two employees assisting each other. Prior to entering a work area, each worker should be examined by his "partner" to ensure that all connections in the respirator system are properly made and that the protective clothing is properly donned.

F. DECONTAMINATION PROCEDURES

Before leaving the work area, all personnel are required to remove gross contamination and debris from their protective clothing and feet. The workers then proceeds to the equipment room and removes all clothing and equipment with the exception of respiratory protection equipment. All tools and extra work clothing, such as cold weather coats and pants, work boots or shoes, etc. which are contaminated, must remain in the containment area and should be stored in the dirty equipment room. All disposable protective clothing must be placed in an appropriately marked bag for disposal with other contaminated waste materials; all personnel are then required to use the following decontamination procedures when leaving the work area. Still wearing the respirator, the workers shall proceed to the showers. Showering is not only essential for decontamination, but is mandatory under this contract. Care must be taken to follow reasonable procedures in removing the respirator to avoid asbestos fibers while showering. At a minimum, the following procedures are required.

1. SUPPLIED-AIR AND PAPR RESPIRATORS: If workers are using Supplied-Air or Powered Air-Purifying Respirator (PAPR), thoroughly wet the body including the face and hair. If workers are using a PAPR, turn the blower unit down so that the filter opening is towards the chest. With the respirator still in place, workers must thoroughly wash the body, hair, respirator face piece, and all parts of the respirator except the blower unit and the battery pack on a PAPR. Workers must pay particular attention to the area around the seal of the face piece and under the straps.

Workers should then completely wet their hair, face and respirator. Taking a deep breath, and while holding their breath, workers must stand so that the water is directed at the face and remove the respirator and hold it away from the face before starting to breath normally.

Carefully wash the face piece of the respirator inside and out. If workers are using supplied air, disconnect the airline. If using workers are using a PAPR, they must shut it down in the following sequence. (a.) First cap the inlet to the filter cartridge and then turn off the blower unit. This will help keep debris which has collected on the inlet side of the filter from dislodging and contaminating the outside of the unit. (b.) Thoroughly wash the blower unit and hoses, and carefully wash the battery pack with a damp rag to avoid getting water into the battery pack.

(c.) Shower completely with soap and water, paying special attention to areas containing body hair. It is imperative that workers rinse thoroughly. (d.) Rinse the walls and floor of the shower before exiting. Proceed to the clean room to dry off and put on street clothes or a new set of protective clothing.

2. AIR PURIFYING RESPIRATORS: For air purifying negative pressure respirators, workers must thoroughly wet the head, neck and body as much as possible without getting the filter wet then take a deep breath, and while exhaling slowly, wet the respirator and filter, with the face directed at the water, and finally remove the respirator from the face and breath normally.

When disposing of the used filters, workers must thoroughly wet the filters and dispose of it as contaminated waste. Workers shall then wash the face piece of the respirator inside and out.

NOTE. ALL USED FILTERS WHICH ARE TO BE REPLACED, SHALL BE DISPOSED OF AS ASBESTOS CONTAMINATED WASTE AND PLACED IN A DISPOSAL BAG LOCATED IN THE DIRTY ROOM. 3. TOWELS AND BATH MATS: All disposable towels and bath mats, which are contaminated, shall be treated as contaminated and disposed of properly

G. MEDICAL EXAMINATIONS

Contractor shall offer at no cost to its employees, a physical examination for all employees working in asbestos abatement operations and are required to comply with the provisions of OSHA's - 29 CER 1926.58. These physical examinations shall, as a minimum, meet the requirements of the Medical Surveillance portion of the OSHA asbestos standard for to construction industry, - 29 CFR 1926.58. As part of the examination, the physician will be asked to evaluate the individual employee's ability to work in the environments capable of producing heat stress in the worker.

1. REPORT OF MEDICAL EXAMINATION: At a minimum, the following information will be contained on the physician completed medical examination report:

a. Personal Information: Employee name and social security number;

b. Medical Conditions: Whether or not the employee has any detected medical conditions that would place the worker at an increased risk of health impairment from exposure to asbestos;

c. Limitations: Any recommended limitations on the worker or use of personal protective equipment such as respirators; and

d. Physician Statement: A physician's written statement of the worker's medical examination results and of any medical conditions that may result from asbestos exposure. Copies of these reports will be furnished by Contractor to the UTMDACC Consultants onsite before its employee is placed on the job site.

e. Employees working at The University of Texas MD Anderson Bastrop Campus are required to have medical clearance **prior to** traveling to the campus. See Attachment A Bastrop Campus-Medical Documentation Requirements.

