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29 CFR 1910.1001

ASBESTOS MANAGEMENT PROGRAM

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I. INTRODUCTION

Asbestos is one of the most heavily regulated and litigated hazardous materials in the country. This carcinogen is found in a wide variety of building materials and contrary to popular belief is still legally used in products sold in the United States. A written plan for management of Asbestos Containing Materials (ACM) in City owned facilities is an important step in reducing the likelihood of asbestos exposure to City workers and citizens.

An Asbestos Management Program is a formulated plan of, work practices, record keeping, training and procedures to manage ACM. Creation of an Asbestos Management Program, will help to ensure the City is complying with asbestos regulations, preventing unnecessary exposure to employees, and protect the City from potential litigation.

This Asbestos Management Program consists of a set of procedures applied to building maintenance, construction, cleaning, and general operations in order to maintain a building environment free from asbestos contamination. The Asbestos Management Program is intended to be flexible in that all situations cannot be foreseen in advance. Methods of response may change and others may be added. New procedures will be developed as experience and job requirements expand. Protocol detailed in this Program will comply with EPA, OSHA and State of Idaho regulations regarding asbestos.

Intact and undisturbed ACM does not pose a health risk. The mere presence of asbestos in a building does not mean that the health of building occupants is endangered. ACM that is in good condition, and is not somehow damaged or disturbed, is not likely to release asbestos fibers into the air. However, asbestos materials can become hazardous when, due to damage, disturbance, or deterioration over time, they release fibers into the air. When ACM is damaged or disturbed elevated airborne asbestos concentrations can create a potential hazard for workers and other building occupants.

Instead of removal of asbestos containing material upon discovery, the Environmental Protection Agency (EPA) recommends an in-place management program for the existing asbestos. EPA only requires asbestos removal in order to prevent significant public exposure to asbestos, such as during building renovation or demolition. When ACM is properly managed, release of asbestos fibers into the air is prevented or minimized, and the risk of asbestos-related disease can be reduced to a negligible level.

II. GOALS

The City of Boise Asbestos Management Program has five main goals:

- A. To comply with various EPA and OSHA regulations regarding asbestos management.
- B. To educate City staff members on asbestos dangers and their responsibilities.
- C. To identify all asbestos containing materials (ACM) in City buildings in a prioritized manner by conducting complete building inspections.
- D. To repair or remove any severely damaged ACM which could cause exposure to employees or citizens.
- E. To minimize asbestos fiber release by using an Environmental Review Form for activities that might disturb ACM.

III. SCOPE

This Asbestos Management Program applies to all buildings, structures, or other materials owned by Boise City. It applies to all City employees and also to contractors working for the City of Boise, on City owned buildings.

IV. PROGRAM LIMITATIONS

This program is designed as policy for management of asbestos containing materials and presumed asbestos containing materials in City buildings. It is not designed to teach staff members how to test, handle, or work with ACM. Specific training is required in order to legally perform these tasks.

V. SUMMARY OF REGULATIONS

The following is a list of applicable Federal OSHA and EPA Asbestos Laws:

- OSHA General Industry Standard (29 CFR 1910.1001) covers routine housekeeping activities in buildings and automotive brake and clutch repair.
- OSHA Construction Standard (29 CFR 1926.1101) applies to building demolition and renovation operations and other activities where asbestos is removed or encapsulated. It also covers building maintenance and emergency cleanup of asbestos spills.
- EPA Asbestos Worker Protection Rule (40 CFR Part 763 Subpart G) extends the OSHA asbestos
 protections to state and local government workers not covered by OSHA laws.
 EPA Asbestos-inSchools Rule (40 CFR Part 763 Subpart E) requires schools to inspect buildings for asbestos and prevent
 exposure worker/occupant exposure.
- EPA National Emission Standards for Hazardous Air Pollutants (NESHAP 40 CFR 61 Subpart M) has
 requirements for removal of asbestos before demolition, notification to EPA before removal, preventing
 release of fibers into the air, and waste disposal.

