

**612.530 Saint Louis County Department of Health Asbestos Abatement Rules and Regulations -- Registration, Notification and Performance Requirements**

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## **Asbestos Abatement Rules and Regulations**

- 1.0 Application. This rule shall apply to--
  - 1.1 All persons that authorize, design, conduct and work in asbestos abatement projects; and
  - 1.2 All persons that monitor air-borne asbestos or dispose of asbestos waste as a result of asbestos abatement projects.
  - 1.3 All persons who inspect buildings to determine the presence or absence of asbestos containing building materials (ACBMs)
  - 1.4 Business entities that qualify for exemption status pursuant to RSMo 643.225.7 are not subject to the notification requirements for asbestos projects of a size less than 160 square feet or 260 linear feet. Business entities are exempt from post-notification requirements, but shall keep records of waste disposal for department inspection.
- 2.0 General Provisions for Asbestos Abatement Projects.
  - 2.1 Registration. Any person that conducts an asbestos abatement project must register with the Missouri Department of Natural Resources (MDNR).
  - 2.2 Certification. No person may participate in an asbestos abatement project operating in Saint Louis County nor inspect a building to determine the presence or absence of ACBMs unless he is currently certified by MDNR
  - 2.3 Notification. Any person undertaking an asbestos abatement project shall provide, at least ten (10) working days in advance, written notification of the project to the staff director according to Section (3.0). The person also shall provide notification of the project completion according to Section (6.0). Emergency asbestos abatement projects shall comply with the provisions of Section (5.0).
  - 2.4 Abatement Procedures and Practices.
    - 2.4.1 Persons shall conduct asbestos abatement projects according to Section (7.0).
    - 2.4.2 At each asbestos abatement project site the person shall provide the following information for inspection by the department :
      - 2.4.2.1 Proof of current MDNR registration
      - 2.4.2.2 Proof of current MDNR occupational certification for those individuals on the project;
      - 2.4.2.3 Results of air samples taken within last 48 hours;
      - 2.4.2.4 Current photo identification for all applicable individuals engaged in the project; and
      - 2.4.2.5 Proof of passage of the training course for the air sampling technicians and photo identifications for air sampling technicians.
  - 2.5 Any person that authorizes an asbestos abatement project, asbestos inspection or any AHERA-related work shall ensure that Missouri registered contractors and certified workers are employed, and that all notification and post-notification procedures on the project are in compliance with this rule and 10 CSR 10-6.250 and Sections 643.225-643.250 RSMo and 40 CFR 61 Subpart M.
  - 2.6 All information required under this rule must be submitted on the appropriate form found in Section (8.0) and contain accurate, legible information. Failure to provide the required information, failure to submit legible information, submission of false information or failure to provide complete information as required, shall be a

violation of this rule and may result in the staff director's denial or revocation of the notification.

- 2.7 Failure to comply with this rule is a violation of this rule. Compliance with this rule does not relieve the participants from compliance with any other applicable federal and state rules, laws, standards or building codes.
- 3.0 Asbestos Project Notification.
  - 3.1 Any person undertaking an asbestos abatement project shall submit a notification to the department for review at least ten (10) working days prior to the start of the project. The department may waive the ten (10) working day review period upon request for good cause. To apply for this waiver, the person shall complete Part B, number 2 of the notification form found in Section (8.0) The person who applies for the ten (10) working day waiver must obtain approval from the department before the project can begin.
    - 3.1.1 The person shall submit the notification on photocopies of the form found in Section (8.0).
    - 3.1.2 If an amendment to the notification is necessary, the person shall notify the department immediately by telephone or FAX. The department must receive the written amendment within five (5) working days following verbal agreement.
    - 3.1.3 Asbestos abatement project notifications shall state actual dates and times of the project, the on-site supervisor and a description of work practices. If the person must revise the dates and times of the project, the person shall notify the department at least twenty-four (24) hours in advance of the change by telephone or FAX and then immediately follow-up with a written amendment stating the change. The department must receive the written amendment within five (5) working days of the phone or FAX message.
    - 3.1.4 A nonrefundable notification fee pursuant to Section 612.260 (9) of the Saint Louis County Air Pollution Control Code will be charged for each asbestos abatement project.
    - 3.1.5 In projects constituting one hundred sixty (160) square feet or two hundred sixty (260) linear feet or more, the person shall submit the laboratory sample analysis to determine asbestos content for all RACM to be disturbed. The director, on a case-by-case basis may accept OSHA's Material Safety Data Sheet (MSDS), OMB No. 1218-0072, as fulfillment of this requirement provided that the MSDS meet the following conditions:
      - A. The MSDS includes the percentage of the asbestos content; and
      - B. The director can be reasonably assured that the information provided on the MSDS applies to the area of asbestos removed, enclosed, encapsulated or demolished.
- 4.0 Inspections. There shall be a charge of one hundred dollars (\$100) per inspection for the first three (3) inspections of any asbestos abatement project. The department shall bill the person for that inspection(s) and the person shall submit the fee(s) within fifteen (15) days of receipt of invoice.
- 5.0 Emergency Project. Any person undertaking an emergency asbestos abatement project shall notify the department by telephone and must receive departmental approval of emergency status. The person must notify the department within twenty-

four (24) hours of the onset of the emergency. If the emergency occurs after normal working hours or weekends, the person shall contact the Saint Louis County Air Pollution Control Program. The notice shall provide—

- 5.1 A description of the nature and scope of the emergency;
- 5.2 A description of the measures immediately used to mitigate the emergency; and
- 5.3 A Schedule for Removal. Following the emergency notice, the person shall provide to the staff director a notification on the form found in Section (8.0) and the person shall submit it within five (5) days of the onset of the emergency. The amendment requirements for notification found in Section (3.0) are applicable to emergency projects.

#### 6.0 Asbestos Project Post-Notification.

Any person undertaking an asbestos abatement project that requires notification according to Section (3.0) on the department form shall notify the department within sixty (60) days of the completion of the project. This notice shall include a signed and dated receipt for the asbestos waste generated by the project issued by the landfill named on the notification. This notice also shall include final clearance air monitoring results. The laboratory which analyzes final clearance air monitoring results shall attest that it complies with the requirements in subsection (7.9). The technician performing the analysis shall sign and date all reports of analyses.\*\*

\*\* Failure to submit the required post-notifications within the 60 day time period will cause the permitting of future project notifications to be put on hold until all delinquent post-notifications are received.

#### 7.0 Abatement Work Practices.

##### 7.1 Work Practices for Asbestos Removal Projects (Gross Removal).

7.1.1 A person who conducts an asbestos removal project that involves removing friable asbestos-containing materials (ACM) or nonfriable ACM which will be rendered friable during removal from structural items or equipment shall conduct the project according to the following requirements:

7.1.1.1 The person shall isolate the proposed work area from other areas of the building and from outside areas. The person shall erect temporary partitions around the work area or install airtight seals over doorways, windows and ventilation system openings. The person shall use control curtains to close off doorways between the work area and decontamination facilities. The person may provide for makeup air, but the person must maintain reduced air pressure inside the work area until the work area has passed clearance air sampling. Where practical, the person shall install at least one (1) clear window in a temporary partition. The window shall be no less than eighteen (18) inches by eighteen (18) square. The person shall install the window to allow direct visual observation of the work area from outside. Plastic sheeting used for the construction of airtight seals shall be at least four (4) mil thick. Whenever possible, the person shall shut down and lock out heating and ventilation systems. If the person is unable to shut down these systems, the person shall make special provisions to ensure that airborne contamination cannot enter the ventilation system and infiltrate other areas of the building. The person shall post

appropriate warning signs at all entryways into the work area. No individuals other than those involved with the project shall enter the work area before the area meets the requirements of subsection (7.1.1.12) and all other requirements applicable to the project.