V. DECONTAMINATION FACILITY

Unless otherwise directed by the contract document, and space not being a factor, Contractor shall provide separate personnel and equipment decontamination facilities. Under this provision, the personnel decontamination unit will be the only means of worker ingress and egress for the work area through the equipment decontamination unit contractor will either build a decontamination unit or furnish a prefabricated decontamination unit.

For example, the decontamination facility could be located parallel or perpendicular

to the work area, the facility could be located inside the work area or it could be outside the work area. The only important criteria for placement of the decontamination facility, is that it exits to the outside ambient surroundings only at the clean end of the unit and exits into the isolated work area only at the equipment or dirty end of the unit.

A. PERSONNEL DECONTAMINATION UNIT

The Personnel Decontamination Unit will consist of a serial arrangement of connected rooms, designated the clean room, shower room, and equipment room. separated by triple overlapping doorways. Construction materials may include 6 mil frosted, opaque or black polyethylene sheets, to provide worker privacy, and suitable framing.

1. CLEAN ROOM: The clean room, or change room as it is sometimes referred to, is physically and visually separated from the rest of the unit for the purpose of allowing personnel to change into protective clothing. It is constructed so as to have an airtight seal between it and the unit and designed so that access to the work area from the clean room is through the double overlapping doorway leading to the shower room and the equipment room. Asbestos contaminated items shall not be allowed to enter this room for any purpose. Entrance to this room will be only from the outside uncontaminated area or from the door leading to the shower room. The clean room shall also act as a storeroom for employees' street clothing, uncontaminated equipment. such as respirators, towels, protective clothing, etc., and as an information center for the posting of required documents and emergency information.

The floor of the clean room must be kept clean and dry at all times, and all surfaces should be wet wiped with a disinfectant solution after each shift. An adequate supply of towels and bath mats shall be provided. Employee storage lockers, or their equivalent, shall also be provided.

2. SHOWER ROOM: Contractor shall provide a water tight operational shower to be used for transit by cleanly dressed workers heading for the work area from the clean room and/or for showering by workers heading out of the work area after undressing in the equipment room. The shower room will be constructed in a "pass through" design in a configuration that will require the worker to pass from the contaminated equipment room, through the shower, and into the clean room.

For sanitary reasons, it is advisable to install a free draining floor on the top of the shower pan. The shower room must contain at least one showerhead for every 10 workers with hot and cold water. Contractor will insure that soap and clean towels are present.

Shower will be appropriately equipped with an approved filtering system, which a minimum, 5 micron wastewater filters in-line to filter the wastewater

for sewer disposal.

3. EQUIPMENT ROOM: This is a change and transit room for personnel who have had access to the contaminated work area. All work equipment, footwear and additional contaminated work clothing must be left in this room. The equipment room shall have two (2) multi-flapped exits, one leading to the work area and the other leading to the shower room. If, for some reason, the airborne asbestos level in the work area is expected to be high, as in dry removal, an intermediate cleaning space will be added between the work area and the equipment room.

B EQUIPMENT DECONTAMINATION UNIT

The equipment decontamination unit is generally required only on large asbestos abatement projects or as emergency exits. If required to do so as a part of the contract document, and where space permits, the material removal area will be constructed by Contractor according to the following specifications:

1. MATERIAL REMOVAL AREA: The material removal area shall be constructed at some location away from the personnel decontamination unit. Whenever possible, this shall be located where there is direct access from the work area to the outside of the building. This consists of a clean holding area that opens to the outside ambient surroundings, a washroom that opens to the contaminated work area, and a divider wall between them, with overlapping doors.

Some type of water spraying unit should be used in place of a shower head and controls in the wash room, and it should have a pan large enough to catch the amount of water required to wash off bags containing contaminated waste materials. This wastewater should be appropriately filtered and discharged.

Personnel working in the material removal area will not use this as a means of exit except in the case of an emergency.

