

# DRI Asbestos Management Plan

## TABLE OF CONTENTS

1.0	PURPOSE.....	1
2.0	SCOPE.....	1
3.0	POLICY.....	1
4.0	SECIFIC PROCEDURES.....	2
4.1	INSPECTIONS/SURVEYS.....	2
4.2	BULK MATERIAL SAMPLE COLLECTION.....	2
4.3	NUMBER OF BULK MATERIAL SAMPLES.....	3
4.4	SAMPLE ANALYSIS.....	4
4.5	INTERPRETATON OF SSAMPLE RESULTS.....	4
4.6	WRITTEN SURVEY REPORTS.....	5
4.7	CONSULTANT SURVEYS.....	5
4.8	EXPOSURE ASSESSMENTS AND MONITORING.....	5
4.9	ASBESTOS WASTE DISPOSAL.....	7
4.10	REGULATORY AGENCY NOTIFICATION.....	7
5.0	STANDARD WET METHOD FOR WALL PENETRATIONS.....	8
6.0	ASBESTOS CONTAINING FLOOR MAINTENANCE GUIDELINES.....	9
7.0	RESPONSIBILITIES.....	10
7.1	ENVIRONMENTAL HEALTH & SAFETY (EH&S).....	10
7.2	FACILTIES OPERATIONS DEPARTMENT.....	10
7.3	O&M (CLASS III & IV ASBESTOS) WORKERS.....	11
8.0	ACCIDENTAL/UNPLANNED ASBETOS RELEASE.....	11
8.1	PERSONS CREATING/DISOCVERING THE ACCIDENTAL RELEASE.....	11
8.2	SUPERVIORS OF THE PERSON REPORTING THE RELEASE.....	11
9.0	EMPLOYEE TRAINING.....	11
10.0	RECORDKEEPING AND LABELING AND WARNING SIGNS.....	12
11.0	GLOSSARY.....	13
12.0	REFERENCES AND RESOURCES.....	15

## 1.0 PURPOSE

Each UCCSN campus is required to have an Asbestos Management Plan implemented to manage and control asbestos containing building materials in a responsible manner. The purpose of this policy is to minimize and control potential exposures to asbestos fibers released from building materials, and to assure compliance with all applicable asbestos control regulations.

## 2.0 SCOPE

- 2.1 This policy applies to personnel who oversee the repair, remodeling or renovation of DRI buildings. It also applies to all construction and maintenance trades personnel or contractors who repair, remodel or renovate any existing buildings.
- 2.2 The Environmental Health & Safety Department (EH&S) and the Facilities Operations Department will provide the necessary oversight for the protection of individual health and safety. Properly qualified contractors may be used as required.

## 3.0 POLICY

- 3.1 Prior to performing minor construction and/or maintenance work such as penetrating walls, removing floor tiles, or otherwise disturbing materials, a project evaluation shall be made to determine whether asbestos containing materials (ACM) are present in the proposed area of disturbance. If necessary, building records and/or inspections will be used as reference. When a determination cannot be made, the material is a "presumed asbestos containing material" (PACM).
- 3.2 DRI staff and contractors shall be made aware of ACM in their work area. Every effort shall be made to minimize the unintentional disturbance of ACM by following the procedures outlined in this document.
- 3.3 Class I and/or Class II (see Glossary for definitions) asbestos abatement work will not be undertaken by DRI employees during the course and scope of their employment duties.
- 3.4 All asbestos management practices used at DRI will meet or exceed applicable pertinent federal, state and local regulations.

## 4.0 SPECIFIC PROCEDURES

### 4.1 INSPECTIONS/SURVEYS

- 4.1.1 An AHERA-compliant project survey shall be performed prior to the commencement of construction work.
- 4.1.2 The survey shall be performed by AHERA-qualified personnel.
- 4.1.3 Existing sampling records and reports will be consulted prior to performing an inspection or survey.
- 4.1.4 Inspections shall ensure the following objectives are met:
  - 4.1.4.1 A visual inspection of the area will determine the location of all ACM and PACM not previously sampled.
  - 4.1.4.2 A determination of the friability status of all ACM or PACM in the area will be performed.
  - 4.1.4.3 The appropriate number of bulk material samples will be secured for analysis.