- 7.1.1.2 If the person intends to remove any items from the proposed work area before abatement begins, the person shall preclean the items using a high efficiency particulate air (HEPA)-filtered vacuum or wet cleaning methods. The person shall restore the items to the work area only after the area passes the final clearance air sample and meets all requirements applicable to the project.
- 7.1.1.3 The person shall preclean all wall and floor surfaces that contain visible asbestos debris, other than those from which the person will remove asbestos, with a HEPA-filtered vacuum or wet cleaning methods. The person shall preclean any other surfaces in the work area that contain visible asbestos debris with a HEPA-filtered vacuum or wet cleaning methods. The person shall cover all surfaces except floors with plastic sheeting that is at least four (4) mil thick. The person shall cover floors with minimum of two (2) layers plastic sheeting. Each sheet must be at least six (6) mil thick. The person shall affix plastic sheeting on the walls in a manner that ensures that it will remain in position throughout the length of the project. The wall sheeting and the floor sheeting shall overlap enough to ensure a seal that will endure the entire length of the project. The person may use sprayed-on plastic instead of plastic sheeting if the person proposes this method in the notification prior to the start of the project. The person shall immediately repair any tears in the plastic sheeting required by this rule.
- 7.1.1.4 The person shall install HEPA-filtered air filtration equipment in a manner that will continually filter air from within the work area. The capacity of the air filtration equipment shall be sufficient to filter the entire volume of air within the containment every fifteen (15) minutes or less. The air filtration equipment shall establish and maintain a flow of air into the work area from all adjacent areas as demonstrated by using smoke producing tubes or other appropriate means. The person shall perform this test daily and record the results for inspection by the department. The air filtration system shall exhaust air to the outside of the building through a duct installed in the plastic sheeting. The person shall establish an airtight seal between the plastic sheeting and the duct.
- 7.1.1.5 The person shall provide a decontamination facility between the work area and adjacent areas. The decontamination facility shall contain at least three (3) areas. Each area shall have a doorway covered by a control curtain. The areas of a decontamination facility shall meet these requirements--
  - 7.1.1.5.1 Individuals entering the work area must first enter a clean room. The clean room shall be free of asbestos contamination;



- 7.1.1.5.2 Individuals entering the work area must pass from the clean room into the shower room. Individuals exiting the work area must shower before entering the clean room. Individuals shall not take contaminated clothing or equipment into the clean room. The shower room shall contain at least one (1) shower head that is supplied with hot and cold water. The shower room shall contain adequate supplies of soap and shampoo to accommodate all persons who emerge from the work area. Shower enclosures shall be leakproof, opaque and constructed of disposable or easily washable material;
- 7.1.1.5.3 Individuals leaving the work area must first pass through the equipment room. The equipment room shall temporarily store contaminated tools, equipment and protective clothing used in the work area. Items entering the equipment room shall be free of gross contamination before removal from the work area. Six (6) mil thick plastic sheeting shall line the floor and walls of the equipment room; and
- 7.1.1.5.4 The person shall fully enclose all decontamination facility areas. The person shall build all of the areas contiguous to each other unless enclosed passageways connect them. Decontamination facilities shall remain functional until the project meets the requirements for removal of airtight seals and partitions according to this rule.
- 7.1.1.6 The person may construct a waste load-out area between the work area and the exit. Asbestos-containing waste and asbestos-contaminated equipment may pass from the work area to appropriate receptacles outside the work area through the waste load-out area. The person shall totally enclose the waste load-out area. The entryway between the work area and the load-out area shall consist of both a control curtain and a rigid door or two (2) control curtains separated by a minimum distance of three (3) feet. The person shall secure the entryway except when using the entryway to transfer materials from the work area. The floor of the load-out area shall be at least two (2) layers of six (6) mil thick plastic sheeting. The floor shall be free of visible asbestos debris. The person shall remove the floor covering upon completion of the project and dispose of it according to subsection (7.8). Asbestos-containing waste that passes through this area must comply with applicable state and federal container and bagging requirements. Individuals who remove asbestos waste through the load-out area must enter the work area through the decontamination facility;
- 7.1.1.7 The person shall wet the friable ACM with a water solution containing an effective wetting agent. The person shall maintain the ACM in an adequately wet condition during removal. The person shall test the effectiveness of the wetting solution by applying it to a representative sample of the material before the gross removal operation begins. The person shall not use the wetting process as the method for dislodging the friable ACM. The person shall maintain the removed

friable ACM and asbestos-contaminated debris in an adequately wet condition and place it in sealed containers for disposal. The person shall clean up and bag all debris as soon as practicable;

- 7.1.1.8 After removal of the ACM from the structural components and equipment items, the person shall clean all plastic sheeting until free of visible debris with an HEPA-filtered vacuum or by wet cleaning methods. If the containment area contains more than one (1) layer of plastic sheeting, the person may remove and dispose of the additional layer instead of cleaning it. The person shall enclose removed sheeting in a double layer of six (6) mil or greater clear plastic and dispose of it in compliance with all applicable federal and state requirements. The person shall remove any liquid or solid material that leaks through the plastic sheeting by wet cleaning methods;
- 7.1.1.9 After the removal is complete and while the final layer of plastic floor sheeting is in place, the person shall clean all surfaces in the work area free of all visible asbestos residues and then cover all surfaces from which ACM has been removed with a distinguishable sealing material;
- 7.1.1.10 The person shall remove the final layer of plastic sheeting after the sealant is dry. If the project requires third party air monitoring, the air sampling professional(s) or their representatives shall visually inspect the area for visible asbestos-containing debris before conducting final-clearance air sampling. Air samplers shall conduct final clearance air sampling according to the requirements of subsection (7.9). State-certified air sampling professionals or their technicians shall conduct all air sampling required by this rule;
- 7.1.1.11 If the project passes final clearance air sampling, the person shall remove all critical barriers and temporary partitions. The person shall enclose the plastic sheeting in two (2) six (6) mil or greater clear plastic leak-tight layers and dispose of it according to subsection (7.8); and
- 7.1.1.12 After the removal of critical barriers and temporary partitions, the person shall ensure that all surfaces in the work area are free of all visible asbestos debris.