C. MATERIAL DECONTAMINATION PROCEDURES

1. EXITING THE WORK AREA: HEPA vacuum the gross contamination from appropriately bagged contaminated waste in the work area, and then move the bags into the washroom of the material removal area.

From there all materials or waste packages will be thoroughly washed and decontaminated before being moved forward into the clean holding area. The workers who have just completed washing the waste material will not proceed into the clean holding area, but will return to the work area, leaving the decontaminated bags of waste stored in the clean holding area.

2. ENTERING THE CLEAN HOLDING AREA: Workers, who are

dressed in clean, uncontaminated protective clothing, and wearing an appropriate respiratory device, will enter the clean holding area of the material removal area from the outside and remove the bags of contaminated waste by bringing them through the door to the outside. These clean workers will not proceed any further inside the removal area than the clean room.

D. REMOTE DECONTAMINATION FACILITIES

In unusual situations, alternate methods of providing decontamination facilities may be utilized in accordance with all applicable codes and regulations. If this situation occurs, the remote or centralized decon shall be as close to the containment as possible. In these cases, the worker would be HEPA vacuumed at the work area, would put on a clean set of coveralls on over the dirty ones, then would proceed directly to the decon unit. From there the worker will shower as described in IV. 4.

E. CLEANING DECONTAMINATION UNIT

The debris and residue from inside the decon unit shall be cleaned on a daily bases or as otherwise indicated by the Contract Project Coordinator. The cleaning shall consist of wet wiping all surfaces after each shift.

1. CONTAMINATED CLEAN ROOM: If the clean room of the personnel decontamination unit becomes contaminated, it may become necessary to close down the entire decontamination unit and erect a temporary new one until such time as the dirty unit can be completely decontaminated. The reason for this being that if the clean room becomes contaminated, there is no place for the workers cleaning it to decontaminate.

VI. TEMPORARY ENCLOSURE WORK AREA)

A. GENERAL

The work area is the location where the asbestos abatement work occurs. The work area is considered contaminated during the abatement work and must be isolated from the rest of the building. The work area must then be decontaminated at the completion of the asbestos abatement. The enclosure, by which this contaminated area is isolated, is known as the temporary enclosure or the critical barrier. On those abatement projects where the work area is outside of a building, it is not always necessary to build an enclosure in order to isolate it. This will be the decision of the Contract Coordinator.

The work area will be completely isolated from the rest of the building so as to prevent asbestos containing dust or debris from passing beyond the isolated area. Should the area beyond the work area become contaminated with asbestos containing dust or debris as a consequence of an accident or a spill, those areas will be cleaned in accordance with appropriate and approved procedures. Unless otherwise specified by the contract document, all uncontaminated movable furniture, equipment, etc., will be cleaned with a HEPA vacuum cleaner and removed from the work area before beginning work. Those items that cannot be removed shall be cleaned with a HEPA vacuum cleaner; wet wiped and then covered with two layers of six mil poly and properly taped to the floor. This covered equipment will then be considered outside of the work area.

Unless otherwise specified in the contract document, all heating, air conditioning, ventilation and return air must be turned off and sealed. Caution must be taken to ensure that the sealing off of the HVAC system will not cause any problems.

For the purpose of this specification all polyethylene (poly) referenced shall be fire retardant.

1 CRITICAL BARRIERS. Contractor shall construct a critical barrier, which will ensure that the abatement area is isolated and contained, by building impermeable barriers at all exits or openings, including doorways, ducts, mechanical shafts, elevator shafts, drains, etc. so that all possible entrance or exit routes are barricaded and sealed.

2. WORK AREA PREPARATION: After wet wipe and HEPA vacuuming of the work area Contractor shall notify the Contract Project Coordinator or Project Manager who will then perform a visual inspection and give the contractor permission to proceed with prepping the area. Critical barriers will consist of sealing all light switches, thermostats, wall plugs, and air ducts, and also all windows and doors not to be used. The Contract Project Coordinator or Project Manager will then perform another visual before Contractor can erect the containment. The containment shall consist of at least two layers of poly sheeting. The order of application will be as follows:

a. First Layer Floors: One layer of six-mil poly covering the floor and extending a minimum of twelve inches up the walls. The poly that is extended up the walls shall be taped in a way that no contaminated water or debris can get behind it during abatement.

