

ARIZONA DEPARTMENT OF TRANSPORTATION POLICIES AND PROCEDURES

SAF-6.01 ASBESTOS MANAGEMENT POLICY

Page 1 of 59

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Responsible Office: Safety & Health, (602) 712-7744

Office of Environmental Services, (602) 712-7769

1.01 PURPOSE

To set forth uniform policies and procedures for the identification, disturbance, repair, maintenance, renovation and demolition of any building or structure which may contain asbestos and that is owned, leased, operated, controlled or supervised by ADOT.

1.02 SCOPE

- A. This policy applies to all ADOT employees, consultants, contractors and subcontractors involved in any asbestos identification, disturbance, maintenance, repair, renovation and demolition activities.
- B. The subject headings contained in this policy are as follows:

1.01	PURPOSE
1.02	SCOPE
1.03	AUTHORITY
1.04	BACKGROUND
1.05	DEFINITIONS
1.06	POLICY
1.07	RESPONSIBLE ASBESTOS MANAGEMENT GROUPS
1.08	PROCEDURES FOR ASBESTOS INSPECTIONS
1.09	PROCEDURES FOR DEMOLITION ACTIVITIES
1.10	PROCEDURES FOR RENOVATION, REPAIR AND MAINTENANCE
	ACTIVITIES INVOLVING NO ASBESTOS REMOVAL
1.11	PROCEDURES FOR ASBESTOS ABATEMENT ACTIVITIES
1.12	WORK ACTIVITIES INVOLVING THE ABATEMENT OF ASBESTOS
	CONTAINING MATERIALS NOT SUBJECT TO NESHAP REGULATIONS
1.13	CLASS IV ASBESTOS WORK
1.14	CORRESPONDING POLICIES

1.03 AUTHORITY

The Environmental Protection Administration's standards Title 40, Code of Federal Regulations (CFR) Part 61, Subpart M and Part 763, Subpart E, and the Occupational Safety and Health Administration's standards Title 29, CFR Part 1926.1101 and Part 1910.1001 provide the authority for this Policy.

1.04 BACKGROUND

A. The term "asbestos" describes six naturally occurring fibrous minerals found in certain types of rock formations. Of that general group, the minerals chrysotile, amosite and crocidolite have been most commonly used in building products. When mined and processed, asbestos is typically separated into very thin fibers. Asbestos fibers are commonly mixed during processing with a material which binds them together so that they can be used in many different products. Asbestos became a popular commercial product because it is strong,

Effective: August 30, 2010 Transmittal: 2010-August

Supersedes: SAF-6.01 (2/23/2004) Page 2 of 59

> won't burn, resists corrosion and insulates well. Building materials containing asbestos include, but are not limited to, thermal insulation, fireproofing, floor coverings, ceiling tile, cement pipe, wall components and acoustical and decorative treatment for ceilings and walls.

- B. Unfortunately, asbestos fibers can cause serious health problems. When these fibers are present in the air, they are normally invisible to the naked eye. If inhaled, they can cause diseases which don't necessarily manifest for 15 to 40 years. These disease effects disrupt normal functioning of the lungs and can cause asbestosis (a fibrous scarring of the lungs), lung cancer and mesothelioma (a cancer of the lining of the chest or abdominal cavity).
- C. It is often possible to "suspect" that a product or material contains asbestos by visual determination. Actual determinations of the presence or absence of asbestos can only be made by instrumental analysis. Until a product is tested, it must be assumed that the product contains asbestos. ADOT is aware that asbestos can be a health hazard, but with proper management and work practices the hazard can be minimized.

1.05 **DEFINITIONS**

Abatement The removal of Asbestos-containing material (ACM).

ADOT Facility Any building or structure owned, leased, operated, controlled or supervised by ADOT including, but not

limited to, all offices buildings, shops, warehouses, storage units, individual dwelling units, mobile homes, culverts, pipes, bridges and highway structures, and any

active or inactive waste disposal site.

The person required by EPA Consent Decree to maintain **ADOT Asbestos Program** ADOT records of Asbestos NESHAPS demolition and Coordinator

renovation notifications. (Currently R/W Demolition

Coordinator)

ADOT National Emissions Standard

for Hazardous Air Pollutants (NESHAP) Monitoring Personnel

Persons within ADOT with Asbestos NESHAPS Program Personnel expertise. (Currently, the **ADOT** Asbestos Program Coordinator, R/W Demolition Coordinator, ITD Hazardous Materials Coordinator, ITD Hazardous Materials Planner II, ITD Safety and Health Industrial Hygienist and TSG Facilities Asbestos and

Lead Program Manager).