### 4.2 BULK MATERIAL SAMPLE COLLECTION

- 4.2.1 Personnel collecting bulk samples shall wear personal protective equipment (PPE) appropriate to the hazard. The following minimal equipment use guidelines shall be followed:
  - 4.2.1.1 Friable material sampling requires the use of a half-mask air purifying respirator, equipped with a HEPA, N100, R100 or P100 filter cartridge, and gloves. (NOTE: In order to use a respirator, employees must have a current medical clearance, have been trained and fit tested for the respirator being used and be clean shaven.)
  - 4.2.1.2 Non-friable material sampling does not require the use of PPE, provided that visible dust is not generated.
- 4.2.2 Samples will be collected in a random pattern within the area of potential disturbance.
- 4.2.3 Core samples will be collected whenever feasible. All bulk samples shall be to the full depth of the ACM or PACM.
- 4.2.4 Wet methods shall be used when sampling those materials reasonably expected to become friable as a result of the sampling techniques used. Such methods include, but are not limited to, the application of a fine water mist to the surface of the material as the sample is being collected.

- 4.2.5 All samples will be immediately sealed in a leak proof container.
- 4.2.6 All sample containers will be labeled with an appropriate sample number.
- 4.2.7 The sample number and location will be identified on a drawing of the survey area. Copies of all such drawings shall be included in the Asbestos Management Plan.
- 4.2.8 Sample data (date, location, material description, etc.) will be recorded on a field sample data sheet.
- 4.2.9 Sample data will be recorded on a laboratory service request, or chain-of-custody document.
- 4.2.10 The original service request or chain-of-custody document shall be delivered to the analytical laboratory with the samples.
- 4.2.11 The signature of the laboratory representative receiving the samples shall be obtained on the original chain-of-custody document copy.

#### 4.3 NUMBER OF BULK MATERIAL SAMPLES

- 4.3.1 The number of samples will be in accordance with 29 CFR 1910.1001(j)(8)(ii)(B), or 29 CFR 1926.1101(k)(5)(ii)(B) and 40 CFR Part 763.86.
- 4.3.2 Bulk sampling of surfacing materials shall be done in a random manner based upon the following surface areas:
  - 4.3.2.1 <1000 linear or square feet: 3 samples
  - 4.3.2.2 1000 to 5000 linear or square feet: 5 samples
  - 4.3.2.3 5000 to 9000 linear or square feet: 7 samples
  - 4.3.2.4 >9000 linear or square feet: 9 samples, in accordance with accepted standards of prudent professional practice.
- 4.3.3 Thermal System Insulation (TSI) materials require minimum of 3 bulk samples be collected from each homogeneous area and one bulk material sample from each homogeneous area of patched TSI material.

#### 4.4 SAMPLE ANALYSIS

- 4.4.1 Analysis must be performed by an EPA accredited laboratory.
- 4.4.2 Analysis shall meet standard EPA polarized light method criteria.
- 4.4.3 Should additional confirmation of the reported findings for a specific sample be justified, an additional point counting analytical method will be requested.

#### 4.5 INTERPRETATION OF SAMPLE RESULTS

- 4.5.1 In order for a given homogeneous material to be classified as “asbestos free”, all of the bulk samples must be reported as either containing no asbestos, or <1% asbestos by weight.
- 4.5.2 If all of the bulk samples for a given homogeneous material are reported as containing <1% asbestos by weight, additional analysis of at least one sample, by the point counting method, shall be requested.
- 4.5.3 Should one sample of a given homogeneous material be reported as containing >1% asbestos by weight, the entire material shall be considered as ACM.
- 4.5.4 Until sampling and analysis establishes that a material contains no asbestos, or contains <1% asbestos by weight, it shall be PACM.
- 4.5.5 Only an AHERA licensed building inspector has the legal authority to make a determination that a given material, such as fiberglass insulation, is “asbestos free” based on a visual inspection