b. First Layer Walls: One layer of four-mil poly covering the walls. This layer will be attached to the walls approximately two inches below the ceiling in a manner that will secure the poly to the walls and not allow it to release during abatement. The wall poly shall overlap the floor poly that is extended up the walls in such a manner that will not allow to sheets to become separated.

c. Second Layer Floors: The second layer of six-mil poly shall then be laid over the floor in the same manner as the first. The sheeting that extends up the walls will be secured to the first layer of wall poly in a manner that will not allow contaminated water or debris between the two layers.

d. Second Layer Walls: A second layer of four-mil poly shall

then be applied to the walls. This layer shall be adhered to the wall approximately one inch from the ceiling in such a manner that will not allow it to release during abatement.

All tools, scaffolding, vacuums, pressure differential machines, etc, should be placed in the work area before it is isolated.

B. ACCESS CONTROL

Containment access shall be permitted only through the decontamination unit. All other means of access shall be closed off and sealed, and danger signs shall be displayed on the barriers. No person shall be allowed to enter the containment area that does not have a direct need to do so. Persons entering the containment must follow all entry procedures, including the removal of all street clothing, donning protective clothing and the appropriate respiratory protection designated for the containment area. No person shall be allowed to enter the containment unless they meet the requirements of OSHA's - 29 CFR 1926.58 (e) (3).

Depending on the nature of the abatement project, the respiratory protection being used, and the air monitoring results, persons desiring entry to the containment will be required to show verification of a physician's clearance allowing the use of a respirator and to enter an asbestos containment.

C. WARNING SIGNS

Contractor shall post a sufficient number of appropriately worded danger signs to adequately notify all persons in the vicinity of the containment and the dangers involved. The signs will be posted directly onto the clean side of the critical barriers and at each entrance to the containment and the decontamination units. The signs must be printed in English and Spanish.

The danger signs shall comply with the requirements of the Occupational Safety and Health Administration's standard on danger signs, - 29 CFR 1910.145. Each sign shall have the following legend and must be red, white and black in color:

DANGER

ASBESTOS

CANCER AND LUNG DISEASE HAZARD

AUTHORIZED PERSONNEL ONLY

RESPIRATORS AND PROTECTIVE CLOTHING ARE REQUIRED IN THIS AREA

VII. PRESSURE DIFFERENTIAL CONTAINMENT SYSTEM

A. The Pressure Differential Containment System is a fully operational engineering control system which exhausts the minimum amount of air from the containment to create a continuous pressure of -0.02 inches of water, or greater, within the enclosure with respect to area outside the enclosure, as per OSHA's - 29 CFR 1926.58 appendix F, page 42.0.35.

B. This requirements detailed above are achieved by using a Pressure Differential Unit which is a self contained filtering machine capable of producing an air flow and shall be equipped with a HEPA filter to collect and retain the airborne asbestos fibers. In order to achieve -0.02 inches of water Contractor must have at least four air changes per hour.

C. Contractor shall demonstrate the pressure differential by use of a manometer. The manometer shall continuously monitor and record the pressure differential between the area inside and outside the containment.

D. The methodology of the Pressure Differential Containment System is to seal all potential air paths into the containment as tightly as possible and provide a HEPA filtered exhaust system which removes enough air from the containment to establish negative pressure to offset any air leakage which may occur and to lower the asbestos fibers.

NOTE: ONCE THE ASBESTOS ABATEMENT OPERATION HAS BEGUN AND THE NEGATIVE PRESSURE COUTAINMENT HAS BEEN ACTIVATED, THE NEGATIVE PRESSURE MUST BE MAINTAINED CONTINUOUSLY UNTIL THE ABATEMENT IS COMPLETE AND THE AIR MONITORING REPORTS INDICATE THE AREA HAS REACHED THE CLEARANCE CRITERIA.

E. ESTABLISHING PRESSURE DIFFERENTIAL

When the air inlet potential is restricted, only enough air is exhausted through a HEPA equipped pressure differential unit to reduce the containment pressure to -0.02 inches of water. From a practical standpoint, this pressure difference should not exceed -0.06 inches of water. Any amount higher than this may damage the critical barriers. Once the required amount of pressure has been reached, the containment has been effectively contained and the only air release outside is through the HEPA equipped pressure differential units.

