### OPERATIONS AND MAINTENANCE PLAN

In the event of the disturbance or removal of any and all asbestos containing material, Boerne ISD will contract with a licensed asbestos consultant and/or abatement firm. In the event of asbestos-containing floor tile disturbance or removal, Boerne ISD will either utilize licensed RFCI district personnel or a licensed asbestos contractor and/or abatement firm for the performance of these activities.

Asb	estos Designated Person: Africa.
ADI	P Signature: Nato June Date: Annuary 1,2015
Doe	s your district employ licensed RFCI personnel? (please check one)
	Yes
Ø	No

## OPERATIONS AND MAINTENANCE GUIDELINES PART ONE

### INTRODUCTION

The Asbestos Hazard Emergency Response Act (AHERA) requires all primary and secondary schools to use a licensed individual to conduct inspections of all buildings to determine the presence of asbestos containing building materials (ACBM). The inspection data is then given to a licensed management planner who recommends specific courses of action, called response actions, to eliminate any threat to human health or the environment. In serious cases, the ACBM may have to be removed immediately. In less serious cases, and because removal is very expensive and disruptive, the ACBM may be left in place temporarily, providing steps are taken to minimize or eliminate the exposure of building occupants to asbestos fibers. These steps, collectively, are known as the Operations and Maintenance plan (O&M). This plan applies to any building that contains (or is assumed to contain) any ACBM; the plan remains in effect so long as any ACBM remains in this building.

The O&M Plan is a set of practices and procedures designed to allow ACBM to remain in the building with minimal risk to the health of the building's occupants and workers. The O&M plan is administered by the district's asbestos coordinator. Sometimes the asbestos coordinator is also referred to as the program manager or as the designated person. This person is responsible for reviewing the O&M program, oversees required training and notifications, approves maintenance activities, keeps required records, and generally ensures that the district fulfills all federal and state asbestos mandates.

### A. REQUIRED INFORMATION

There are several cases where the school has a responsibility to give out certain information; these communications may be considered part of the O&M plan. The general purpose of all these communications is to ensure that each person has enough information to avoid accidentally creating a health hazard.

These items of information may also need to be given in another language in the cases of persons for whom English is a second language. This is particularly true in the case of warning labels.

- 1. Annual notification is required for building occupants, and parents/guardians of children concerning the management plan and their right to examine it. This notification is required even in cases where the building has no asbestos, since the law gives these individuals the right to inspect the procedures used to determine that the building is asbestos-free.
- 2. Notification is required to building occupants and parents/guardians of children concerning all asbestos-related activities, such as the implementation of response actions, and surveillance and reinspection activities.
- 3. Maintenance and custodial workers must have easy access to DIAGRAMS that clearly show the locations of ACBM in buildings in which they work.
- 4. WARNING LABELS are required to be placed adjacent to ACBM located in utility-

maintenance areas used primarily by maintenance and custodial workers. Warning labels should also be placed at the entrance to the area. Labels must read:

# CAUTION ASBESTOS HAZARDOUS DO NOT DISTURB WITHOUT PROPER TRAINING AND EQUIPMENT

In most cases, it will be appropriate to restrict access to these areas to authorized personnel.

5. OUTSIDE WORKERS (such as subcontractors or repair persons) must be told of ACBM located in areas where they could be working. The asbestos coordinator should receive from the contractor a written assurance that all workers have the knowledge, training, and, if required, the license to undertake their assigned activities.

### **B. TRAINING**

1. Maintenance and Custodial Worker Training.

All maintenance and custodial workers must receive two hours of awareness training. The two-hour asbestos awareness training includes:

- a. an overview of the nature of asbestos and the conditions under which asbestos can create a health hazard.
- b. the locations and condition of the ACBM located in district buildings.
- c. instruction in prohibited activities, and direct to report any <u>change</u> observed in the condition of any of these materials.
- d. a summary of the steps this district has taken and continues to take to ensure the safety and well-being of all building occupants.
- e. the availability and location of the management plan.
- f. training in the ability to recognize specific kinds of damage.
- g. a knowledge of the O&M program.
- h. an understanding of the duties of the asbestos coordinator.

THE TWO-HOUR TRAINING DOES NOT QUALIFY AN INDIVIDUAL TO HAVE ANY CONTACT WITH FRIABLE ACBM. ANY ACTIVITY ASSIGNED TO AN INDIVIDUAL WITH ONLY THE TWO-HOUR TRAINING MUST BE, IN THE OPINION OF THE ASBESTOS COORDINATOR.