#### 4.6 WRITTEN SURVEY REPORTS

- 4.6.1 A summary page, or pages, identifying those materials or surfaces which were sampled, the date sampled and the results of the sample analysis.
- 4.6.2 Recommendations for abatement, training requirements or work methods to be used in order to control asbestos fiber releases.
- 4.6.3 Copies of the laboratory analysis reports.
- 4.6.4 Copies of the laboratory service request/chain-of-custody documents.
- 4.6.5 Copies of building drawings that identify sample locations.

#### 4.7 CONSULTANT SURVEYS

- 4.7.1 All project surveys shall comply with the Asbestos Management Plan standards as defined in this document.
- 4.7.2 Reports shall include building drawings identifying sample numbers and locations.
- 4.7.3 All reports and survey data will become part of the DRI Asbestos Management Program. Files/binders containing this information will be maintained in the appropriate Facilities Operations Office.

#### 4.8 EXPOSURE ASSESSMENTS AND MONITORING

Each employer who has a workplace or work operation where exposure monitoring is required under this section shall perform monitoring to determine accurately the airborne concentrations of asbestos to which employees may be exposed. Determinations of employee exposure shall be made from breathing zone air samples that are representative of the 8-hour TWA and 30-minute short-term exposures of each employee in compliance with 29 CFR 1926.1101(f)(1)(iii).

##### 4.8.1 INITIAL EXPOSURE ASSESSMENTS (IEA).

IEAs shall be conducted by a "competent person" immediately before or at the initiation of the operation to ascertain expected exposures during that operation or workplace. The assessment must be completed in time to comply with requirements which are triggered by exposure data or the lack of a "negative exposure assessment," and to provide information necessary to assure that all control systems planned are appropriate for that operation and will work properly. Unless a negative exposure assessment has been made, the initial exposure assessment shall be based on monitoring conducted pursuant to 29 CFR 1926.1101(f)(1)(iii).

##### 4.8.2 NEGATIVE EXPOSURE ASSESSMENT (NEA)

For any one specific asbestos job which will be performed by employees who have been trained in compliance with the standard, the employer may demonstrate that employee exposures will be below the PELs by data which conform to the following specific criteria listed in 29 CFR 1926.(f)(2)

4.8.2.1 Objective data demonstrating that the product or material containing asbestos minerals or the activity involving such product or material cannot release airborne fibers in concentrations exceeding the TWA and excursion limit under those work conditions having the greatest potential for releasing asbestos; or

4.8.2.2 Where the employer has monitored prior asbestos jobs for the PEL and the excursion limit within 12 months of the current or projected job, the monitoring and analysis were performed in

compliance with the asbestos standard in effect; and the data were obtained during work operations conducted under workplace conditions "closely resembling" the processes, type of material, control methods, work practices, and environmental conditions used and prevailing in the employer's current operations, the operations were conducted by employees whose training and experience are no more extensive than that of employees performing the current job, and these data show that under the conditions prevailing and which will prevail in the current workplace there is a high degree of certainty that employee exposures will not exceed the TWA and excursion limit; or

- 4.8.2.3 The results of initial exposure monitoring of the current job made from breathing zone air samples that are representative of the 8-hour TWA and 30-minute short-term exposures of each employee covering operations which are most likely during the performance of the entire asbestos job to result in exposures over the PELs.

#### 4.8.3 PERIODIC MONITORING

##### 4.8.3.1 CLASS I AND II OPERATIONS

Daily monitoring that is representative of the exposure of each employee who is assigned to work within a regulated area who is performing Class I or II work unless a negative exposure assessment has been made for the entire operation.

##### 4.8.3.2 ALL OPERATIONS OTHER THAN CLASS I AND II

Periodic monitoring of all work where exposures are expected to exceed a PEL shall be conducted at intervals sufficient to document the validity of the exposure prediction.