F. ESTIMATING THE NUMBER OF PRESSURE DIFFERENTIAL UNITS

Lacking specific air monitoring data that could indicate the number of pressure differential units required in the containment to provide a fully operational pressure differential system, Contractor shall estimate the number of units in the following manner:

To determine the number of units required, Contractor shall ascertain the containment volume in cubic feet, by multiplying floor area by ceiling height. The total ventilation requirement for the containment, in cubic feet per minute (CFM), will then be

determined by dividing the above volume by fifteen (15).

Ventilation Required = <u>Volume of containment</u> (cu. ft)

15

The number of pressure differential units needed to achieve this rate will then be determined by dividing the ventilation requirement (CFM) by the working capacity of the units used.

There shall be at least one additional unit on site as a backup in case of unit failure or if a unit needs to be shut down to replace filters.

The pressure differential system relies on air monitoring data to indicate machine usage, and not on a passive, inactive system deployed on the basis of standard calculations, which do anticipate the peculiarities of each containment. Further, it has all active control over the airflow in the containment with an arrangement that can be changed to react to the air movement of each individual project. The air monitoring results can be used to maximize the systems effectiveness.

G. POSITIONING THE PRESSURE DIFFERENTIAL UNITS

Exhausting machines should be located away from the most likely air entry routes, such as the decon unit both personnel and material, to establish the longest possible air flow path. When there is air movement, the fibers tend to dilute in the fresh air and be pulled into the pressure differential units to be filtered before exhausting into the outside air. It is desirable that exhausted air has the least potential for contamination to reduce the risk of fiber release in case of accident, seal failure or filter failure.

Additional units may be located free standing inside the containment to circulate air within the area to filter and trap contamination out of the air. Depending on work methods, other engineering controls, the form or type of asbestos, material characteristics, and previous treatments, the number of units may be varied as little or as much as needed to lower the airborne fiber levels in the containment.

<u>NOTE</u>: CONTRACTOR SHALL ALWAYS USE NON-IRRITANT SMOKE RESULTS AS A MEANS TO LOCATE ANY DEAD AIR SPACES INSIDE OF CONTAINMENT SUCH AS CLOSETS, NOOKS, HALLWAYS, ETC.

H. DISMANTLING THE SYSTEM

When the final inspection and results of the final air tests have indicated the work area has been completely decontaminated, the pressure differential units may be turned off and removed from the work area. Before removal from the work area, the pre filter of the units should be removed and properly disposed of as contaminated waste. Then the intake and exhaust ports shall be sealed with six mil poly to prevent any chance of contamination.

VIII. REMOVAL OF ASBESTOS CONTAINING MATERIAL (ACM)

After preparation of the decontamination unit, enclosure of the containment, and start up of the pressure differential units, the removal of asbestos containing material may begin.

A. ACCESS TO ASBESTOS CONTAINING MATERIAL (ACM)

Prior to the actual removal of the ACM, it may be necessary to dismantle ceilings, electrical, or mechanical systems in order to gain access to the ACM. The dismantled components will be cleaned, protectively wrapped, and stored for re-use, preferably outside of containment, or the components will be properly decontaminated and disposed of as general trash, or the components will be properly disposed of as asbestos contaminated waste.

B. AMENDED WATER

Contractor shall use amended water to thoroughly soak or wet down the ACM sufficiently to retard the release of asbestos fibers during the abatement of the material. The amended water penetrates more effectively than plain water and permits a more thorough soaking of the ACM. The amended water is generally prepared by mixing at least one ounce of surfactant to five gallons of water.

The amended water is applied to the ACM with an airless sprayer, which will allow the amended water to be applied in a fine spray that minimizes the release of asbestos fibers by reducing the impact of the spray on the material to be abated.

C. OTHER REMOVAL AGENTS

In some cases, Contractor will find it necessary to use other removal agents. For example, a penetrating type of encapsulant designed specifically for removal of ACM. When using such a removal encapsulant, it may be necessary to remove the ACM from the substrate before the encapsulant hardens or becomes dry.