VI. DEFINITIONS

<u>Asbestos</u>- A name applied to a group of 6 different minerals occurring naturally in the environment (including the typical white as well as blue, gray and brown) made up of thin fibers 5 μ m or longer with a length/diameter ratio of at least 3:1. Long fibers (>5 μ m) are more carcinogenic than short ones (<5 μ m).

<u>Non-Friable ACM</u>- Non-Friable ACM means that, when dry, the asbestos containing material cannot be crumbled, pulverized or reduced to powder by hand pressure. Examples include vinyl floor tile and cement pipe or panels. (Note: Friable materials are more likely to release asbestos fibers when disturbed. However, non-friable materials may also release fibers if ground, cut, sanded, or otherwise manipulated.)

<u>Asbestos Containing Waste Material (ACWM)</u>- Any waste material containing commercial asbestos generated by a source regulated by the National Emission Standard for Asbestos. These may include filters from control devices, friable asbestos material, packaging contaminated with asbestos, demolition products containing asbestos and contaminated disposal equipment, material and protective clothing.

<u>Regulated Asbestos Containing Material (RACM)-</u> 1) Either friable or non-friable Category I ACM that has become friable or 2) Category I materials that are subject to sanding, grinding, cutting or abrading or 3) Category II non-friable ACM that have a high probability of becoming friable in the course of demolition/renovation.

<u>Category I non-friable asbestos</u>- containing material (ACM) means asbestos containing packings, gaskets, resilient floor coverings, and asphalt roofing products containing more that 1 percent asbestos as determined using the method specified in appendix E, subpart E, 40 CFR part 763, Section 1, Polarized Light Microscopy.

<u>Category II non-friable ACM-</u> means any material, excluding Category I non-friable ACM, containing more than 1 percent asbestos as determined using the method specified in appendix E, subpart E, 40 CFR part 763, section 1, Polarized Light Microscopy that when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

<u>Demolition</u>- The wrecking or taking out of any load-supporting structural member of a facility and any related handling operations.

<u>Renovation</u>- The altering a facility or one or more facility components in any way, including the stripping or removal of regulated asbestos containing materials from a facility component.

<u>Surfacing Material</u>- ACM sprayed or troweled onto surfaces such as acoustical plaster found on ceilings and walls, and fire-proofing material on structural members,

<u>Thermal Systems Insulation (TSI)</u>- ACM applied to pipes, boilers, tanks, ducts, etc., in order to prevent heat loss/gain or water condensation.

Miscellaneous Material- other ACM such as floor tile, wallboard, siding, and cement materials.

<u>Incidental Roofing Materials</u>- Thick, painted-on materials used to seal and reflect heat from roofs including cements, mastics, and coatings.

NESHAP- National Emission Standards for Hazardous Air Pollutants, 40 CFR Part 61, M

AHERA- Asbestos Hazard Emergency Response Act, Public Law 99-519, Oct 22, 1986, 15 USC Section 2651

VII. ASBESTOS WORK CLASSES

OSHA recognizes four asbestos work classes in order to address different degrees of potential asbestos fiber exposure and training requirements. The four work classes are defined as follows:

<u>Class I asbestos work</u> means activities involving the removal of thermal system insulation (TSI) and surfacing ACM/PACM and potentially asbestos-containing material (PACM).

<u>Class II asbestos work</u> means activities involving the removal of ACM/PACM which is not TSI or surfacing material. This includes, but is not limited to, the removal of asbestos containing wallboard, floor tile and sheeting, roofing and siding shingles, and construction mastics.

<u>Class III asbestos work</u> means the repair and maintenance operations, where ACM/PACM, including thermal system insulation and surfacing material, is likely to be disturbed.

<u>Class IV asbestos work</u> means maintenance and custodial activities during which facility personnel come in contact but do not disturb ACM/ PACM.