##### 4.8.3.3 EXCEPTION TO PERIODIC MONITORING

When all employees required to be monitored daily are equipped with supplied-air respirators operated in the pressure demand mode, or other positive pressure mode respirator, the employer may dispense with the daily monitoring, except in the case of employees performing Class I work who are using an unlisted or modified control method even if they are equipped with supplied-air respirators.

#### 4.8.4 TERMINATION OF MONITORING

If periodic monitoring reveals that employee exposures, as indicated by statistically reliable measurements, are below the permissible exposure

limit and excursion limit the employer may discontinue monitoring for those employees.

#### 4.8.5 ADDITIONAL MONITORING

Additional monitoring shall be conducted whenever there has been a change in process, control equipment, personnel or work practices that may result in new or additional exposures above the permissible exposure limit and/or excursion limit or when the employer has any reason to suspect that a change may result in new or additional exposures above the permissible exposure limit and/or excursion limit. This additional monitoring is required regardless of whether a "negative exposure assessment" was previously produced for a specific job.

#### 4.8.6 FINAL CLEARANCE AIR SAMPLES

Clearance monitoring is required for all asbestos abatement projects prior to dismantling area containment. A properly licensed independent third-party consultant is required for all clearance air sampling. Clearance samples must establish that the PEL has been met to be considered acceptable.

### 4.9 ASBESTOS WASTE DISPOSAL

4.9.1 Friable asbestos waste shall be wetted and double bagged in six mil polyethylene disposal bags. Bagged asbestos waste materials must be labeled with proper EPA and OSHA warning labels.

4.9.2 Non-friable asbestos waste must be maintained in a manner that will minimize damage.

4.9.3 All asbestos waste must be taken to disposal facilities permitted to handle such materials.

4.9.4 Disposal records will be maintained in files/binders in the appropriate Facilities Operations Office.

*NOTE: DRI will not be responsible for the disposal of any contractor generated asbestos waste materials.*

### 4.10 REGULATORY AGENCY NOTIFICATION

4.10.1 Contractors are required to file the appropriate survey and reporting documents with the state and county health district authorities ten days prior to commencing any work on the project.

4.10.2 Facilities Operations staff shall file the appropriate survey and reporting documents with state and county health district authorities for qualifying proposed in-house construction/remodeling projects ten days prior to commencing any work on the project.

## 5.0 STANDARD WET METHOD FOR WALL PENETRATIONS

- 5.1 Some DRI buildings may have asbestos containing sheetrock joint compound or skim coats. Asbestos exposure may result when making penetrations through these wall surfaces for the purposes of installing screws and/or wall anchors. To control such exposures which may result from maintenance activities involving minor penetrations of walls, a standardized wet method procedure has been developed.
- 5.2 Sampling of wall surface materials prior to work is ill advised due to the nature and extent of damage due to the sampling protocol, which will exceed the potential damage of the screw and/or anchor installation itself.
- 5.3 PROCEDURE
  - 5.3.1 Use a damp sponge or wet paper towel when making wall penetrations. Paper towels are preferred, in order to eliminate the need to place the contaminated sponge into a water container, thus contaminating it with asbestos fibers.
  - 5.3.2 The sponge/paper towel is placed directly on the wall surface at the point of penetration, and the penetration made through both the sponge/paper towel and the wall.
  - 5.3.3 The penetration tool (drill bit, screw driver, knife, etc.) is withdrawn through the sponge or paper towel while hand pressure is applied to the tool through the sponge/paper towel, wiping off possible asbestos contamination following the penetration.
  - 5.3.4 Following extraction of the penetration tool the sponge/paper towel is then used to wipe the wall surface of any remaining debris. The sponge/paper towel is then placed into a small plastic bag, sealed and disposed with other ACM containing wastes.