### UNLIKELY TO RESULT IN ANY DISTURBANCE OF ASBESTOS.

### C. RECORD KEEPING

Accurate, up to date records shall be maintained for the following:

- 1. 3-Year inspections.
- 2. 6-Month Periodic Surveillance activities.
- 3. preventive measures and response actions, including the collection of air samples (see 763.94 [b] [1 & 2]).
- 4. training received by any personnel.
- 5. initial cleaning activities.
- 6. operations and maintenance activities that disturb friable ACBM.
- 7. each fiber release episode.
- 8. copies of all notifications.
- 9. copies of all training materials issued to staff.
- 10. ACBM disposal.
- 11. employee exposure measurements and medical surveillance.

### D. SURVEILLANCE ACTIVITIES

The management plan indicates that all ACBM areas shall be placed under Periodic Surveillance at six-month intervals. The Asbestos Coordinator shall determine the exact scheduling of this activity, and shall assign responsibility to appropriately trained individuals. The primary purpose of the surveillance is to determine any change in the condition of the ACBM that could affect its potential for fiber release. Notes should be made of any changes that have already been observed by occupants. The changes being reported fall into two categories: (1) changes in physical condition - has damage or deterioration occurred (beyond that noted in the management plan's original assessment). (2) Has the <u>use</u> of the area changed? Is it possible that the new use might pose a greater threat because of the type and number of occupants of the space, or because of a new source of vibration? Finally, the person conducting the surveillance activities should indicate what repairs or other changes would alleviate the potential for fiber release for a particular area. The surveillance reports become a permanent part of the management plan record.

#### E. RE-INSPECTION

At three-year intervals, all of the areas listed at the beginning of this Operations and Maintenance Plan shall be reinspected by a state licensed inspector according to the requirements of 763.85 (b) of the AHERA regulations. Homogeneous areas shall be moved from part one to part two of this Operations and Maintenance plan as required by any reclassification that occurs as part of the reinspection.

### F. ROUTINE PROCEDURES IN AREAS CONTAINING NONFRIABLE ACBM

Non-friable ACBM (these are on part one of the list of ACBM areas at the beginning of this Operations and Maintenance Plan) poses a fiber release threat only if it is damaged. For this reason no activity, including cleaning and repair, is permitted that in any way disturbs the structural integrity of any nonfriable ACBM. This includes nailing, sanding, abrasion, cutting, breaking, or puncturing. No object must be allowed to come into contact with a nonfriable ACBM surface where there is a possibility of damage to the ACBM surface. All nonfriable ACBM areas shall be continuously monitored for any activity in the area which could cause damage to the material. In the event that disturbance of nonfriable ACBM is necessary, procedures shall be followed as determined by the asbestos coordinator. These procedures will ordinarily include shutting down the HVAC system and the use of amended water. Care shall be taken with electrical connections that may be exposed.

### G. FIBER RELEASE EPISODES

- 1. Minor occurrences: Minor fiber release episodes are defined as involving no more than three square feet or three linear feet of asbestos containing material. Generally speaking, the custodial and maintenance staff with the sixteen hour training are qualified to handle these minor episodes on an emergency basis. The Texas Department of Health will be consulted if there is any question regarding the appropriate personnel to be used. The following procedures shall be used:
  - a. notify the asbestos coordinator immediately.
  - b. restrict access to area.
  - c. thoroughly wet debris using HEPA vacuum or wet cleaning on all horizontal surfaces. Carpets should be cleaned with a HEPA vacuum or steam cleaned.
  - d. dispose of all cleaning materials as asbestos debris.
  - e. evaluate the circumstances of the release to determine what, if any, actions are required to avoid a similar episode in the future.
- 2. Major occurrences: Major fiber release episodes are defined as involving more than three square or three linear feet if asbestos containing material. Generally, the same procedures are used as for minor episodes, except that the HVAC system must be shut down and the asbestos coordinator, in consultation with the Texas Department of Health will determine the LEVEL OF

TRAINING necessary to handle the situation. The appropriate RECORDS must be maintained for major fiber release episodes. UNDER ALL CIRCUMSTANCES, special precautions must be taken to ensure that building occupants do not become contaminated in the course of fiber release episodes. Activities that would bring staff or students into the vicinity of asbestos debris must be avoided. Evacuation of the building, and the use of emergency exits may be necessary.

### IF ASBESTOS DEBRIS COMES INTO CONTACT WITH BUILDING OCCUPANTS:

- a. MAINTAIN CALM; AVOID ANY MOVEMENT THAT WOULD STIR UP THE DEBRIS.
- b. EVACUATE NON-CONTAMINATED PERSONS.
- c. CONTAMINATED PERSONS SHOULD BE INSTRUCTED TO AVOID BRUSHING DEBRIS FROM THEIR CLOTHING.
- d. CONTAMINATED PERSONS SHOULD BE MOVED TO A PLACE WHERE THEY CAN BE CLEANED WITH A HEPA VACUUM OR WET METHODS; SHOWERS SHOULD BE PROVIDED IF POSSIBLE.
- e. CONTAMINATED CLOTHING SHOULD BE DISPOSED OF AS ASBESTOS DEBRIS OR PROPERLY LAUNDERED. CONTAMINATED CLOTHING MUST NOT BE SURRENDERED TO THE INDIVIDUAL.