(A "disturbance" of ACM/PACM, as used in the class definitions, refers to any activity that disrupts the matrix of ACM/PACM, or generates visible debris, or disturbs visible debris.)

VIII. TRAINING REQUIREMENTS

- A. Class IV maintenance and custodial work that can be performed by facility personnel is described in the above section. Class IV maintenance and custodial worker must have at a minimum the annual 2-Hour Asbestos Awareness Training. This training can be taken through iLearn, the City's Learning Management System, or through an instructor led class. This training does not permit personnel to disturb ACM.
- B. An 8-hour NESHAP training is required (City of Boise regulation) for those staff identified as an "Environmental Lead" for each facility. These persons require addition training because they are the on-site responsible person for asbestos related questions. They will review asbestos surveys to identify if smaller scale renovations in their facility can be performed without disturbing ACM. This training is an instructor led training, provided by a consultant.
- *Note Training requirements for certain work practices performed outside of buildings such as roofing repair and pipe repair/replacement differ from those required for work done inside buildings. Completion of the 8-hour NESHAP training is adequate for working with non-friable asbestos cement pipe and non-friable roofing materials if a valid Negative Exposure Assessment (NEA) has been completed and exposure is shown to be below applicable limits. The 8-hr NESHAP training must be taken every two years and the NEA is required to be validated annually.
- C. Class III asbestos work requires a 16-hour training course which is available from a local environmental consulting firm. Four-hour refresher classes are required annually. Medical monitoring is also required for employees who perform Class III work more than 30 days in a year. This is the only training which allows staff to work with or disturb, some limited types and quantities of ACM.
- D. Sampling of building materials for asbestos will be conducted only by persons trained to at least the 24-hr AHERA Asbestos Inspector level. Inspectors must pass an initial exam and attend a four-hour refresher class annually.
- E. Any employee utilizing a respirator must adhere to all requirements in Safety Services Respirator Program.
- F. No abatement (planned removal) of ACM or PACM shall be conducted by any City of Boise employee.

IX. GENERAL REQUIREMENTS AND PROHIBITIONS

A. Only persons who have completed the required training and hold current certifications (16-hr/Class III or 24/hr Inspector) can intentionally disturb Asbestos Containing Materials (ACM) or Presumed Asbestos Containing

Materials (PACM). The job supervisor shall inform Environmental Lead Staff (who will contact Safety Services, 972-8120 and/or the Asbestos Coordinator, 384-3906) prior to disturbance of any ACM/PACM. After-hours and emergency disturbance of ACM/PACM shall be conducted only by trained personnel, at the discretion of the job supervisor.

- B. The different classes of asbestos work require varying degrees of training, engineering controls, safety procedures, and personnel protective equipment. Minimum controls and practices that must *always* be used, regardless of the level of exposure or work class, are:
 - 1. Contact Environmental Lead Staff at your facility, (who will notify Safety Services and/or the Asbestos Coordinator) prior to starting any work which could disturb ACM.
 - 2. Identify work area by using signs and/or locking doors so others do not enter the work area.
 - 3. After complying with Safety Services respirator program, wear an approved respirator with P-100 filters.
 - 4. Thoroughly spray the ACM to be disturbed with a water a dish soap mixture before and during the job. (Do not use water around electrical equipment to prevent potential electrical shock and use lock-out\tag-out procedures to ensure electricity is turned off)
 - 5. Use vacuum cleaners with HEPA filters to collect asbestos-containing debris and dust.
 - 6. Ensure prompt clean-up and disposal of wastes and debris contaminated with asbestos in approved leak-tight containers.
- C. The following activities are prohibited by both EPA and OSHA:
 - Dry sweeping, dusting, shoveling or normal vacuuming of asbestos or PACM material, debris, waste, or dust.
 - 2. Using compressed air to clean surfaces contaminated with asbestos or to remove asbestos unless it is used with a HEPA ventilation system that can capture the dust cloud.
 - 3. Sanding of asbestos-containing material.
 - 4. Abatement (intentional removal) of asbestos by anyone other than a licensed abatement contractor.
 - 5. Eating, drinking, smoking, chewing tobacco or gum, or applying cosmetics in any area where ACM or PACM is being disturbed.
- D. If a building material has not been tested and shown to contain less than 1% asbestos, you must assume that that it is asbestos containing, unless it is solid glass, wood, or metal. Contact your supervisor, Environmental Lead, Safety Services or the Asbestos Coordinator for testing and abatement options.