## 6.0 ASBESTOS CONTAINING FLOOR MAINTENANCE GUIDELINES

(EPA Recommended Interim Guidelines for Stripping Asbestos-containing Floors January 25, 1990)

The Environmental Protection Agency (EPA) recommends that school officials, building owners, and custodial/maintenance staff consider the following basic guidelines when stripping wax or finish coat from asbestos-containing floor coverings:

- 6.1 **AVOID STRIPPING FLOORS.** Stripping of floors should be done as infrequently as possible -- perhaps once or twice or less per year depending on circumstances. The frequency should be carefully considered as floor maintenance schedules or contracts are written or renewed.
- 6.2 **PROPERLY TRAIN STAFF.** Custodial or maintenance staff who strip floors should be trained to operate properly and safely the machines, pads, and floor care chemicals used at the facility.
- 6.3 **FOLLOW APPROPRIATE WORK PRACTICES.** Custodial or maintenance staff who strip floors should follow appropriate work practices, such as those recommended here, under informed supervision. Directions from floor tile and floor wax product manufacturers on proper maintenance procedures should be consulted.
- 6.4 **STRIP FLOORS WHILE WET.** The floor should be kept adequately wet during the stripping operation. Do NOT perform dry stripping. Prior to machine operation, an emulsion of chemical stripper in water is commonly applied to the floor with a mop to soften the wax or finish coat. After stripping and before application of the new wax, the floor should be thoroughly cleaned, while wet.
- 6.5 **RUN MACHINE AT SLOW SPEED.** If the machine used to remove the wax or finish coat has variable speeds, it should be run at slow speed (about 175-190 rpm) during the stripping operation.
- 6.6 **SELECT THE LEAST ABRASIVE PAD POSSIBLE.** EPA recommends that the machine be equipped with the least abrasive pad possible to strip wax or finish coat from asbestos-containing floors.
- 6.7 **DO NOT OVERSTRIP FLOORS.** Stop stripping when the old surface coat is removed. Overstripping can damage the floor and may cause the release of asbestos fibers. Do NOT operate a floor machine with an abrasive pad on unwaxed or unfinished floors.

**REMEMBER:** Improperly removing asbestos-containing floor covering could result in the release of high levels of asbestos. EPA recommends that you leave asbestos-containing floor covering in place, provided the material is in good condition. However, proper maintenance procedures, such as those outlined above, should always be followed. These guidelines were developed by the U.S. Environmental Protection Agency in consultation with asbestos control professionals and several flooring material and floor care product manufacturers to reduce any possible exposure to asbestos fibers.

## 7.0 RESPONSIBILITIES

### 7.1 ENVIRONMENTAL HEALTH & SAFETY (EH&S)

- 7.1.1 Provide and/or make arrangements for respiratory protection equipment training and fit-testing and necessary asbestos awareness training.
- 7.1.2 Perform internal audits of the DRI Asbestos Management Program.

### 7.2 FACILITIES OPERATIONS DEPARTMENT

- 7.2.1 Develop, implement and maintain the Asbestos Management Plan.
- 7.2.2 Ensure that only personnel who possess current certifications/licenses perform asbestos related work activities.
- 7.2.3 Assure that all necessary employee training is completed and current.
- 7.2.4 Notify appropriate regulatory agencies of planned abatement activities at least ten days prior to commencing work.
- 7.2.5 Arrange for disposal of ACM generated by DRI employees.
- 7.2.6 Ensure that asbestos-related contract specifications include:
  - 7.2.6.1 Stipulations for the provision of necessary copies of written safety plans, personnel certification and licensing documentation.
  - 7.2.6.2 Stipulations for the documented use of asbestos-free materials.
  - 7.2.6.3 An asbestos survey is completed by either properly trained Facilities Operations personnel or a properly licensed asbestos consultant prior to the commencement of any work.
  - 7.2.6.4 Stipulations for notification of state and local authorities as per Section 4.10 B. of this plan at least ten days prior to commencing any work on the project, and for the payment of necessary filing/application fees.
- 7.2.7 Ensure that asbestos survey results are obtained prior to commencing remodeling/construction activities.
- 7.2.8 Identify and label those areas that require asbestos warning signage.