## 7.2 Work Practices For Asbestos Encapsulation Projects.

7.2.1 In some cases encapsulation may control fiber release from friable ACMs on structural items or equipment. The person who performs encapsulation shall meet these requirements:

- 7.2.1.1 The person shall use encapsulation only on ACM that is firmly bound to the underlying surface;
- 7.2.1.2 The person shall not encapsulate friable ACM located in areas subject to abrasive or other physical damage. The person may remove this ACM according to the requirements of subsection (7.1). The person must dispose of the ACM according to the requirements of subsection (7.8);
- 7.2.1.3 Encapsulant materials shall have acceptable adhesive and penetrating characteristics. The person shall test the encapsulant materials by applying the encapsulant to representative samples of the friable surface material and then removing a core sample for physical and visual inspection. The

- person shall repair the core immediately following visual inspection;
- 7.2.1.4 Encapsulant materials shall have acceptable flame retardant characteristics. Encapsulant materials, when dry, shall not be noxious or toxic to applicators or to individuals who occupy the structure after the project is completed;
  - 7.2.1.5 The person who repairs damaged portions of the surface before encapsulation shall use asbestos-free patching materials;
  - 7.2.1.6 The person shall apply encapsulating materials with a sprayer that does not cause the release of fibers from the ACM at the application rates specified by the manufacturer or by the project specifications;
  - 7.2.1.7 After application of the encapsulant, the person shall clean all plastic sheeting covering walls, ceilings, equipment and work surfaces in the area free of visible asbestos residue by wet cleaning methods; and
  - 7.2.1.8 The person who encapsulates friable ACMs located in any enclosed area that will be reoccupied shall conduct the project according to subsection (7.1) and shall dispose of waste according to subsection (7.8).
- 7.3 Work Practices for Outdoor Areas. The department may waive the requirements of paragraph (7.1.1) for a person who removes ACM from structural items and equipment installed in and accessible from outdoor areas. The person must meet these requirements—
- 7.3.1 The person shall secure doors, windows or other openings located within one hundred feet (100') of the work area with plastic sheeting. The person shall use at least four (4) mil thick plastic for this purpose;
  - 7.3.2 The person shall secure the work area by fences or other department-approved means. No individuals other than those engaged in the project shall pass within fifty feet (50') of the work area. The person shall post appropriate warning signs at all entry-ways into the area. Warning signs shall remain until the project meets the requirements of subsections (7.3.4) and (7.3.5) and all applicable requirements;
  - 7.3.3 The person shall wet the friable ACM with a water solution containing an effective wetting agent. The person shall maintain the friable ACM in an adequately wet condition during removal. The person shall maintain all debris in an adequately wet condition. The person shall place the wet debris in a double layer of clear six (6) mil plastic for disposal;
  - 7.3.4 The person shall remove from the work area all friable asbestos-containing debris including accumulations that existed before the project started. Warning signs required by subsection (7.3.2) and access restrictions shall remain in place until the person removes all debris from the work area;
  - 7.3.5 The person shall clean visible asbestos residue from all surfaces. The person shall cover all surfaces from which ACM has been removed with an effective distinguishable sealant. Warning signs required by subsection (7.3.2) and access restrictions shall remain in place until the project meets these requirements; and
  - 7.3.6 Any individual leaving the work area shall remove outerwear prior to leaving the restricted area required by subsection (7.3.2).
- 7.4 Work Practices For Asbestos Dismantling Projects.
- 7.4.1 The person who removes structural or equipment items covered with friable ACM without first stripping the ACM shall conduct the project in the following manner:
    - 7.4.1.1 If the person strips a portion of the surface for the purpose of cutting or mechanically disassembling the equipment, the person shall conduct the project according to subsection (7.1) or (7.7), and before removing

structures or equipment from the work area, the person shall wrap the items in a double layer of six (6) mil plastic sheeting or the person shall place them in leaktight fiber or metal containers. The surface of the wrappings or containers shall be free of all visible asbestos residues. The person shall prevent damage to the containers. If damage to a wrapping or container occurs, the person shall immediately repair or replace the container or wrapping using wet cleaning methods or an HEPA-filtered vacuum.

- 7.4.2 A person who removes structural or equipment items as described in paragraph (7.4.1) shall comply with disposal requirements of subsection (7.8) and applicable federal requirements or the person shall meet the following requirements:
  - 7.4.2.1 If the person will sell or reuse items treated according to subsection (7.4.1) of this rule, the person shall clean all surfaces free of visible asbestos residue and cover the surfaces with a distinguishable sealing material;
  - 7.4.2.2 If the person removes friable ACM outdoors, the person shall comply with subsection (7.3) and applicable federal requirements; and
  - 7.4.2.3 If the person removes friable ACM indoors, the person shall carry out the project in an area specifically designated for the purpose and shall comply with subsection (7.1).

#### 7.5 Work Practices for Asbestos Removal Prior to and During Demolition.

- 7.5.1 The person who demolishes a structurally sound and safe structure that contains friable or nonfriable ACM shall meet these requirements:
  - 7.5.1.1 The person shall remove ACM according to subsection (7.4) and all applicable federal requirements; or
  - 7.5.1.2 The person shall remove all friable ACM and nonfriable category II ACM from the building prior to demolition. The person shall remove friable ACM according to the requirements of subsection (7.1) and all applicable federal requirements. The person shall remove nonfriable category I ACM that is likely to release significant quantities of asbestos fibers.
- 7.5.2 The person who conducts the demolition of unsafe buildings or parts of buildings containing asbestos may use the following procedures on those portions of the buildings that pose imminent danger to public health or safety, or both. All other parts of the buildings which contain asbestos are subject to all applicable laws and rules.
  - 7.5.2.1 A person who demolishes an asbestos-containing building must obtain a copy of the demolition order from the appropriate authority and submit it with an asbestos abatement notification as required in Section (3.0).
  - 7.5.2.2 The person shall ensure that the debris is adequately wet and stays adequately wet until disposal. The person shall ensure that the project activities generate no visible emissions.
  - 7.5.2.3 The person shall ensure that on-site at all times during the demolition is an individual who is trained in asbestos removal techniques and who is certified as an asbestos abatement supervisor.
  - 7.5.2.4 The person shall post signs notifying the public that an emergency exists.
  - 7.5.2.5 The person shall treat all debris generated by the demolition as regulated friable ACM. A registered asbestos abatement contractor shall remove the debris and shall dispose of it in accordance with subsection (7.8). If it is possible to segregate and decontaminate some debris, then the person

may dispose of those materials that do not contain more than one percent (1%) asbestos in a demolition landfill. Certified asbestos abatement workers must perform the segregation and decontamination work.

7.6 Work Practices for Asbestos Related Enclosure Projects. The person who encloses ACM shall follow these procedures:

- 7.6.1 Before installing hangers, brackets or other enclosure supports, the person shall spray the surface of the ACM with amended water or an encapsulant. The person shall use a sprayer that does not cause release of fibers from the ACM at the application rates specified by the manufacturer or by the project specifications;
- 7.6.2 If the person uses a power drill or any tool which may disturb the ACM, the tool shall be equipped with a HEPA-filtered vacuum;
- 7.6.3 Before beginning to build the enclosure, the person shall adequately wet and remove any loose and hanging ACM. The person shall dispose of the material according to subsection (7.8);
- 7.6.4 After installing hangers, brackets or other supports, and before building the enclosure, the person shall repair the ACM using materials that do not contain asbestos;
- 7.6.5 The person responsible for maintaining ACM enclosures shall identify the areas by signs, labels, color coding or some other mechanism to warn those who may disturb the enclosure that asbestos is present; and
- 7.6.6 If the enclosure project disturbs ten (10) square feet or sixteen (16) linear feet or more of ACM, the person must meet the requirements of subsection (7.1).

7.7 Work Practices for Glove Bag Projects. The department limits use of glove bags to projects of less than two hundred sixty (260) linear feet. The department requires precleaning of any loose asbestos debris in the immediate area of the glove bag project. The staff director may require portions of subsection (7.1.1) if the conditions of the asbestos project warrants this action to protect public health and the environment.