X. BUILDING INSPECTIONS

A. At this time only some City owned buildings have been thoroughly inspected for asbestos. Building inspections will be prioritized based on likelihood of potential exposure to employees and citizens. Buildings which match the following criteria are considered to be a priority for having an asbestos inspection completed.

- 1. A complete asbestos inspection of the building by an AHERA Certified Inspector is not available for review and;
- 2. The building was constructed before 1981 and;
- 3. The building is not a single-family home or apartment with four or fewer dwellings and;
- 4. The building is occupied by City staff or tenants on a normal/daily basis.

OR

- 1. The building is scheduled for demolition, burning, or renovations and a complete asbestos inspection of the building by an AHERA Certified Inspector is not available for review.
- B. Other City buildings can be inspected on an "as needed" basis. Certain single-family homes owned by the City may be prioritized for asbestos inspections when City employees perform maintenance work on the building. Also, buildings in which there is regular maintenance that requires disturbance of building materials should be inspected.
- C. Facility Managers may also request a complete asbestos survey to allow for more efficient work in their buildings.
- D. Buildings not owned by the City in which City employees may perform work that could disturb ACM or PACM must be inspected for asbestos prior to City employees performing any non-emergency renovation or demolition work in the building. This applies to all City employees, including Fire and Police personnel.

XI. LABELS AND SIGNAGE

Signage adhering to OSHA standards will be placed in a visible location in all City owned buildings which contain ACM or PACM. In addition, appropriate warning labels will be placed on specific friable ACM which has been identified and is considered to be at risk of disturbance.

XII. RECORDKEEPING

- A. Records for all inspections, sampling, abatements, fiber release episodes, NESHAP notifications, disposal, training classes, and other activities related to asbestos containing materials shall be kept on site by the Environmental Lead staff and sent to the Asbestos Coordinator. It is the responsibility of the Job Supervisor/Project Manager to ensure all required documentation is obtained and that copies are sent to the Asbestos Program Manager. The City must retain copies of all Waste Shipment Records (WSR), including a WSR signed by the owner or operator of the waste disposal site where the waste was deposited for at least 2 years. The City is expected to provide copies of the WSR upon request of the responsible agency (EPA) and to make the WSR file available for inspection during normal business hours. Each Facility and the Asbestos Coordinator will keep all other records of asbestos sampling or removal indefinitely (or until the building is no longer owned by the City of Boise). All asbestos related work must be reported to the Asbestos Program Coordinator or Safety Services by the Project/Job Manager.
- B. "Environmental Lead Staff" are responsible for keeping all asbestos information for their facility current and available on-site. This includes asbestos surveys, Environmental Review Forms, and Warning labels. They will work with the assistance of the Project Manager, the Asbestos Coordinator, and Risk/Safety to update records when any work is performed at the facility that may impact ACM or PACM. It is the responsibility of the facility manger with the assistance of the Environmental Lead to report damaged building materials which could be ACM to Safety Services.
- C. A spreadsheet containing all <u>known</u> information regarding ACM in City buildings is available (see Appendix B). This spreadsheet will be updated as each new survey is completed.

D. The City of Boise Asset Management (VueWorks) and GIS systems may be utilized for storing and obtaining information regarding ACM and Lead-Based Paint (LBP). This idea is being explored at this time and this section will be updated when appropriate.