### 7.3 O & M (CLASS III & IV ASBESTOS) WORKERS

7.3.1 Read and comply with procedures and guidelines provided by their supervisors and the Asbestos Management Plan.

7.3.2 Perform their job duties in a manner that conforms to procedures.

7.3.3 Ensure that their asbestos worker (Class III & IV) training is up to date prior to undertaking any duties related to that training.

7.3.4 Ensure that any NEAs to be used are current.

## 8.0 ACCIDENTAL/UNPLANNED ASBESTOS RELEASE

### 8.1. PERSON CREATING/DISCOVERING THE ACCIDENTAL RELEASE

In the event of accidental damage to ACM (pipe insulation, ceiling acoustical materials, etc.) which results in the release of asbestos fibers, the person responsible for the damage or who discovers the damage shall immediately initiate the following actions:

8.1.1. ISOLATE THE AREA OF DAMAGE through the use of barricades to contain the release and to prevent ACM from being spread to a larger area. Avoid all contact with the ACM debris.

8.1.2. NOTIFY AREA PERSONNEL of the release. All personnel should leave the room in question until full containment or clean up is completed.

8.1.3. NOTIFY THEIR SUPERVISOR of the release.

### 8.2. SUPERVISOR OF THE PERSON REPORTING THE RELEASE

The supervisor who receives notification of an accidental asbestos release will contact appropriate Facilities Operations personnel to make arrangements for clean up of the debris.

## 9.0 EMPLOYEE TRAINING

9.1 All DRI employees who perform Class III asbestos work are required to complete a 16 hour Operations and Maintenance training course, as per 29 CFR 1926.1101(k)(9)(v), prior to being permitted to perform such work. 8.2

9.2 All DRI employees who perform Class IV asbestos work are required to complete an asbestos awareness training course of at least two hours in duration, as per 29 CFR 1926.1101(k)(9)(vi), prior to being permitted to perform such work.

9.3 All AHERA trained and/or certified employees will also be required to attend the

appropriate AHERA annual refresher courses prior to the expiration date of their current training credentials.

## 10.0 RECORDKEEPING AND LABELING AND WARNING SIGNS

- 10.1 The Asbestos Management Plan will be located in the Facilities Operations Department offices and posted on the DRI EH&S website.
- 10.2 Copies of all building survey and asbestos abatement documents, drawings, records, reports sampling and clearance data will be maintained in files/binders in the appropriate Facilities Operations Office.
- 10.3 The original copy of all employee asbestos related training records will be maintained in files/binders in the appropriate Facilities Operations Office. Copies will be forwarded to the employee, their personnel record and EH&S.
- 10.4 Any employee exposure, both personal and area monitoring exposure data, will be kept in files/binders in the appropriate Facilities Operations Office.
- 10.5 Where warning signs and labels are required, they shall be consistent in wording and posting with 29 CFR 1926 1101(k)(7) and (k)(8).

## 11.0 GLOSSARY

**ASBESTOS:** Chrysotile, amosite, crocidolite and tremolite asbestos, anthophyllite asbestos, actinolite asbestos and any of these materials that have been chemically treated and/or altered.

**ASBESTOS CONTAINING MATERIALS (ACM):** All materials containing greater than 1% asbestos by weight.

**PRESUMED ASBESTOS CONTAINING MATERIAL (PACM):** Any material that is likely to contain asbestos which has not been positively identified through analysis by an National Institute for Standards and Technology (NIST) or EPA accredited laboratory.

**REGULATED ASBESTOS CONTAINING MATERIAL (RACM):**

1. Friable materials containing greater than 1% asbestos by weight.
2. Category 1 non-friable material that has become friable.
3. Category 1 non-friable material that will be subject to grinding, cutting, sanding or abrading.
4. Category 2 non-friable material that will have a high probability of being crumbled, pulverized or reduced to a powder by the demolition/renovation activity.