AHERA The Asbestos Hazard Emergency Response Act

> (AHERA). AHERA regulations are 40 CFR 763, Subpart E and are enforced by the U.S. Environmental Protection

Agency.

An AHERA accredited building inspector is one who has AHERA accredited building inspector

received and maintains this accreditation through an EPA accredited training facility, for example, The Asbestos

Institute.

AHERA accredited contractor/

supervisor

An AHERA accredited contractor/supervisor is an individual who has received and maintains this accreditation through an EPA accredited training facility,

for example, The Asbestos Institute.

AHERA accredited project designer An AHERA accredited project designer is a individual

who has received and maintains this accreditation

Effective: August 30, 2010 Transmittal: 2010-August

Supersedes: SAF-6.01 (2/23/2004) Page 3 of 59

through an EPA accredited training facility, for example, The Asbestos Institute.

NOTE: All contracted Assessment/Oversight Contractors, Asbestos Abatement Contractors, and AHERA Inspectors must hold current AHERA Contractor/Supervisor accreditations.

NOTE: Referring to the Asbestos Institute should not be considered an endorsement.

Chrysotile, amosite, crocidolite, tremolite asbestos, anthophyllite asbestos, and actinolite asbestos, and any of these minerals that has been chemically treated and/or altered fibrous forms of amphibole asbestos found in

products such as vermiculite.

Asbestos-containing material (ACM) Any materials containing more than 1% asbestos.

Asbestos-containing products such as packing, gaskets, resilient floor covering, and asphalt roofing products containing more than 1% asbestos. Category I non-

friable ACM pertains to NESHAP regulations.

Any materials, excluding Category I non-friable ACM such as cement (transite) pipe, panels, siding and other similar materials containing more than 1% percent asbestos. Category II non-friable ACM pertains to

NESHAP regulations.

OSHA regulated activities involving the removal of thermal system insulation (TSI) and surfacing ACM and presumed-asbestos containing material (PACM). In order to perform Class I asbestos work, certification is required at the worker and/or contractor/supervisor level.

OSHA regulated activities involving the removal of ACM, 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. Eight (8) hours of training is required for all employees who perform Class II asbestos work or certification at the Class I level.

OSHA regulated repair and maintenance operations, where ACM, including TSI and surfacing ACM and PACM, is likely to be disturbed. Class III asbestos work is limited to the disturbance of ACM and PACM materials not to exceed one glove bag or waste bag 60 inches in length and width. Sixteen (16) hours of training at a minimum is required for all employees who perform Class III asbestos work.

OSHA regulated maintenance and custodial activities during which employees contact ACM and PACM and activities to clean up waste and debris containing ACM and PACM. This includes dusting surfaces, vacuuming

Asbestos

Category I non-friable ACM

Category II non-friable ACM

Class I asbestos work

Class II asbestos work

Class III asbestos work

Class IV asbestos work

Effective: August 30, 2010 Transmittal: 2010-August

Supersedes: SAF-6.01 (2/23/2004) Page 4 of 59

carpets, mopping floors, and cleaning up ACM or PACM materials from thermal system insulation or surfacing ACM/PACM. Two (2) hours of training is required for all employees who perform Class IV asbestos work.

Contractor Firm or individual hired by ADOT pursuant to a state

procurement contract to perform asbestos program activities under the direct or indirect supervision of ADOT

staff.

Demolition The wrecking, taking out, or alteration of any load-

bearing structural member of a facility together with any related handling operations or the intentional burning of any facility. Demolition activity includes relocating a modular building or moving a building or other structure

off a foundation.

Disturbance Are activities that disrupt the matrix of ACM or PACM,

crumble or pulverize ACM or PACM, or generate visible

debris from ACM or PACM.

Facility Means any institutional, commercial, public, industrial, or

residential structure, installation, or building (including any structure, installation, and any active or inactive waste disposal site). Any structure, installation or building that was previously subject to this Asbestos NESHAP is not excluded regardless of its current use or

function.

Facility component Any part of a facility including equipment.

Friable ACM Any materials containing more than 1% asbestos that

when dry can be crumbled, pulverized, or reduced to powder by hand pressure. From the NESHAP regulations, friable ACM includes previously non-friable

materials which have been made friable.