- 7.7.1 The person shall use six (6) mil thick or thicker leak-tight glove bags according to the manufacturer's instructions or an equivalent procedure. The person shall supply a copy of the instructions to the department representative for inspection at the work site. The person shall not use glove bags on surfaces having a temperature of one hundred fifty degrees Fahrenheit (150°F) or greater.
- 7.7.2 The person shall post appropriate warning signs at all entryways to the work area. The person shall restrict access to the work area to individuals who have responsibilities directly related to the project. The restrictions and the signs shall remain in place until the project meets all applicable requirements.
- 7.7.3 The person shall tightly enclose in six (6) mil plastic any surface which has loose or damaged ACM attached to it until the person can place a glove bag over the pipe and remove the ACM.
- 7.7.4 The person shall ensure an airtight seal between the glove bag and the surface until the person removes the glove bag. The person shall not use the same glove bag for more than one (1) section of pipe. The person shall not move the glove bag from one (1) section of pipe to another.
- 7.7.5 The person shall maintain the ACM in an adequately wet condition while removing it. The person shall maintain the removed ACM in an adequately wet condition while it remains in the glove bag. The person shall use a HEPA-filtered vacuum to evacuate air from the glove bag.
- 7.7.6 Before the person seals and removes the glove bag for disposal, the person shall

clean all surfaces stripped of ACM until free of visible asbestos residues.

7.7.7 Before removing warning signs and access restrictions to the work area, the person shall apply a distinguishable sealing material to all surfaces stripped of ACM and to any friable ACM exposed as a result of the removal process.

7.7.8 Before removing warning signs and access restrictions to the work area, the person shall ensure that the work area is free of all visible asbestos-containing debris, including accumulations that existed prior to the start of the project, and that air sampling clearance required under subsection (7.9.3.4) has been achieved.

7.7.9 If there is any asbestos contamination of the work area due to damage or improper use of glove bags, the person shall immediately stop the project activities. If damage occurs to any friable ACM within the work area, the person shall immediately stop the project activities. The person shall thoroughly clean with an HEPA-filtered vacuum or by wet cleaning methods all asbestos-contaminated surfaces. Each individual who is contaminated with asbestos fibers from project activities including clean-up operations shall remove or clean clothing with an HEPA-filtered vacuum or by wet cleaning methods before leaving the work area. The person shall notify the department of the date, nature and clean-up measures used for these occurrences before individuals other than those involved in the project occupy the area. The department may require additional cleaning before allowing reoccupation of the area. The person may use mini-containment procedures during glove bag operations if they are necessary to provide increased protection for public health and environment.

#### 7.8 Asbestos Waste Disposal Work Practices.

7.8.1 All solid waste materials containing friable asbestos that result from an asbestos abatement project shall be handled in the following manner:

7.8.1.1 All friable asbestos-containing waste shall be placed in leak-tight containers in an adequately wet condition before it is removed from the work area. Waste containers shall consist of not less than two (2) six (6) mil thick leak-tight clear plastic bags unless the waste contains rigid or heavy objects that are likely to tear the bags. If bag damage is likely to occur, the waste shall be placed in fiber or metal containers that are equipped with a plastic bag liner and a leak-tight lid which can be firmly fastened in position. Large sections of structural items, such as pipe or duct work that has been removed with friable ACMs left in place, shall be tightly wrapped in not less than a double layer of six (6) mil thick clear plastic sheeting for disposal purposes if they cannot be placed in containers. All ACM exposed during cutting or disjoining operations shall be adequately wet when wrapped.

7.8.1.2 The exterior surface of each container or individually wrapped object shall be free of all visible asbestos debris. An asbestos caution label and a source identification label shall be securely attached to each container or wrapping before it leaves the work area.

7.8.1.3 Each waste container shall be carefully handled and transported in order to prevent breaking or opening. Whenever a container breaks or otherwise becomes unable to completely contain the waste, the container shall be immediately repaired or replaced. Any friable asbestos-containing waste materials that come out of the original container shall be

immediately cleaned up after being wetted with water and placed in the replacement container;

7.8.1.4 Friable and category II nonfriable asbestos containing solid waste that is disposed of in Missouri shall be disposed of in a sanitary landfill having a state permit to operate. Category I nonfriable asbestos shall be disposed of in a demolition landfill or a sanitary landfill having a state permit to operate.

7.8.1.5 Waste shall be transported in enclosed roll-offs or dumpsters, vehicles that have completely enclosed cargo areas, or a four (4)-sided cargo area which shall be completely covered with six (6) mil thick plastic sheeting or other equivalent covering while the waste is being transported. All visible debris remaining in the vehicle cargo area after the waste has been deposited at the disposal area shall be immediately removed by wet cleaning methods and disposed of in accordance with the requirements of subsection (7.8). If asbestos waste is handled in a rented vehicle, the owner of the vehicle shall be notified that the vehicle will be used to transport asbestos waste.

7.8.1.6 Waste filters. Waste water from asbestos projects shall be filtered through a filter not to exceed 0.5 micron pore size prior to disposal.

## 7.9 Air Sampling.

7.9.1 The department shall require final clearance air monitoring for all enclosed asbestos abatement work areas. The department shall require third-party final clearance air monitoring for all asbestos abatement projects of a magnitude of one hundred sixty (160) square feet or two hundred sixty (260) linear feet or greater conducted in an indoor work area. Air sampling shall be conducted by air sampling professionals (ASP) or by trained air sampling technicians under the direction of an ASP. Projects less than one hundred sixty (160) square feet or two hundred sixty (260) linear feet need not have air sampling clearance conducted by a third party ASP. The contractor shall conduct air sampling clearance in compliance with 7.9.3. and may employ his own ASP when the project is less than one hundred sixty (160) square feet or two hundred sixty (260) linear feet. In-house projects conducted by state-exempt business entities using their own trained employees are exempt from this provision.

7.9.2 The department shall require the following air samples:

7.9.2.1 When the department requires third party air sampling, the samplers will collect samples inside and outside the work area to determine the effectiveness of work practices and control measures used to contain asbestos fibers inside the project at a frequency of at least once every forty (40) hours of active abatement work. The ASP will determine the location of the samples. The department may require third-party air monitoring on a case by case basis for any asbestos abatement project; and

7.9.2.2 After removal and clean-up activities are complete the abatement contractor shall ensure that ASPs conduct aggressive air sampling on all projects described in subsection (7.1). Aggressive air samples will consist of at least eleven hundred (1,100) liters each of air drawn through a filter.

Glove bag projects are exempt from aggressive air sampling. Glove bag projects shall employ nonaggressive area sampling during operations.

7.9.3 Clearance criteria.

7.9.3.1 An indoor work area of one thousand (1000) cubic feet or greater shall be available for reoccupancy when the results of five (5) phase contrast microscopy (PCM) or transmission electron microscopy (TEM) samples are all less than one-hundredth (.01) fibers per cubic centimeter (f/cc). The microscopists shall perform PCM according to the National Institute for Occupational Safety and Health (NIOSH) 7400 method or TEM according to the NIOSH 7402 method or an equivalent method approved by the Department. If any one (1) of the five (5) samples reveals an airborne fiber count of one-hundredth (.01) f/cc or greater the asbestos abatement contractor shall clean the area again. ASPs or their technicians shall conduct aggressive final clearance air sampling again. This process shall continue until the air sampling results are below one-hundredth (.01) f/cc.

7.9.3.2 Indoor asbestos abatement work areas of less than one thousand (1000) cubic feet shall require two (2) PCM or TEM samples taken from each work area. Both samples must be less than one-hundredth (.01) f/cc before the ASP can clear the area for reoccupancy.