XIII. FIBER RELEASE EPISODES

As long as ACM/PACM remains in City facilities, a release of asbestos fibers (fiber release episode) may occur. Maintenance and Custodial workers should report to Risk/Safety and/or the Asbestos Coordinator the presence of debris on the floor, water or physical damage to any ACM/PACM, or any other evidence of possible fiber release. The Asbestos Coordinator or Risk/Safety will assign a suitably trained contractor or in-house team to clean up debris and make repairs as soon as possible.

Steps to be taken by staff who first notices the fiber release include:

- 1. The area should be isolated as soon as possible after the ACM/ACBM debris is discovered. Where the area can be sealed by doors, they should be closed (escape corridors must remain in operation) and signs posted to prevent unauthorized personnel from entering the area.
- 2. If possible, the air-handling system should be shut off or temporarily modified to prevent the distribution of fibers from the release site to other areas of the building.
- 3. Each fiber release episode shall be documented with a fiber release form included in Appendix-C. Posted Signs should read:

"DANGER-ASBESTOS; CANCER AND LUNG DISEASE HAZARD; AUTHORIZED PERSONNEL ONLY; RESPIRATORS AND PROTECTIVE CLOTHING ARE REQUIRED IN THIS AREA"

XIV. OUTSIDE CONTRACTORS

Only licensed asbestos removal contactors will be used for asbestos abatement (removal) activities. Asbestos building inspections will be conducted only by licensed AHERA Inspectors. Licensed local asbestos abatement and consulting companies are listed in Appendix A. Notification to the Asbestos Coordinator or Risk/Safety is required prior to any abatement.

XV. NEW CONSTRUCTION

Asbestos is still permitted in certain building products including concrete. All new construction built by the City of Boise and all major renovation projects should be certified asbestos-free. The project architect or general contractor must certify that the products used in construction are asbestos-free. If an architect is not involved in the project, the general contractor must certify that all building products are asbestos-free. The Project Manager of each job is responsible for obtaining the certification. The bid specifications for new construction should also specify that all materials must be asbestos-free.

Obtaining this certification is the only legal way, other than performing building inspections, to prove that a building does not contain asbestos. Documentation of the asbestos-free certification will be kept by the Building Department, Facility Manager, Environmental Lead and the Asbestos Coordinator. This step will help to save

time and money during future building modifications. The Asbestos Free Certification Form is available in Appendix C.

XVI. DEMOLITION AND RENOVATION

A. NESHAP Requirements for Demolition & Renovation Projects

Most demolition (including intentional burning) and renovation projects of City buildings are regulated by the National Emissions Standards of Hazardous Pollutants or "NESHAP" (EPA, 40 CFR Part 61).

Facilities regulated by this program:

- 1. All public, commercial, industrial buildings
- 2. Apartment complexes of greater than 4 units
- 3. Two or more residential houses

Facilities not regulated by this program:

- 1. One private residence
- 2. Apartment complexes of 4 units or less

If your facility is regulated by NESHAP the Project/Job Manager must determine if an AHERA-certified asbestos inspector has inspected the building. If it has been inspected, obtain a copy of the inspection report to determine if asbestos is present. If it has not been inspected, have the building or the area to be renovated inspected by an AHERA certified inspector. The report must then be reviewed by the facility Environmental Lead or Asbestos Coordinator <u>prior to commencing any work</u> on the building. A copy of the report must be kept on site throughout the project as required by the EPA, also a copy sent to Peter McCullough, Public Works Environmental, City Hall-4th Floor.

For demolition projects:

- 1. All friable asbestos or asbestos which could become friable during demolition/burning must be removed by a licensed asbestos abatement company prior to demolition.
- For all demolitions (even those not containing asbestos) you must prepare and submit an EPA
 NESHAP Notification Form. The form is available on the EPA Region 10 Web-site or from Peter
 McCullough at 384-3906. Send the completed form to: EPA Region 10, Idaho Operations Office
 (100), 1435 N. Orchard Street, Boise, ID 83706. This form must be postmarked or delivered 10 days
 working days before commencement of the project.