Homogeneous area An area of surfacing material, thermal system insulation

material, or miscellaneous material that is uniform in

color and texture.

Industrial Hygiene Science devoted to the anticipation, recognition,

evaluation, and control of those environmental factors or stresses arising in or from the workplace which may cause sickness, impaired health and well-being, or significant discomfort among workers or among citizens

of the community.

Industrial Hygienist A person with a college or university degree or degrees

in engineering, chemistry, physics, medicine, or related physical and biological sciences who, by virtue of special studies, training and experience, has acquired

competence in industrial hygiene.

Intermodal Transportation Division

(ITD) Asbestos NESHAPS

Coordinator(s)

A person required by EPA Consent Decree to review all transportation system development related asbestos NESHAPS demolition and renovation notices prior to

Effective: August 30, 2010 Transmittal: 2010-August

Supersedes: SAF-6.01 (2/23/2004) Page 5 of 59

submission by demolition or renovation contractor to appropriate regulator. (Currently EPG Hazardous Materials Coordinator and Hazardous Materials Planner II).

NESHAP

National Emissions Standard for Hazardous Air Pollutants; Asbestos NESHAP regulations are 40 CFR 61, Subpart M and are enforced by the U.S. Environmental Protection Agency, the Arizona Department of Environmental Quality (DEQ), the Maricopa County DEQ, the Pinal County Air Quality Control District (PCAQD), the Pima County DEQ, and the Navajo EPA.

Non-friable ACM

Is any material containing more than 1% asbestos that when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

Phase Contrast Microscopy (PCM)

Is a technique using a light microscope equipped to provide enhanced contrast between the fibers and the background. Samples for PCM are collected on a mixed cellulose ester membrane filter with a 0.8 micrometer (micron) pore size. Filters are then cleared with an acetone vapor so that trapped particulate material can be viewed through the microscope at a magnification of approximately 400X. This method does not distinguish between fiber types and only counts those fibers 5 microns or longer, and at least 3 times as long as they are wide (3:1 aspect ratio). Because of these limitations, fiber counts by PCM typically provide only an index of the total concentration of airborne asbestos in the environment monitored. As the proportion of the airborne fibers, which are less than 0.25 micrometers (micron) in diameter increases, PCM becomes a less reliable analytical tool.

Polarized Light Microscopy (PLM)

PLM is the most commonly accepted method for analyzing bulk materials for the presence of asbestos. PLM is based on optical mineralogy using a light microscope equipped with polarizing filters. Identification of asbestos fiber bundles is based on the determination of optical properties displayed when the sample is treated with various dispersion staining liquids (refraction index liquids). In addition, identification can be substantiated by morphology of the fiber and the effect of polarized light on the fiber.

Presumed ACM (PACM)

Under OSHA regulations, all building materials with the exception of glass, wood or metal, are presumed to contain ACM unless proven otherwise. Typically PACM is TSI and surfacing material constructed no later than 1980. Demonstration that PACM does not contain more than 1% asbestos may be 1) having a complete inspection conducted pursuant to the requirements of 40 CFR Part 763, subpart E, or by 2) performing tests of the material containing PACM to demonstrate that no ACM is present in the material. Such tests shall include analysis

Effective: August 30, 2010 Transmittal: 2010-August

Supersedes: SAF-6.01 (2/23/2004) Page 6 of 59

of bulk samples collected in the manner described in 40 CFR 763.86.

Regulated ACM (RACM)

Under NESHAP regulations, RACM is 1) friable asbestos material, 2) Category I non-friable ACM that has become friable, 3) Category II non-friable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or 4) Category II non-friable 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 subpart.

NOTE: EPA has also ruled that certain materials or activities produce RACM aside from friability; e.g. mechanical alteration, sanding, grinding, grading, abrading or pulverization.

The NESHAP requirements apply to each owner or operator of an abatement activity if the combined amount of RACM is:

- A. At least 260 linear feet on pipes;
- B. At least 160 square feet on other facility components; or
- C. At least 35 cubic feet of facility components where the length or area could not be measured previously.

At a NESHAP facility, removal of RACM below the EPA threshold amounts, and any amounts of Category I and Category II non-friable ACM is not subject to the asbestos NESHAP standards. However, NESHAP requires a thorough inspection before any work to establish whether the threshold amounts are present.