7.9.3.3 If all sample results done on PCM are one-hundredth (.01) f/cc or higher, then the air sampling professional may choose to direct the laboratory to perform TEM using the NIOSH 7402 method on the highest sample. If the TEM analysis indicates the asbestos fiber level is less than one-hundredth (.01) f/cc, the ASP may clear the area for reoccupancy.

7.9.3.4 Clearance for glove bag projects will be achieved when all sample results of non-aggressive area sampling are less than one-hundredth (.01) f/cc by PCM or TEM per the method(s) described in subsection (7.9.3.1.).

7.9.3.5 The ASP may request a waiver of the one-hundredth (.01) f/cc clearance level required by subsections (7.9.3.1-7.9.3.4) for an asbestos abatement project where the sampler can demonstrate that the background levels exceed the one-hundredth (.01) f/cc enforcement level. The department may require the ASP to document that the background interference is from sources not associated with the asbestos abatement project. The background air samples shall be of sufficient number and strategic placement to be acceptable by the department.

7.9.4 The ASP shall have the following responsibilities.

7.9.4.1 Utilize trained air sampling technicians;

7.9.4.2 Assure that the microscopist employs the NIOSH 7400 method when performing PCM on air samples from an asbestos abatement project;

7.9.4.3 Assure that the microscopist employs the NIOSH 7402 or an equivalent method when performing TEM on non-AHERA air samples; and

7.9.4.4 Assure that laboratories utilized have the proper accreditation. The accreditation organizations are the American Industrial Hygiene Association (AIHA) and the National Voluntary Laboratory Accreditation Program (NVLAP). The ASP may utilize persons on the Asbestos Analysts Registry.

7.9.5 The contractor and the owner shall keep the air monitoring results for three (3) years. The person shall make the results available to representatives of the



department upon request. The contractor shall provide final clearance air monitoring results to the department within sixty (60) days of the close of the project. All AHERA projects shall comply with EPA air monitoring requirements in 40 CFR part 763.

#### 7.10 Additional Provisions.

- 7.10.1 The person who uses any technology not identified in this rule shall list that technology on the asbestos abatement notification. The person shall receive written approval for the use of the technology prior to the start of the project. Failure to comply with this section shall be a violation of this rule.
- 7.10.2 An asbestos abatement supervisor shall be available at the work site during the hours that a project is being conducted.
- 7.10.3 Waiver. The department may waive any individual requirements of Section (7.0) of this rule. To request a waiver, the person must complete Part B, number 2 of the notification form which appears in Section (8.0) of this rule. Except in cases where the department waives the ten (10) working day-waiting period, the person must receive departmental approval of the waiver before the project begins.
- 7.10.4 Asbestos inspectors shall utilize laboratories accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) for bulk sample analysis. Alternatively, asbestos inspectors may utilize Industrial Hygiene Laboratories accredited by the American Industrial Hygiene Association (AIHA) and deemed proficient in the Bulk Asbestos Proficiency Analytical Testing Program (BAPAT). Asbestos inspectors may utilize other laboratories for bulk sample analysis that voluntarily participate in and are deemed proficient in the AIHA BAPAT. This subsection shall be effective one (1) year from date of promulgation.

#### 8.0 Appendices.

##### 8.1 Appendix A. Official Forms.

###### 8.1.1 Notification.

###### 8.1.2 Post-Notification.

#### SAINT LOUIS COUNTY DEPARTMENT OF HEALTH AIR POLLUTION CONTROL PROGRAM ASBESTOS PROJECT NOTIFICATION

Any person who intends to perform an asbestos abatement project subject to the regulations of the Saint Louis County Department of Health (DOH) must provide the information requested in this form in order to comply with the requirements of Chapter 643 RSMo, the Missouri Air Conservation Law. Except as otherwise provided in Section 612.530 this form is to be completed and returned to the Saint Louis County – DOH not less than ten (10) working days before the intended starting date of the project. Each building or structure at the work site, including projects conducted outdoors, must be reported on a separate notification, submitted on photocopies of this form.

Any notification specifying work practices in violation of the applicable regulations will be considered invalid, as will notifications that are incomplete or illegible. Parts A, B, C, D & E must be completed for each notification. Notifications lacking the required information will be returned for completion and the ten (10) working day review period specified in Section 612.530 will be recalculated from the postmark date of the re-submitted notification.

Attach consecutively numbered supplemental pages as necessary to provide the information required in this notification form. Each supplemental page must refer to the part number and item to which it pertains, and must identify the project site and notification date. Failure to provide this identifying information will render a notification incomplete.

Mail completed notification and fee to:

SAINT LOUIS COUNTY DEPARTMENT OF HEALTH  
AIR POLLUTION CONTROL PROGRAM  
6121 NORTH HANLEY ROAD  
BERKELEY, MO 63134



**ST. LOUIS COUNTY  
AIR POLLUTION CONTROL PROGRAM  
ASBESTOS PROJECT NOTIFICATION**

- ORIGINAL       REVISION  
 EMERGENCY       CANCELLATION

Greater than or equal to 160 square feet or 260 linear feet of friable asbestos-containing material.  
 Less than 160 square feet or 260 linear feet of friable asbestos containing material.  
 NOTE: A non-refundable permit as required by St. Louis County Air Pollution Control Code Section 612.260 (9) must be submitted for any asbestos abatement project involving 10 square feet (SF) or more or 16 linear feet (LF) or more of friable asbestos-containing material, and for planned renovation projects as defined in U.S. EPA Regulation 40 CFR 61 Subpart M. Fee schedule: <1,000 SF or <1,500 LF = \$100.00; >=1,000 SF and <5,000 SF or >=1,500 LF and <5,500 LF = \$150.00; >=5,000 SF or >=5,500 LF = \$200.00.  
 Make checks payable to: St. Louis County Air Pollution Control Program

**PART A AUTHENTICATION**

1. ASBESTOS CONTRACTOR

2. ASBESTOS CONTRACTOR ADDRESS      CITY      STATE      ZIP      TELEPHONE NUMBER

3. MISSOURI REGISTRATION NUMBER      REGISTRATION EXPIRATION DATE

4a. I CERTIFY THAT AN INDIVIDUAL TRAINED IN THE PROVISIONS OF FEDERAL REGULATION (40 CFR PART 61 SUBPART M) WILL BE ON-SITE DURING THE PROJECT AND PROOF THAT THIS PERSON HAS COMPLETED THE REQUIRED TRAINING WILL BE AVAILABLE FOR INSPECTION BY THE DEPARTMENT.

4b. BY MY SIGNATURE, I ATTEST THAT ALL ASBESTOS ABATEMENT PROCEDURES SHALL BE PERFORMED IN COMPLIANCE WITH ALL APPLICABLE STATE AND FEDERAL REGULATIONS AND THE ASBESTOS CONTROL MEASURES PRACTICED ON THIS PROJECT WILL COMPLY WITH ST. LOUIS COUNTY AIR POLLUTION CONTROL CODE AND THE STANDARDS FOR WORKER PROTECTION ESTABLISHED BY OSHA IN 29 CFR 1926.1101 AND 1910.1001.

4c. I HEREBY CERTIFY THAT, TO THE BEST OF MY KNOWLEDGE AND UNDERSTANDING, THE INFORMATION PROVIDED IN THIS NOTIFICATION IS TRUE AND CORRECT.