For renovation projects:

1. If asbestos materials are found in the area to be renovated, the materials must be removed by a certified Asbestos Abatement Company prior to the commencement of renovation work. It is

- recommended that third-party consultant be hired for oversight and clearance testing of the removal, to ensure the building is safe to occupy during and after the removal.
- 2. If the amount of <u>friable</u> asbestos to be disturbed is greater than, or equal to **160 square feet, 260 linear feet, or 35 cubic feet**, then an EPA NESHAP notification form (see details above) must be completed.

B. City of Boise Demolition Procedures

In order to ensure compliance with the NESHAP regulation, a Demolition Environmental Review Form will be required for all demolitions (including intentional burning) of City owned structures. The Environmental Review Form will function like a permit and work shall not commence until the form is completed and signed.

Prior to any demolition of a City facility or structure, the Project/Job Manager with assistance from the facility Environmental Lead and Asbestos Coordinator will ensure that either:

- 1. No asbestos containing materials are present in the structure to be demolished and a NESHAP notification has been sent to the EPA at least 10 working days prior to the start of the demolition.
- 2. If asbestos containing materials are present, all friable asbestos (and ACM which may become friable during demolition) will be removed from the building by a licensed asbestos contractor prior to demolition. In addition, a NESHAP notification must be sent to the EPA at least 10 working days prior to the start of the demolition.

C. City of Boise Renovations Procedures

In order to ensure compliance with the NESHAP regulation, a Renovation Environmental Review Form will be required for all renovations of City owned structures. The Environmental Review Form will function like a permit and work shall not commence until the form is completed and signed.

Prior to any renovation of City facilities, the Project/Job Manager will ensure through coordination with the facility Environmental Lead and Asbestos Coordinator that:

- 1. No asbestos containing materials (ACM) or presumed asbestos containing materials (PACM) will be disturbed during the renovation or;
- 2. If asbestos containing materials are present, all ACM will be removed from the building by a licensed asbestos contractor prior to the start of renovation.
- 3. In addition, a NESHAP notification must be sent to the EPA at least 10 working days prior to the start of the renovation if the amount of <u>friable</u> asbestos to be disturbed is greater than or equal to **160** square feet, **260** linear feet, or **35** cubic feet.
- 4. No new asbestos containing materials shall be used in a renovation of any City building. The Asbestos Free Certification Form (Appendix C) should be completed by the General Contractor or other responsible party for the renovation.

XVII. DISPOSAL

Qualified contractors shall, at a minimum, adhere to the following when preparing ACM for disposal. City of Boise employees should not actually be involved in the disposal of asbestos waste, but rather (as the property owner) ensure the contractor is performing their duties properly and that the Waste Shipment Record is returned to the City after disposal.

- All ACM or asbestos-contaminated waste shall be placed in a labeled 6-mil impermeable poly bag and sealed at the top with duct tape. The first bag shall be double bagged in a second labeled 6-mil impermeable poly bag and sealed at the top with duct tape. In addition, a label with the date and name/location of the waste generator (City of Boise) is required on all bags.
- 2. All asbestos material shall be adequately wet inside the 6-mil impermeable poly bag prior to sealing; limiting fiber release if the bag is broken during transportation or disposal.
- 3. For jobs with large quantities of asbestos containing waste; a waste container lined with a double layer of 6-mil poly sheeting and seal prior to transport can be used in place of bags. All asbestos waste materials must remain adequately wet.
- 4. A Waste Shipment Record (WSR) shall be completed by the contractor transporting asbestos to the landfill. The Project/Job Manager shall ensure a signed copy of the WSR is obtained after the waste has been taken to the landfill. The Job/Project Manager shall send a copy to the facility Environmental Lead and the Asbestos Coordinator.
- 5. Asbestos waste shall be transported to a registered asbestos landfill in an enclosed or covered vehicle. The disposal site must conform to 40 CFR 61.152 and be permitted to accept asbestos waste (Ada County Landfill). The landfill receiving procedures of the Ada County Solid Waste Department must be followed; including notification to the landfill 24 hours prior to disposal.
- 6. If friable asbestos waste is to be stored on-site prior to disposal it must be in labeled double 6-mil poly bags and in a locked room or storage area with an OSHA approved asbestos warning sign.

