



# ASBESTOS MANAGEMENT PROGRAM

RISK MANAGEMENT AND SAFETY  
2020

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## **1.0 INTRODUCTION**

### **1.1 Policy**

It is the policy of the University of Nevada Las Vegas (UNLV) to provide a safe, healthy learning, living, research and working environment. The requirements in this program are to provide individuals and contractors with pertinent information regarding asbestos safety. It is also the intent of UNLV to meet all Federal, State and Local regulations and to employ best management practices with regard to asbestos containing materials (ACM) to minimize unintentional disturbance.

### **1.2 Purpose**

It is the purpose of this program to minimize the unintentional disturbance of asbestos containing materials at UNLV campuses and leased facilities to reduce exposure to students, staff, contractors, and members of the public.

### **1.3 Scope and Application**

This program applies to all UNLV faculty, staff and contractors, especially personnel who are responsible for the demolition, maintenance, renovation and repair of existing buildings and materials. This will be accomplished by implementing this Asbestos Management Program (AMP) which includes proper work practices in order to maintain ACM in good condition, to ensure proper clean-up of asbestos spills, prevent further release of asbestos fibers and assess the condition of ACM. Intact and undisturbed ACM does not pose a health risk.

Personnel responsible for renovation and maintenance projects which disturb or remove building materials must review the Asbestos Management Program prior to performing these activities. All materials except, glass, metal, plastic or wood are assumed to contain asbestos.

All asbestos maintenance and abatement work must be performed by contractors and/or employees who maintain current State of Nevada Department of Business and Industry Industrial Relations Occupational Safety and Health Administration Asbestos Control Program licensing.

## **2.0 EMERGENCY CONTACT INFORMATION**

For questions or concerns or to report an asbestos disturbance that may lead to an asbestos spill or unintentional disturbances contact the following:

During Normal Business Hours (8:00 a.m. – 5:00p.m.)

Risk Management and Safety (702) 895-4226

After Hours

Facilities Management Services (702) 895-4357

Police Services Dispatch (702) 895-3668

## **2.1 Asbestos Emergencies**

Asbestos related emergencies develop due to incidental and accidental contact with ACM. This causes a disruption in the matrix of asbestos containing building materials. Minor and major releases of asbestos fibers can also occur from water damage, building or equipment vibration and air erosion.

A release of asbestos fibers is defined as the dislodging of materials containing asbestos.

Immediate actions that must be employed to reduce exposure to asbestos are as follows:

1. Stop work immediately and leave the area.
2. Secure access to the area and post signage at the entry to the affected areas.
3. Notify an immediate supervisor.
4. Contact the Risk Management and Safety Department (during normal business hours) ext. 54266, Facilities Management Services (after hours) ext. 54357 or Public Safety ext. 53668.

Only asbestos qualified personnel will use the proper methods and equipment to clean

## 3.2 Regulations

Nevada Administrative Code (NAC)  
NAC 618 Abatement of Asbestos  
NAC 444 Disposal of Asbestos

Nevada Revised Statutes (NRS)  
NRS 618 Control of Asbestos

Occupational Safety and Health Administration (OSHA)  
29 CFR 1910.134 Respiratory Protection  
29 CFR 1910.1001 General Industry  
29 CFR 1926.59 Hazard Communication  
29 CFR 1926.200 Accident Prevention Signs and Tags

Environmental Protection Agency (EPA)  
40 CFR 61 SUBPART A - General Provisions  
40 CFR 61 SUBPART M - National Emission Standard for Hazardous Air  
Pollutants (NESHAP)  
40 CFR 763 Asbestos

## 4.0 DEFINITIONS

*Abatement* - means any act which is intended to reduce, eliminate or encapsulate asbestos or materials containing asbestos.

*Abatement Worker* - means any person who is licensed by the Enforcement Section in a nonsupervisory capacity, to clean, handle, repair, remove, encapsulate, enclose, haul, dispose of or otherwise work with materials containing asbestos.

*Abatement Supervisor* - means any abatement worker who is licensed by the Enforcement Section to be a contractor's competent person.

*Asbestos* - The term asbestos includes chrysotile, amosite, crocidolite, tremolite asbestos, anthophyllite asbestos, and actinolite asbestos and any of these minerals that has been chemically treated or altered.