SIGNED \_\_\_\_\_ DATE \_\_\_\_\_

PRINTED NAME AND TITLE \_\_\_\_\_

**PART B ADDITIONAL INFORMATION**

1. IF AN UNSAFE STRUCTURE IS BEING DEMOLISHED UNDER ORDER OF A STATE OR LOCAL GOVERNMENTAL AGENCY. GIVE NAME, TITLE, AND AUTHORITY OF INDIVIDUAL WHO ORDERED THE DEMOLITION. INCLUDE COPY OF SIGNED ORDER.

NAME      TITLE      AUTHORITY OF INDIVIDUAL      TELEPHONE NUMBER

2. IF A WAIVER OF ANY PORTION OF ST. LOUIS COUNTY AIR POLLUTION CONTROL CODE SECTION 612.530 IS REQUESTED, INDICATE THE WAIVER DESIRED AND THE JUSTIFICATION FOR SUCH A WAIVER. IDENTIFY ITEM NUMBER. USE SUPPLEMENTAL SHEET TO DESCRIBE PROPOSED ALTERNATIVE WORK PRACTICE.

WAIVER      JUSTIFICATION

3. NAME OF AIR SAMPLING PROFESSIONAL PERFORMING CLEARANCE AIR MONITORING FOR THIS PROJECT.

ADDRESS      CITY      STATE      ZIP      TELEPHONE NUMBER

**PART C PROJECT DESCRIPTION**

1. COUNTY WHERE PROJECT IS TO BE PERFORMED  
St. Louis County

2. PROJECT NAME OR NOTIFICATION NUMBER

3. CONTRACTOR'S ON-SITE SUPERVISOR

4. PROJECT SITE TELEPHONE NUMBER

5. PROJECT SITE ADDRESS      CITY      STATE      ZIP

6. OWNER NAME      OWNER CONTACT PERSON      TELEPHONE NUMBER

7. OWNER ADDRESS

**PART C PROJECT DESCRIPTION (CONTINUED)**

8. PROJECT TYPE  
 REPAIR       RENOVATION       OPERATIONS AND MAINTENANCE       REMOVAL       ENCLOSURE  
 DEMOLITION       DISMANTLING       ENCAPSULATION

9. DESCRIBE PROCEDURE USED FOR THE DETECTION OF RACM INCLUDING ANALYTICAL METHOD EMPLOYED IF APPROPRIATE.

**10. DESCRIPTION AND QUANTITY OF FRIABLE ASBESTOS MATERIALS TO BE DISTURBED. (REPORT ONLY DEBRIS IN CUBIC FEET.)**

MATERIAL	SQUARE FEET	LINEAR FEET	CUBIC FEET
MATERIAL	SQUARE FEET	LINEAR FEET	CUBIC FEET
MATERIAL	SQUARE FEET	LINEAR FEET	CUBIC FEET
MATERIAL	SQUARE FEET	LINEAR FEET	CUBIC FEET
<b>TOTAL FRIABLE ACM</b>		SQUARE FEET	CUBIC FEET

**NOTE** If project is NESHAPS size attach laboratory sample analysis for all friable asbestos materials to be disturbed. Per St. Louis County Air Pollution Control Code Section 612.530, OSHA Material Safety Data Sheet, OMB #1218-0072, may be substituted if it lists percent asbestos content.

**11. QUANTITY OF MATERIAL WHICH WILL BE ABOVE 150°F. WHEN DISTURBED. A WAIVER MUST BE REQUESTED AND WORK PRACTICES SUBMITTED FOR WORK OF THIS NATURE.**

MATERIAL	SQUARE FEET	LINEAR FEET	CUBIC FEET
MATERIAL	SQUARE FEET	LINEAR FEET	CUBIC FEET

**12. DESCRIPTION AND QUANTITY OF NON-FRIABLE ASBESTOS MATERIALS TO BE DISTURBED**

MATERIAL	SQUARE FEET	LINEAR FEET	CUBIC FEET
MATERIAL	SQUARE FEET	LINEAR FEET	CUBIC FEET
MATERIAL	SQUARE FEET	LINEAR FEET	CUBIC FEET

**NOTE** If chemical mastic removers are to be used to remove floor covering mastics, attach Material Safety Data Sheet for the remover to be used.

13a. DESCRIBE ABATEMENT WORK INCLUDING LOCATION IN BUILDING. PLANNED DEMOLITION/RENOVATION, AND METHODS TO BE USED.

13b. DESCRIBE WORK PRACTICES AND ENGINEERING CONTROLS TO BE USED TO PREVENT EMISSION OF ASBESTOS.

13c. DESCRIBE THE CONTINGENCY PLAN IF UNEXPECTED RACM IS DISCOVERED

14. APPROXIMATE AGE OF STRUCTURE      15. PRESENT USE OF STRUCTURE      16. FORMER USE OF STRUCTURE IF KNOWN

PART D PROJECT SCHEDULE			
No phase of the project may begin during the 10 working day notification review period without explicit waiver from the department.			
	START DATE	COMPLETE DATE	TIME
1. Preparation Phase			
2. Abatement Phase			
3. Daily Work Schedule	START TIME	QUIT TIME	LUNCH BREAK
4. DAYS OF WEEK WORK WILL TAKE PLACE			
PART E DISPOSAL			
1. NAME OF WASTE HAULER IF OTHER THAN ASBESTOS CONTRACTOR			
ADDRESS			
2. NAME OF DISPOSAL SITE			
ADDRESS			PHONE
PART F SUPPLEMENTAL INFORMATION			
PROJECT SITE		NOTIFICATION DATE	
PART NUMBER		ITEM NUMBER	



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**GENERAL INSTRUCTIONS**

Asbestos abatement projects of a magnitude of ten (10) square feet, sixteen (16) linear feet or greater are required to submit post-notification to the department within sixty (60) days of the completion date submitted on your initial notification or application form to the department. This post-notification shall include a signed and dated receipt of the asbestos disposal slip(s) as well as the final clean air results. These documents as well as the completed post-notification form shall be mailed to the following address:

St. Louis County Department of Health  
Air Pollution Control Program (Asbestos)  
6121 S. North Hanley Road  
Berkeley, MO 63134

**PART A ASBESTOS PROJECT INFORMATION**

1. NAME OF CONTRACTOR

2. CONTRACTOR CONTACT PERSON

3. BUILDING/STRUCTURE OWNER NAME

STREET ADDRESS

CITY	STATE	ZIP
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4. START DATE OF PROJECT	COMPLETION DATE OF PROJECT
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**PART B AIR SAMPLING AND LABORATORY INFORMATION**

NAME OF ANALYTIC LABORATORY UTILIZED FOR FINAL AIR RESULTS

STREET ADDRESS

CITY	STATE	ZIP
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TELEPHONE	CONTACT PERSON
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**NOTE**    **INCLUDE A COPY OF THE FINAL CLEARANCE AIR RESULTS.**

## 9.0 Definitions for the Saint Louis County Department of Health Asbestos Abatement Rules and Regulations

(A) All terms beginning with "A."