D. WET REMOVAL PROCEDURES

In order to thoroughly soak or wet down the ACM, Contractor shall spray the material with amended water or other removal agents, using spray equipment capable of providing a low-pressure application to reduce the release of fibers. The material shall be saturated sufficiently to wet it to the substrate without causing excessive dripping. The ACM must be sprayed repeatedly during the abatement as necessary to maintain wet conditions and minimize fiber release. The saturated ACM should be removed in small sections, and if possible, placed directly into disposal bags. The ACM must not be allowed to dry out during this procedure.

ACM should not be allowed to accumulate on the floor of the containment. Any material that has not been bagged during the day must be bagged before the work shift is over. Non-metallic shovels shall be used. Bagged waste shall be removed at the end of each workday and placed in a dumpster designated for this purpose or transported to an approved asbestos disposal site.

In areas where the ACM is more than one-inch thick, total penetration or saturation may occur, thus resulting in partially wet removal. When this occurs, periodic misting with amended water of the surfaces and the surrounding atmosphere is required to ensure the asbestos fibers do not dry out and become airborne.

E. WASTE DISPOSAL BAGS

Unless otherwise required by the contract document, Contractor shall use six mil thick impermeable polyethylene bags, which are properly labeled, for disposal of the asbestos containing waste material. Before starting removal, Contractor must have a sufficient number of waste disposal bags on site. The disposal bags shall be sealed with duct tape using the "gooseneck technique". This technique helps in minimizing any leaks that may occur from a poorly sealed disposal bag.

1. WARNING LABELS: Contractor shall comply with OSHA's Hazard Communication Standard, - 29 CFR 1910.1200 (f), which requires each employer to ensure that all containers of hazardous material in the work area are labeled, tagged, or marked with the identity of the hazardous material contained therein, and an appropriate warning of the hazards of the material. These labels are three inches high by five inches wide and conform to the requirements specified in - 29 CFR 1910.145 for danger labels or signs. All asbestos waste disposal bags utilized by Contractor shall be appropriately marked as follows:

DANGER CONTAINS ASBESTOS FIBERS AVOID CREATING DUST CANCER AND LUNG DISEASE HAZARD BREATHING AIRBORNE ASBESTOS FIBERS IS HAZARDOUS TO YOUR HEALTH

F. SHORT DURATION REMOVAL PROCEDURES

Several methods can be used to remove small amounts of ACM during small scale, short duration renovation or maintenance tasks. These include the use of glove bags, the removal of asbestos pipe insulation, and the construction of mini containments.

1. PIPE INSULATION: Where pipe insulation is being removed within the work area, it should be sprayed with a mist of amended water or removal encapsulant and allowed to saturate the material to the substrate. Any wire or bands holding the pre-formed pipe insulation should then be cut, the jacket slit open at the seams, and the insulation removed and placed into a waste disposal bag. Any residue remaining on the substrate should then be removed with a stiff bristled nylon brush or a scrub pad.

2. GLOVE BAGS: Glove bag removal shall be performed in accordance

with all state and federal regulations.

When properly installed and used, the glove bag will permit the worker to remain completely isolated from the asbestos material being abated inside the bag.

Glove bags provided by Contractor shall be a plastic bag of six mil thickness with an adhesive strip top enclosure which may require slitting the sides of the bag to develop shoulders over the pipe.

Before any removal work begins, the worker must don the appropriate protective equipment. This is necessary to protect the worker who is in close proximity to the glove bag, and should the bag rupture. There may be a potential for exposure. Before installing the glove bag, all tools required for the removal shall be placed into the bag. This includes a water spray bottle if used. The glove bag must be installed so that it completely covers the pipe or fitting where the asbestos is to be removed. This is done by attaching the bag to the pipe by folding the open edges together and sealing them with tape. All unused openings to the bag must be sealed with tape or an equivalent material. All glove bags shall be smoke tested prior to start of abatement.

A wetting agent must be used. It may be applied by a small spray bottle enclosed in the bag, or an airless sprayer, which has been placed through the pre-cut port or poked through a slit.

In either of the latter two methods, the slit or precut hole must be sealed around the sprayer and made airtight.

Once the material has been soaked it can be removed from the pipe. The choice of tools to remove the ACM depends on the type of material. This may include a retractable utility knife, wire saw, tin snips, rags, brush, etc.

After the abatement of the ACM, the surface of the pipe must be brushed and wet wiped. The edges of the insulation shall be thoroughly soaked with a penetrating encapsulate and the top of the bag washed down.