XVIII. RESPONSIBILITIES

The ultimate responsibility for complying with this Asbestos Management Plan lies with the Project/Job Manager who initiates the request for a renovation or demolition on a building. They have the responsibility to ensure that the work given to city staff or contractors will not create an asbestos hazard.

Asbestos Coordinator

- Make recommendations to City departments regarding asbestos management.
- Assist in management of recordkeeping for asbestos in city buildings. Each facility will also keep records for their own buildings.
- Revise the Asbestos Management Program as needed.
- Review complex renovation and demolition projects for compliance with asbestos regulations.
- Perform limited asbestos sampling of building materials.

- Maintain current AHERA Asbestos Inspector Certification.
- Assist Job Supervisor/Project Manager with preparation of required paperwork during a renovation or demolition project.
- Assist Safety Services when responding to Fiber Release Episodes and make recommendations for cleanup.
- Contact regulators for guidance on asbestos related issues.
- Sign Demolition Environmental Review Form to authorize building demolitions.

Risk Management/Safety Services

- Assist with duties of Asbestos Program Coordinator listed above.
- Perform duties associated with a respirator program and medical monitoring.
- Manage required training of employees and keep records of the training on file.
- Facilitate exposure assessments of work activities when requested.
- Handle employee asbestos exposure claims.
- Serve as an emergency contact.

Project/Job Manager (Person who initiates the work on the building)

- Obtain a working knowledge of the regulations regarding asbestos by attending an 8-hour NESHAP training or a 2-hour awareness training annually.
- Read and understand the City of Boise Asbestos Management Plan.
- Ensure that employees and contractors you direct to perform work are not disturbing ACM unless properly trained, licensed, and equipped.
- Contact the Asbestos Program Coordinator or Risk/Safety Services prior to the disturbance of any ACM or PACM.
- Specify asbestos free construction materials on all new building projects.
- Follow all other procedures outlined in the City Asbestos Management Program.

Environmental Lead Staff (One or more needed for each facility, supervisors recommended)

- Attend an 8-hour instructor lead NESHAP training to gain knowledge regarding:
 reading asbestos surveys/reports, asbestos regulations, and City of Boise asbestos procedures.
- Read and understand the City of Boise Asbestos Management Plan.
- Has access to and gathers all records for asbestos at their facility/facilities.
- First line of defense for stopping asbestos exposure to staff in their facility.
- Liaison with Project/Job Manger, Asbestos Coordinator and Risk/Safety for asbestos projects.
- Can sign Renovation Environmental Review Form authorizing work in their facility. May consult with the Asbestos Coordinator and Risk/Safety for large complex renovations.

Maintenance Staff with current 16-hr Class III certification

- Attended annual Class III refresher training and follow all procedures detailed in the Class III training.
- Read and understand the City of Boise Asbestos Management Plan.
- Complete all components of the City of Boise respiratory protection program.
- Have a Negative Exposure Assessment completed by an OSHA "Competent Person" for each job type prior to commencing work.
- Post OSHA approved warning signs outside work area.

- Use glove bag method when practical.
- Only disturb up to 3 square or linear feet of ACM.
- When possible contact your supervisor and the Asbestos Program Coordinator prior to commencing work (emergency work is excluded).

City employees who could come into contact with ACM or initiate projects that could disturb ACM

- Attended Annual Asbestos Awareness Training.
- Read and understand City of Boise Asbestos Management Plan.
- Report any damaged or deteriorated ACM or PACM to supervisor or Risk/Safety.
- Perform normal job duties following all procedures of the City of Boise Asbestos Management Program.