### H. DISPOSAL OF ASBESTOS CONTAINING MATERIAL

- 1. Materials covered by these disposal requirements include:
  - a. any debris from asbestos containing materials.
  - b. any material that is contaminated by asbestos containing material, and where adequate cleaning is not feasible (such as carpet on a floor under fallen asbestos containing ceiling materials).
  - c. all cleaning materials used in areas in which friable asbestos containing materials are located. This includes mop heads, "wet wipe" dust cloths, HEPA vacuum filters, HVAC filters, plastic sheeting, and disposable protective gear.
- 2. Procedures:

- a. After being wetted, all materials shall be placed in a 6-mil polyethylene bag which has been labeled as to its asbestos content; bags shall not be filled with such volume or weight that rupture is a possibility; materials that are too large to fit in such bags shall not be broken or compacted to fit the bags; contact the asbestos coordinator for alternative instructions.
- b. Bags in use shall be kept tied closed at all times and shall be located in a locked area; filled bags shall be twist tied, sealed with duct tape and placed in a second labeled, 6-mil polyethylene bag which is also sealed in a similar manner; double bagged asbestos debris shall then be placed in appropriately labeled 55 gallon drums (drums that have not had any ruptured bags may be wet wiped and reused).
- c. After giving required notifications, drums are transported to an EPA approved landfill in a truck lined with polyethylene sheeting.
- d. Personnel unloading the truck shall wear protective gear; care shall be used in handling the containers to prevent spill and ruptures; after the operation is complete, the truck lining and protective clothing shall also be disposed of as asbestos waste in labeled, 6 mil polyethylene bags.

IT IS VERY IMPORTANT THAT WRITTEN RECORDS AND RECEIPTS BE MAINTAINED FOR EVERY PHASE OF ASBESTOS WASTE DISPOSAL.

### OPERATIONS AND MAINTENANCE GUIDELINES PART TWO

### A. INITIAL CLEANING

Spaces near priority areas require special cleaning. This includes spaces that are physically near the priority area, as well as spaces that could be contaminated by fiber released from priority areas because of traffic patterns or HVAC use.

This initial cleaning shall be initiated as soon as possible after completion of the initial inspection; the same procedures shall be used prior to the initiation of and after the completion of any response actions for the priority area.

The purpose of the initial cleaning is to make the building relatively asbestos-free, except for the actual asbestos-containing material.

Initial cleaning requires the use of protective equipment, including disposable coveralls and NIOSH approved respirators; access to the area being cleaned must be restricted.

#### Procedures:

- 1. HEPA vacuum all curtains, upholstery, and all horizontal surfaces, including tops of light fixtures, but not any asbestos containing material that is friable or is damaged thermal system insulation.
- 2. Mist the air with regular water; allow mist to settle, then wet wipe all surfaces, again excepting any asbestos material that is friable or is damaged thermal system insulation.
- 3. HEPA vacuum or steam clean all carpets; wet mop other floor surfaces.
- 4. Dispose of all used cleaning materials as asbestos waste (see "Disposal of Asbestos Containing Materials" in Part One).

### B. ROUTINE CLEANING

The same areas that were subject to initial cleaning (see above) shall have all routine cleaning done with wet methods and HEPA vacuuming. Wet wiping of surfaces shall take place at least weekly; HEPA vacuuming of carpets, upholstery and curtains shall take place at least semiannually. Conventional vacuuming and dry wiping or mopping shall never be used in these areas.

### C. REPAIR WORK IN AREAS NEAR ACBM

Any maintenance/repair type work in an area where asbestos containing materials could be disturbed shall be approved in advance by the asbestos coordinator who shall determine the level of training and protective gear that is needed in accordance with applicable standards.

### Procedures:

- 1. Work shall be scheduled after normal school or working hours, if possible, or access to the area shall be strictly controlled.
- 2. The air handling system shall be shut off or temporarily modified to prevent the distribution of any released fibers outside the work area.
- 3. To the extent possible, barriers shall be placed around the priority area to prevent accidental disturbance; nothing, however, shall be fastened in any to the ACBM itself.
- 4. The ACBM in the priority area should be lightly misted with an amended water solution; care shall be taken with electrical connections that may be exposed.
- 5. A 6-mil polyethylene sheet shall be placed beneath the maintenance area, extending at least 10 feet beyond all sides of the work site.
- 6. All contaminated materials shall be disposed of as asbestos waste.