After abatement completion, a HEPA vacuum shall be inserted into the bag through the port to remove any air inside the bag. When the air has been removed, the bag should be compressed, twisted, and sealed with tape to keep the asbestos materials safely in the lower portion of the bag

Any asbestos containing edges that are exposed shall be encapsulated with a bridging encapsulant to ensure that the edges do not release asbestos fibers after the glove bag has been removed. The bag can then be removed from the pipe and the sealed bag shall then be placed into a waste disposal bag, labeled and removed as required.

3. MINI ENCLOSURES: In some instances, such as removal from a small ventilation system or from a short length of duct, a glove bag may not

be large enough to properly enclose the material to be abated. In such cases, Contractor may elect to build a mini containment around the area where a small scale, short duration asbestos abatement is to be performed. Such an enclosure must be constructed of the same materials as the large containment, but only one layer of poly is normally required. It can be constructed small enough for entry by only one worker. The worker must wear the appropriate protective equipment while in the mini enclosure and the change room must be contiguous to the enclosure. This is necessary to allow the worker to decontaminate after removal.

IX. DISPOSAL OF ASBESTOS CONTAINING MATERIALS

- A. Asbestos containing waste, when packaged in accordance with this guideline may be disposed of at designated landfills when certain precautions are taken. These include notifying the EPA's regional office and obtaining the necessary state and local permits. Contractor must be licensed by the Texas Department of Health as a Waste Transporter.
- B. Bagged asbestos containing waste, which is ready for disposal, shall not be stored in the open outside of the work area. These bags will be taken directly to a closed truck or dumpster. No bagged asbestos containing waste is to be left within the building or premises without the approval of the UTMDACC Consultants and/or Contract Project Coordinator. Care shall be exercised before and during the transport to insure that no unauthorized persons have access to the materials. All bagged waste shall be transported out of the buildings in closed containers. The required generator labeling shall be attached to the bagged asbestos waste bags prior to leaving the projects regulated area.
- C. Waste disposal bags that are not containerized shall not be transported in open trucks. Double-bagged materials may be transported in open trucks if they are first loaded into container drums and the drums are then sealed. These drums must then be labeled with the same warning as the disposal bags. Uncontaminated drums may be reused, but any drums that are contaminated must be treated as such and disposed of in accordance of this guideline.
- D. When possible, the landfill operator should be notified at least twenty-four hours in advance of the transport and advised of the quantity of material to be delivered. At the disposal site, the sealed waste bags should be carefully removed from the truck. If any of the bags are broken or damaged, they should be left on the truck and then placed in another clean, unbroken disposal bag before being removed from the truck. In this case, the entire bed of the truck must be cleaned and decontaminated.
- E. Receipts from the landfill for the materials disposed of must be retained in compliance with section 16.0 of the Guideline, Final Documentation. Contractor should be sure manifests are complete. Owner's copies of manifests shall be mailed monthly to the UTMACC Asbestos Consultant.

X. WORK AREA CLEANUP PROCEDURES

A. This section details the cleaning and decontamination procedures to be followed during the final cleanup of the work area, including the decontamination of the air in the work area which has been contaminated by the elevated airborne asbestos fiber levels generated during the abatement procedures.

B. It includes the cleaning and decontamination of all surfaces (ceilings, walls and floors) of the work area and all equipment in the work area. In order to accomplish this series of decontamination cleaning will be conducted. These cleaning apply to that portion of' the abatement project in which all visible ACM has been removed from the substrate and the substrate has been brushed and wet wiped. During this entire cleaning process the air filtering units must be maintained in continuous operation.

C. FINAL CLEANING

1. After the removal of all visible accumulations of asbestos material and debris, all surfaces in the work area and the decontamination units should be thoroughly cleaned with HEPA filtered vacuums and wet wiped. The decontamination units must also continue to remain in operation.

2. A second cleaning should then be conducted, again using HEPA filtered vacuums and wet wiping all surfaces. When this second cleaning has been completed, UTMDACC Consultants and/or Contract Project Coordinator or contracted third party asbestos project manager will conduct a visual inspection of the work area and the decontamination units, to ensure that all areas are free of ACM debris.