1. Abatement project designer--An individual who designs or plans Asbestos Hazard Emergency Response Act (AHERA) asbestos abatement.
2. Adequately wet--To sufficiently mix or penetrate with liquid to prevent the release of particulates. If visible emissions are observed coming from asbestos-containing material, then that material has not been adequately wetted. However, the absence of visible emissions is not sufficient evidence of being adequately wet.
3. Administrator--The regional administrator for Region VII, United States Environmental Protection Agency (EPA).
4. Aggressive air sampling--Sweeping of floors, ceilings and walls and other surfaces with the exhaust of a minimum of one (1) horsepower leafblower or equivalent immediately prior to air monitoring.
5. AHERA--Asbestos Hazard Emergency Response Act of 1986 (P.L. 99-519).
6. Air cleaning device—Any method, process or equipment which removes, reduces or renders less obnoxious air contaminants discharged into the ambient air.
7. Air contaminant—Any particulate matter or any gas or vapor or any combination of them that pollutes, or makes air impure.
8. Air contaminant source—Any and all sources of emission of air contaminants.
9. Air pollution--The presence in the ambient air of one or more air contaminants in quantities, of characteristics and of a duration which directly cause or contribute to injury to human, plant or animal life or health, or to property or which interfere with the enjoyment of life or use of property.
10. Air sampling professional—An individual who by qualifications and experience is proficient in asbestos abatement air monitoring. The individual shall conduct, oversee or be responsible for air monitoring of asbestos abatement projects before, during and after the project has been completed.
11. Air sampling technician—An individual who has been trained by an air sampling professional to do air monitoring. That individual conducts air monitoring of an asbestos abatement project before, during and after the project has been completed.
12. Ambient air--All space outside of buildings, stacks or exterior ducts.
13. Applicable requirement-- Any standard or requirement established in sections 643.225 - 643.245, RSMo of the Missouri Air Conservation Law and rules adopted under them.
14. Appropriate warning sign--Any asbestos hazard warning sign that complies with the asbestos regulations of the United States Occupational Safety and Health Administration (OSHA) or the EPA rules.
15. Approved waste disposal site--A solid waste disposal area that is authorized by MDNR to receive friable asbestos containing solid wastes.
16. Asbestos--The asbestiform varieties of chrysotile, crocidolite, amosite, anthophyllite, tremolite and actinolite.
17. Asbestos abatement--The encapsulation, enclosure or removal of asbestos-containing materials, in or from a building, or air contaminant source; or preparation of friable asbestos-containing material prior to demolition or renovation.
18. Asbestos abatement contractor--Any person who by agreement, contractual or otherwise, conducts asbestos abatement projects at a location other than his/her own place of business.

19. Asbestos abatement project--An activity undertaken to encapsulate, enclose or remove ten (10) square feet or sixteen (16) linear feet or more of friable asbestos-containing materials from buildings and other air contaminant sources, or to demolish buildings and other air contaminant sources containing ten (10) square feet or sixteen (16) linear feet or more of friable asbestos-containing materials.
20. Asbestos abatement supervisor--An individual who directs, controls or supervises others in asbestos abatement projects, and has taken the appropriate qualifying training courses.
21. Asbestos abatement worker--An individual who engages in asbestos abatement projects, and who has received the appropriate required training.
22. Asbestos caution label--A label that complies with applicable EPA, Department of Transportation (DOT) and OSHA rule requirements and is to be securely affixed to a waste container that contains friable asbestos materials.
23. Asbestos-containing material (ACM)--Any material or product which contains more than one percent (1%) asbestos, as determined using the polarized light microscopy method described in 40 CFR Part 763, subpart F, Appendix A. Section 1.
24. Asbestos debris--Material that results from removal or deterioration of asbestos-containing material.
25. Asbestos dismantling project--An asbestos abatement project that includes the disassembling, handling and moving of the components of any structural or equipment item that has been coated with friable asbestos-containing material without first removing this material.
26. Asbestos encapsulation project--An asbestos abatement project involving the coating of a friable asbestos-containing surface material with a sealing substance with the intended purpose of preventing the continued release of asbestos fibers from the material into the air. This definition shall not include:
- A. The repainting of a previously painted asbestos-containing surface primarily for the purpose of improving appearance;
  - B. The application of a sealing material to a surface subsequent to the removal of asbestos from it;
  - C. The application of an encapsulant to asbestos-containing material while the material is being removed;
  - D. The application of a sealing substance to less than ten (10) square feet or less than sixteen (16) linear feet of friable asbestos-containing material;
  - E. The application of a sealing substance to asbestos-containing material that has previously been enclosed or encapsulated; or
  - F. The painting of nonfriable asbestos-containing material.
27. Asbestos enclosure project--An asbestos abatement project that involves the construction of an airtight impact resistant barrier to isolate a surface coated with asbestos-containing material.
28. Asbestos maintenance operation--Any operation that involves the removal or cleanup of less than ten (10) square feet or less than sixteen (16) linear feet of friable asbestos-containing material from any type of structural or equipment item in order to repair, replace or maintain the item and anything attached to it.
29. Asbestos projects--An activity undertaken to remove or encapsulate one hundred sixty (160) square feet or two hundred sixty (260) linear feet or more of friable asbestos-containing materials or demolition of any structure or building or a part of it containing the previously mentioned quantities of asbestos-containing materials.



30. Asbestos removal project--An asbestos abatement project consisting of activities that involve, and are required, to take out friable asbestos-containing materials from any building. This definition includes, but is not limited to, activities associated with the cleanup of loose friable asbestos-containing debris or refuse, or both, from floors and other surfaces.

(B) All terms beginning with "B."

1. Building—Any structure, excluding single-family, owner-occupied dwellings; and vacant public or privately owned residential structures of four (4) dwelling units or less being demolished for the sole purpose of public health, safety or welfare. Excluded structures must be geographically dispersed, demolished pursuant to a public safety determination, and must pose a threat to public safety.

(C) All terms beginning with "C."

1. Category I nonfriable ACM--Asbestos-containing packings, gaskets, resilient floor covering and asphalt roofing products containing more than one percent (1%) asbestos as determined using the method specified in 40 CFR part 763, subpart F, Appendix A, section 1, Polarized Light Microscopy that, when dry cannot be crumbled, pulverized or reduced to powder by hand pressure.

2. Category II nonfriable ACM--Any material, excluding category I Nonfriable ACM, containing more than one percent (1%) asbestos as determined using the method specified in 40 CFR part 763, subpart F, Appendix A, section 1, Polarized Light Microscopy that, when dry, cannot be crumbled, pulverized or reduced to powder by hand pressure.

3. Circumvention—Building, erecting, installing or using any article, machine, equipment, process or method, which, when used would conceal an emission that would otherwise constitute a violation of an applicable standard or requirement. That concealment includes, but is not limited to, the use of gaseous adjuncts to achieve compliance with a visible emissions standard, and the piecemeal carrying out of an operation to avoid coverage by a standard that applies only to operations larger than a specific size.

4. Clean room--An uncontaminated area or room which is a part of the worker decontamination enclosure system.

5. Commission—The Missouri Air Conservation Commission established pursuant to section 643.040, RSMo.

6. Containment--The area where an asbestos abatement project is conducted. The area must be enclosed either by a glove bag or plastic sheeting barriers.

7. Control curtain--Any of the three (3) following types of closure devices that are to be constructed of not less than four (4) mil thick plastic sheeting material and installed in an entryway of an area that is considered to be contaminated with free asbestos fibers.

A. A ventilation curtain that allows unrestricted air flow movement into a contaminated area when it is being ventilated with an exhaust fan. This curtain consists of a single flap that opens into the contaminated area and is securely fastened across the top of the entryway framework so that it overlaps both sides of the entryway by not less than twelve inches (12") and the base of the entryway by not less than three inches (3");

B. A confinement curtain that restricts the movement of air into, and from, an unventilated and contaminated area. This curtain consists of three (3) constructed baffles that cover the entire area of the entryway and are securely fastened along the top of the entryway framework and along alternate sides of locations in a manner that will allow two (2) of the curtains to fully cover the entryway opening while a person passes through the third curtain. An airlock arrangement consisting of two (2) confinement curtain entryways that are located at least three feet (3') apart may be substituted for the triple baffle arrangement; or

C. A closure device for which written department approval is required.

(D) All terms beginning with "D."