**FRIABLE:** Those asbestos containing materials that will crumble, flake or otherwise release asbestos dust under hand pressure or which can release fibers when disturbed by mechanical means (drilling, sawing, sanding, etc.). Often these materials have degraded since their original installation, thus evolving from non-friable to friable. They can include spray-on acoustic materials, flaking plaster and damaged pipe insulation materials.

**NON-FRIABLE:** Solid asbestos containing materials which are in good condition and will not release asbestos fibers, including intact floor tiles, laboratory bench counter tops, transite panels, cement products, and encased pipe insulation. When undertaken and performed by properly qualified personnel, friable ACM can be rendered non-friable by appropriate encapsulation and enclosure methods. Non-friable materials can be made friable by mechanical means.

1. **CATEGORY 1:** Asbestos containing packing, gaskets, resilient floor coverings and asphalt roofing products.
2. **CATEGORY 2:** Asbestos containing products that are not Category 1 materials, such as various transite cement products.

**PERMISSIBLE EXPOSURE LIMIT (PEL):** 0.1 fibers/cubic centimeter of air.

**FIBER:** A structure that is at least 5 microns in length, with a length to width aspect ratio of at least 3:1.

*THERMAL SYSTEM INSULATION (TSI)*: Any pipe or boiler insulation system, which may or may not contain ACM or PACM.

*SURVEY*: A written determination of construction material composition by properly certified personnel. A survey may include either the collection of an appropriate number of bulk samples or a review of existing building survey records and/or a physical inspection of the proposed work site.

*BULK MATERIAL SAMPLES*: Samples of ACM or PACM collected from areas of proposed construction or remodeling related activities. Normal sample process involves the extraction of a core sample of the material in question.

*CORE SAMPLES*: A bulk material sample that penetrates to the full depth of the construction material being sampled.

*CLASS I ASBESTOS WORK*: Removal of TSI and sprayed-on or troweled-on surfacing ACM or PACM exceeding three square feet (sf) or lineal feet (lf).

*CLASS II ASBESTOS WORK*: Removal of non-TSI or surfacing ACM or PACM exceeding three sf or lf.

*CLASS III ASBESTOS WORK*: Repair and maintenance operations that remove less than 1 glovebag of material (measuring 60 by 60 inches or less) likely to disturb ACM or PACM. State of Nevada regulations further limits the area of disturbance for all Class III work to 3 sf or 3 lf.

*CLASS IV OPERATIONS*: Custodial and housekeeping operations where minimal contact with ACM or PACM may occur.

*NATIONAL EMISSION STANDARD for HAZARDOUS AIR POLLUTANTS (NESHAP)*: A set of regulations set forth by the Environmental Protection Agency to control asbestos emissions from renovation and demolition activities in all commercial buildings.

*ASBESTOS HAZARD EMERGENCY RESPONSE ACT (AHERA)*: A set of regulations governing all activities involved in the identification and abatement of asbestos containing materials. The regulations establish minimum personnel training requirements and accepted procedures to be used to control asbestos hazards.

*ASBESTOS SCHOOL HAZARD ABATEMENT REAUTHORIZATION ACT (ASHARA)*: Reauthorized AHERA and made some minor changes in the Act, including adding requirements for accreditation for any persons who inspects for ACM in public or commercial buildings or who designs or conducts a response action with respect to friable ACM in such a building, including government owned buildings.

## 12.0 REFERENCES and RESOURCES

### 12.1 FEDERAL

EPA Asbestos NESHAP, 40 CFR 61

OSHA General Industry Asbestos Standard, 29 CFR 1910.1001

OSHA Constuction Asbestos Standard, 29 CFR 1920.1101

TSCA (EPA) Asbestos regulations, 40 CFR 763

### 12.2 STATE

Nevada OSHA (29 CFR 1910.1001 and 1926.1101)

Nevada Department of Environmental Quality, Bureau of Waste  
Management

### 12.3 COUNTY (NESHAP delegated by EPA Region 9)

Clark County Department of Air Quality and Environmental Management  
rules and regulations (See appendix A)

Washoe County District Health Air Quality Management Division rules  
and regulations (See appendix B)