3. After the second cleaning, all tools and equipment remaining in the work area the decontamination units should be decontaminated by HEPA vacuuming and wiping. Once this is completed, the area is ready to be visually inspected by UTMDACC Consultants and/or Contract Project Coordinator or Project Manager, and the Supervisor. If the results of the inspection are satisfactory, the UTMDACC's Consultant(s) representative conducting the inspection will release the work area for encapsulation. This involves applying a sealant to the substrate and of the remaining poly sheeting to lock down any remaining asbestos fibers. An adequate time period will be established to allow the sealant to dry before conduction additional air sampling.

4. MSDS for encapsulant used may effect requirements for respiratory protection. Vapors that are given off during the application of some encapsulant must be taken into account when selecting respiratory protection if other than supplied air is being used. The UTMDACC Consultants and/or Contract Project Coordinator shall have the option to decide which encapsulant will be used on the final lock down.

5. Final air monitoring of the containment and decon unit will then be conducted to determine the area fiber counts. Unless contract documents specifies otherwise, the third party Air Monitoring/ Project Manager onsite shall only conduct this air sampling.

6. If the results of the clearance sample is less than 0.01 f/cc the area shall be cleared for tear down. If however, there are still sufficient asbestos fibers airborne inside of the containment area, this shall require that Contractor re-clean the containment as many times as it takes to achieve clean air criteria of 0.01 f/cc.

D. REMOVAL OF TEMPORARY ENCLOSURES: Upon acceptance of the air monitoring results, Contractor shall then dismantle operations of the remaining work area, decon unit, and tear down of the critical barriers. Although the area has been tested clean, all polys from the containment shall be placed in disposal bags and disposed of as asbestos waste.

XI. AIR MONITORING

A. This section describes the air monitoring carried out by the third party vendor Project Manager to ensure the compliance of all air monitoring requirements. This however excludes the air monitoring of Contractor's employees. Contractor is responsible for employee personnel air monitoring as required by OSHA.

B. UTMDACC's third-party vendor Project Manager will determine the final clearance results and will be performing under the directive of UTMDACC's Consultants.

C. The written results of the asbestos abatement contractor's (ref. Contractor as defined in Section 1 "Guidelines", subsection I "Scope") employee OSHA sampling for each shift shall be posted for each employee's review in a timely manner. In the event Contractor has two air cassettes voided because of gross contamination, misuse, or damage Contractor shall immediately furnish type "C" supplied air respirators equipped with the pressure demand mode to all employees working inside containment.

1. TERMINATION OF MONITORING

The requirement exception for conducting daily monitoring that is representative of the exposure of each employee in the containment is when all workers in the containment are equipped with supplied air respirators operating in the pressure demand mode. Personnel monitoring will not be mandatory of Contractor after releases of the work area for demobilization. This will be done by the owner's consultant or project manager.

2. EMPLOYEE NOTIFICATION

Immediately upon receipt of the air monitoring results, they will be posted on

site. When the results are received at the completion of the job, or after the employees who were involved in the sampling have left the job site, it will be Contractor's responsibility to notify its employee of the results.

3. OBSERVATION OF MONITORING

Contractor shall provide its affected employees or their designated representatives an opportunity to observe the monitoring of employee exposure in containment The observer shall comply with all of the state requirements for Asbestos Workers licensing.

XII. DEMOBILIZATION

The pressure differential units shall be turned off and sealed. All debris used cleaning materials and any other remaining shall be disposed of as contaminated waste. All bags shall be removed from UTMDACC's property by approved transport methods. All contaminated waste which has been removed from the project during the demobilization operation will be disposed of at the selected waste disposal site. The transportation vehicles will then be decontaminated and the protective clothing worn by the disposal crew will be included in the disposal process.

XIII. FINAL DOCUMENTATION

Project documentation will be submitted to UTMDACC consultant within ten (10) working days after completion of project. Final documentation will be submitted to UTMDACC Consultants for acceptance and permanent file no later than ten working days after the completion of the project.

XIV. PARKING

Contractor will be responsible for its company and employees parking arrangements through the Texas Medical Center operations or elsewhere as may be applicable.

All parking and traffic rules and regulations of UTMDACC are applicable and will be enforced.

Any parking tickets issued to Contractor's vehicles or the Contractor's employee's vehicles are the sole responsibility of the violating party.

END OF SECTION