1. Decontamination facility--The serial arrangement of rooms or spaces for the purpose of separating the work site from the building environment upon entering the work site and for the cleaning of persons, equipment and contained waste prior to returning to the clean environment.
2. Demolition project--The wrecking, razing, burning, pulling down or removing of any load-supporting structural member or portion of a structure together with any related handling operation.
3. Department-approved in-house project--An asbestos abatement project in a person's own facility using their own trained facility employees; the project has received departmental approval as part of planned renovation operations.
4. Department--refers to Missouri Department of Natural Resources or their designated agent, such as, Saint Louis County Department of Health.
5. Director or department director--"Director of the Saint Louis County Department of Health".

(E) All terms beginning with "E."

1. Emergency asbestos abatement project--An asbestos abatement project that must be undertaken immediately to prevent a public health hazard from exposure or to restore essential facility operation.
2. Emission--The release or discharge, whether directly or indirectly, into the atmosphere of one (1) or more air contaminants.

(F) All terms beginning with "F."

1. Friable asbestos-containing material--Any material that contains more than one percent (1%) asbestos as determined using the method specified in 40 CFR part 763, subpart F, Appendix A, section 1, Polarized Light Microscopy, which is applied to ceilings, walls, structural members, piping, ductwork or any other part of a building or facility and which, when dry, may be crumbled, pulverized or reduced to powder by hand pressure.
2. Furnishings--Removable furniture, drapes, rugs and decorative items.

(G) All terms beginning with "G."

1. Glove bag--A manufactured or fabricated device, typically constructed of six (6) mil transparent polyethylene or polyvinyl chloride plastic. This device consists of two (2) inward projecting long sleeves, an internal tool pouch and an attached, labeled receptacle for asbestos waste. The bags are especially designed to contain sections of pipe for the purpose of removing a short length of damaged asbestos material without releasing fibers into the air.

(H) All terms beginning with "H."

1. Hazardous air pollutant--Any of the air pollutants listed in Table 1 of this rule.
2. High efficiency particulate air filter--A HEPA filter found in respirators and vacuum systems capable of filtering three-tenths (0.3) micron particles with at least ninety-nine and ninety-seven hundredths percent (99.97%) efficiency.
3. Homogeneous area--An area of surfacing material, thermal system insulation material or miscellaneous material that is the same in structure, quality, color and texture.

(I) All terms beginning with "I."

1. Inspector--An individual, AHERA certified as an inspector by Missouri Department of Natural Resources (MDNR), who collects and assimilates information used to determine whether asbestos-containing material is present in a building or other air contaminant sources.

(J) All terms beginning with "J."

(K) All terms beginning with "K."

(L) All terms beginning with "L."

(M) All terms beginning with "M."

1. Management planner--An individual, under AHERA, who devises and writes plans for asbestos abatement, and has received appropriate required training.

(N) All terms beginning with "N."

1. NIOSH—National Institute of Occupational Safety and Health.

(O) All terms beginning with "O."

1. Outside air--Air outside the containment area.

2. Owner or operator of a demolition or renovation activity —Any person who owns, leases, operates, controls or supervises the building being demolished or renovated. Any person who owns, leases, operates, controls or supervises the demolition, renovation operation, or both.

(P) All terms beginning with "P."

1. Person--Any individual, partnership, association, corporation including the parent company of a wholly-owned subsidiary, municipality, subdivision or agency of the state, trust, estate or other legal entity either public or private. This shall include any legal successor, employee or agent of the previous entities.

2. Pollutant—An air contaminant listed in 10 CSR 10-6.020(3)(A), Table 1 without regard to levels of emission or air quality impact.

(Q) All terms beginning with "Q."

(R) All terms beginning with "R."

1. Refuse—The garbage, rubbish, trade wastes, leaves, salvageable material, agricultural wastes or other wastes; anything thrown away as worthless.

2. Regulated air pollutant--All air pollutants or precursors for which any standard has been promulgated.

3. Regulated asbestos-containing material (RACM)--friable asbestos material; category I nonfriable asbestos-containing material (ACM) that has become friable; category I nonfriable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or 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 renovation operations regulated by this rule.

4. Regulated pollutant--Any regulated air pollutant except carbon monoxide and pollutants regulated exclusively under section 112(r) or Title VI of the Act.

5. Repair--The restoration of asbestos material that has been damaged. Repair consists of the application of rewettable glass cloth, canvas, cement or other suitable material. It may also involve filling damaged areas with nonasbestos substitutes and reencapsulating or painting previously encapsulated materials.

(S) All terms beginning with "S."

1. Salvage operation--Any business, trade, industry or other activity conducted in whole or in part for the purpose of salvaging or reclaiming any product or material.

2. Sealing material--A liquid substance that does not contain asbestos which is used to cover a surface that has previously been coated with a friable asbestos-containing material for the intended purpose of preventing any asbestos fibers remaining on the surface from being disbursed into the air. This substance shall be distinguishable from the surface to which it is applied.

3. Shower room--A room between the clean room and the equipment room in the worker decontamination enclosure. This room shall be equipped with running hot and cold water that is suitably arranged for complete showering during decontamination.
4. Shutdown--The cessation of operation of any air pollution control equipment or process equipment, excepting the routine phasing out of process equipment.
5. Staff director—Director, Environmental Protection Division of the Saint Louis County Department of Health and/or Manager, Air Pollution Control Program of the Saint Louis County Department of Health.

6. Structural item—Roofs, walls, ceilings, floors, structural supports, pipes, ducts, fittings and fixtures that have been installed as an integral part of any structure.

(T) All terms beginning with "T."

1. Third-party air monitoring—Air monitoring conducted in accordance with Chapter 643, RSMo and 10 CSR 10-6.250 by a person who is not under the direct control of the person carrying out the asbestos abatement project and who has been selected by the owner or operator of the property on which the project is conducted.

(U) All terms beginning with "U."

(V) All terms beginning with "V."

(W) All terms beginning with "W."

1. Waste generator—The business entity that is directly responsible for the supervision of activities that result in the accumulation of friable asbestos-containing waste materials.
2. Wet cleaning—The process of using water or other non-hazardous liquid and a wet brush, mop, cloth, sponge or similar wet cleaning device to completely remove any residue of asbestos-containing materials from surfaces on which they may be located. This definition does not include the use of a wet vacuum cleaner.
3. Wetting agent—Any chemical that is added to water to decrease its surface tension and allow it to spread more easily over or penetrate into friable asbestos-containing materials.
4. Work area – A specific room or physically isolated portion of a room, other than the space enclosed within a glove bag, in which a friable asbestos-containing material is required to be handled in accordance with St. Louis County Air Pollution Control Code Section 612.530. The area is designated as a work area from the time that the room, or portion of it, is secured and access restrictions are in place. The area remains designated as a work area until the time that it has been cleaned in accordance with any requirements applicable to these operations.

(X) All terms beginning with "X."

(Y) All terms beginning with "Y."

(Z) All terms beginning with "Z."

Table 1—Hazardous Air Pollutants

CAS # 1332214      Asbestos