*Asbestos Containing Material (ACM)* - Materials are considered to contain asbestos if the asbestos content of the material is determined to be more than one percent.

*Asbestos Permissible Exposure Limit* - 0.1 fibers per cubic centimeter of air as an 8-hour time weighted average measured in the breathing zone as defined by 29 CFR 1926.110

*Building/facility owner* - is the legal entity, including a lessee, which exercises control over management and record keeping functions relating to a building and/or facility in which activities covered by this standard take place.









B. Time-Weighted Average (TWA) - an airborne concentration of asbestos in excess of 0.1 fiber per cubic centimeter of air as an eight (8) hour time-weighted average (TWA), as determined by the method prescribed in 1926.1101 Appendix A, or by an equivalent method.

*Regulated Asbestos-Containing Material (RACM)* – means:

- A. Friable asbestos material (e.g. fireproofing, thermal system insulation on steam/hot water pipes, acoustical insulation such as popcorn ceiling texture)
- B. Category I nonfriable ACM that has become friable (e.g. asphalt roofing products such as shingles, packings, gaskets, linoleum, vinyl asbestos tile)
- C. Category I nonfriable ACM that will be or has been subjected to sanding, grinding, cutting or abrading (e.g. roofing materials, packings, vinyl asbestos tile, linoleum)
- D. Category II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or the regulated renovation operations (cement siding, transite shingles/pipes)

*Regulated area* - an area established by the employer to demarcate where airborne concentrations of asbestos exceed, or there is a reasonable possibility they may exceed, the permissible exposure limits.

*Renovation* - Altering a facility or one or more facility components in any way, including the stripping or removal of RACM from a facility component. Operations in which load supporting structural members are wrecked or taken out are demolitions.

*Surfacing Material* - material that is sprayed, troweled-on or otherwise applied to surfaces (such as acoustical plaster on ceilings and fireproofing materials on structural members, or other materials on surfaces for acoustical, fireproofing, and other purposes).

*Suspect Material* - any building materials which, are not listed in Section 1.3 and has not been proven to contain asbestos through laboratory analysis.

*Thermal System Insulation (TSI)* - ACM applied to pipes, fittings, boilers, breeching, tanks, ducts or other structural components to prevent heat loss or gain or water condensation.

## **5.0 RESPONSIBILITY**

## **5.1 Risk Management and Safety**

5.1.1 The Director of Risk Management and Safety shall designate, in writing, a Competent Person qualified to perform the functions associated with the Asbestos Program Manager.

5.1.2 Maintain, review, and revise the Asbestos Management Plan, as necessary, to ensure compliance with all federal, state, and local regulations.

5.1.3 Notify appropriate regulatory agencies (State of Nevada Department of Business and Industry Industrial Relations Division Enforcement Section, Clark County Air Quality Environmental Management District) prior to abatement activities, when required.

5.1.4 Maintain records of all friable building material assessments, asbestos building inspections and surveys, negative exposure assessments, air monitoring, training, and abatement activities.

5.1.5 Provide technical information for maintenance, renovation, and demolition project implementation.

5.1.6 Notify building occupants, through written communication, of asbestos abatement activities.

5.1.7 Conduct initial exposure assessments prior to the removal of ACM where a negative exposure assessment has not been conducted.

5.1.8 Conduct an annual negative exposure assessment during Class I, Class II, Class III and Class IV asbestos removal and maintenance projects.

5.1.9 Identify and label, where applicable, ACM with appropriate asbestos danger signage as required by the Occupational Safety Health Administration (OSHA).

5.1.10 Conduct an annual assessment of all accessible, friable asbestos containing materials.

5.1.11 Maintain copies of all personnel certifications, licensing, medical evaluations, respirator fit test records, and annual NESHAP and OSHA notifications.



## **5.4 Employees**

- 5.4.1 Attend the appropriate initial and refresher trainings as directed by your supervisor and the AMP.
- 5.4.2 Use non-penetrating methods (adhesive strips, double-sided tape, etc.) for hanging items on asbestos containing walls.
- 5.4.3 Promptly report any potential asbestos debris or damaged materials (e.g., damaged floor tiles and ceiling and wall materials).
- 5.4.4 Contract all renovation work through Facilities or Planning and Construction.
- 5.4.5 Contact your supervisor or Risk Management and Safety if you see improper cleaning (not using wetted rags or paper towels, HEPA filtered vacuums) or maintenance activities involving materials that may contain asbestos.
- 5.4.6 Do not damage, disturb, or remove asbestos containing materials. Drilling, hammering, cutting, sawing, screwing, or breaking any materials that may contain asbestos is not permitted, including wall and joint compound, ceiling tiles, floor tiles, or insulation. Please avoid generating any dust or debris with asbestos containing materials.
- 5.4.7 Do not vacuum, dry sweep, or try to remove debris that may contain asbestos.