Contracting Departments

- Prepare bidding documents to ensure compliance with applicable asbestos regulations regarding demolition and renovation of City buildings.
- Follow City of Boise regulations regarding asbestos in new construction.
- Obtain an asbestos free-certification form signed by the architect or general contractor on all new construction projects.
- Notify Asbestos Program Coordinator or Safety Services as soon as possible (at least 14 days prior) to any scheduled demolition.

Asbestos Consultants

• Perform duties as assigned by the City of Boise such as, material and air sampling, lab analysis, abatement oversight, training, and cost analysis.

<u>Asbestos Contractor/Abatement Company</u>

• Perform asbestos removal/abatement activities as assigned by the City of Boise, with licensed workers and in compliance with all applicable regulations.

XIV. COST CONSIDERATIONS

The costs associated with implementing an Asbestos Management Program may vary significantly depending on the types-of ACM, building-specific factors, actual procedures adopted, types of equipment used, and the useful life of the building. The City may find it more cost-effective to implement a well-supervised Asbestos Management Program than to incur the costs of immediate asbestos removal. In addition to the direct costs of removal, other costs related to ACM removal include moving building occupants, arranging alternative space for building occupants during the removal work, and restoring the building after the removal is completed.

The cost for a complete building inspection will vary considerably based on the size of the building and the number of samples required. A recent complete building inspection for the Boise Art Museum (BAM), a 32,000 SF structure was \$3240. An inspection for a 10,000-square foot industrial building would likely cost less about \$1200-\$1400. This is because fewer suspect materials would need to be tested. Larger buildings would cost more about \$700-\$900 per additional 10,000 sq. feet. Again, these are rough estimates and will vary depending on building construction with more complex buildings costing more.

Inspections of the building materials to be disturbed is required by the NESHAP regulation before any renovation or demolition. Therefore, the cost will likely have to be incurred at some point in the future regardless. The earlier inspections are completed the less potential liability the City will be exposed to. In addition, more accurate renovation and demolition costs can be determined if the City is aware of the ACM present in all buildings. It should also be noted that a properly formulated Asbestos Management Program will likely reduced exposure to unforeseen expenses, such as regulatory fines and litigation. This will also help to avoid the negative publicity of an asbestos exposure incident.

APPENDIX A – CONTACT INFORMATION City of Boise Contacts

Environmental Analyst (Asbestos Coordinator)
Peter McCullough, City Hall 4th Floor
(208) 384-3906 - pmccullough@cityofboise.org

Safety Services City Hall, 1st Floor 972-8120

Emergency Contact: Corey Pence, Risk Manager, 859-4624 Cell

Regulatory Contacts

EPA Idaho Operations Office 950 W Bannock, Suite 900 Boise, ID 83702 208-378-5746

U.S. EPA Region 10 Regional Contacts:
Kim Farnham (Enforcement) farnham.kim@epa.gov
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APPENDIX B - ASBESTOS INVENTORY (COB BUILDINGS)

The inventory of known asbestos containing materials in City of Boise buildings is available in Excel format, and can be obtained by contacting the Asbestos Coordinator or Safety Services. The inventory will be updated as new sampling is completed. Any omissions or discrepancies should be reported to the Asbestos Coordinator.

APPENDIX C - FORMS

Forms referenced in the City of Boise Asbestos O&M Program are listed below in alphabetical order. These Forms are available in Microsoft Word format from the Asbestos Coordinator (pmccullough@cityofboise.org) and on the "Inside" City web page at: http://publicworks.boise.local/forms-and-documents/.

Asbestos abatement contractors list
Asbestos Notice for City Buildings
Flow Chart – Renovations/Demolitions
Fiber Release Episode Report
Landfill Receiving Procedure
NESHAP Notification Forms
Renovation and Demolition Environmental Review Forms
Specific Work Procedure Guides
Waste Shipment Record