## **6.1 Inspectors**

- 6.1.1 All inspectors engaged in the sampling of ACM shall obtain certifications and licensing inclusive to any and all State of Nevada requirements during inspection and sampling of ACM.
- 6.1.2 Inspectors shall meet the requirements relating to the collection of bulk samples in accordance with 29 CFR 1926.1101 Class I and Class III asbestos work.
- 6.1.3 Inspectors must review previous survey and sampling data prior to conducting a site visit of the project area.
- 6.1.4 Inspectors must determine the presence location and quantity of ACM within the project area.
- 6.1.5 Inspectors must collect the appropriate number of bulk samples, in a random manner, from a homogeneous material according to 40 CFR 763 Subpart E, regardless of the installation date of a building material.
- 6.1.6 Bulk samples of materials, when analyzed via Polarized Light Microscopy (PLM), have an asbestos content of 5% or less are to be point-counted using the EPA 400 point 600/R-93-116 method or are to be assumed to contain asbestos.
- 6.1.7 An annual NEA must be conducted while sampling asbestos containing materials.

## **6.2 Survey Reports**

- 6.2.1 Surveys must contain a summary identifying the project area, the date of the inspection, the materials sampled (eg... surfacing, TSI or miscellaneous) within the project area, the results of the sample analysis.

6.2.2 Survey reports must also include a copy of the State of Nevada Department of Business and Industry Industrial Relations Occupational Safety and Health Administration Asb





## 9.5 Air Sampling

### 9.5.1 Initial Exposure Assessment

9.5.1.1 A "competent person" must conduct an exposure assessment immediately before or at the initiation of an asbestos 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. UNLV shall presume that employees are exposed in excess of the TWA and excursion limit until the UNLV conducts exposure monitoring and documents that employees on that job will not be exposed in excess of the PELs.

### 9.5.2 Negative Exposure Assessment

9.5.2.1 A Negative Exposure Assessment (NEA) shall be conducted on all maintenance and abatement activities at intervals sufficient to document the validity of the exposure during removal operations annually. There are three potential approaches provided under 29 CFR 1926.1101(f)(2) for producing a negative exposure assessment. These are the use of objective data and previous air monitoring results which have been collected within the past year. If UNLV cannot produce a negative exposure assessment with objective data or previous air monitoring results, then exposure monitoring is required. Until a negative exposure assessment is produced, UNLV shall comply with the elements of the standard that are applicable and assume the PEL will be exceeded. Personal protective equipment (eg. respirator, full body covering) is required for employees who are conducting abatement or maintenance activities while a negative exposure assessment is being established.

**Note:** *Prior to conducting an NEA, an Initial Exposure Assessment shall be conducted. See Appendix B.*

### 9.5.3 Final Clearance Air Sampling

9.5.3.1 After final cleanup and the asbestos control area is dry, but prior to clearance sampling, the Contractor and a third party representative shall perform a visual inspection in accordance with ASTM E 1368 to ensure that the asbestos control and work area is free of any accumulations of dirt, dust, or debris.

9.6.2 A third party representative shall collect area samples using aggressive air sampling techniques as defined in the EPA 560/5-85-024 to establish an asbestos fiber concentration of less than 70 structures per square millimeter by use of transmission electron microscopy (TEM). Sample results shall be returned by the laboratory within 24 hours of the final air clearance sampling.



## **9.6 Waste Disposal**

All asbestos that is intended for transport must be wetted with a water and surfactant mixture and stored in:

- a) A plastic bag which is not less than 6 mils thick and sealed so it will not leak;
- b) A combination of plastic bags which equal at least 6 mils in thickness; or
- c) A container made of cardboard or metal which is lined with plastic.
- d) Stored in the Universal Waste area.

## **9.7 Final Report Documentation**

All completed forms and final report documentation shall be submitted to the Risk Management and Safety department.