NOTE: Even though demolition or renovation work may not be subjected to the asbestos NESHAP standards, <u>ALL</u> asbestos related work activities are regulated by OSHA.

An area established by the contractor to demarcate areas where Class I, II, and III asbestos work is conducted, and any adjoining area where debris and waste from such asbestos work accumulate; and a work area within which airborne concentrations of asbestos, exceed or there is a reasonable possibility they may exceed the OSHA permissible exposure limit (PEL) of 0.1 f/cc.

All operations where ACM, RACM and/or PACM are taken out or stripped from structures or substrates, including demolition operations.

Altering a facility or one or more facility components in any way, including the stripping or removal of ACM and/or RACM from a facility component.

Regulated area

Removal

Renovation

Supersedes: SAF-6.01 (2/23/2004) Page 7 of 59

NOTE: Operations in which load-supporting structural members are wrecked or taken out are demolitions.

Repair

Is overhauling, rebuilding, reconstruction, or reconditioning of structures or substrates, including encapsulation or other repair of ACM or PACM attached to structures or substrates which returns damaged material to an intact condition.

Requesting Party Project Manager

The ADOT employee who initiates departmental actions which cause implementation of this policy to ensure compliance with the provisions within.

Responsible Asbestos Management Groups and Staff

Those ADOT program groups, administrative organizations or staff with varying degrees of ADOT asbestos program compliance responsibility and supervision as identified by this policy.

Surfacing material

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

Surfacing ACM

Surfacing material, which contains more than 1% asbestos.

Thermal system insulation (TSI)

Materials applied to pipes, fittings, boilers, breeching, tanks, ducts or other structural and/or mechanical components to prevent heat loss or gain.

Thermal system insulation ACM

Thermal system insulation materials, which contains more than 1% asbestos.

Transmission Electron Microscopy

TEM is a technique which focuses an electron beam onto a thin sample. As the beam is transmitted through certain areas of the sample, an image resulting from varying densities of materials within the sample is projected onto a fluorescent screen. TEM is currently considered the best available analytical method for identifying asbestos fibers collected in air samples. TEM can be used to identify the smallest fibers. Only AHERA (for asbestos abatement projects in schools) requires TEM analysis of samples for final air clearances.

TRIRIGA

TRIRIGA is a computerized maintenance management system used to support the Facilities Management and Support Group (FM&SG) maintenance program. The purpose of TRIRIGA is to provide a scheduling tool and data repository containing preprogrammed maintenance job plans and important historical data for each ADOT facility maintained by FM&SG.

Working day

Monday through Friday and includes holidays that fall on any of the days Monday through Friday.

Supersedes: SAF-6.01 (2/23/2004) Page 8 of 59

1.06 POLICY

A. No facility owned, leased, operated, controlled or supervised by ADOT shall be remodeled, modified, repaired, altered or changed in any way, including the installation or removal of equipment or devices that disturbs any portion of the building or building systems, nor shall buildings or structures, which will require modification, be added to the ADOT facilities inventory without the written authorization of the appropriate responsible individual as defined in Section 1.07.

- B. No facility owned by ADOT may be demolished without the written authorization of the appropriate responsible individual as defined in Section 1.07.
- C. Every ADOT facility <u>must</u> be inspected to determine if ACM is present <u>prior</u> to the disturbance of any surface by demolition, maintenance, renovation, or abatement activities. If ACM is identified, it must be properly abated prior to the planned disturbance.
- D. All materials installed during the construction of any new facility, or during any renovation, repair and maintenance operations shall be asbestos free.
- E. All costs associated with regulatory compliance will be the responsibility of the requesting party within ADOT unless the inspection, repair and maintenance, renovation, abatement, disposal and/or demolition are part of a project for which capital improvement funds have been appropriated.
- F. An appropriate number of employees from Right-of-Way Property Management, Office of Environmental Services Environmental Planning Group, ITD Districts, Facilities Management and Support Group, Safety and Health Group shall receive and maintain AHERA Contractor/Supervisor certification so as to ensure compliance with all NESHAP and OSHA regulations and with the policies and procedures contained herein.
- G. Facilities Management and Support Group, Right-of-Way Property Management and Environmental Planning Group shall send quarterly reports listing the expected or planned up-coming demolition, renovation, repair and maintenance activities to the District Maintenance Superintendents, Phoenix Construction District Superintendent and the ADOT designated EPA/NESHAP primary and backup contacts so as to keep them apprised of all expected and up-coming demolition and asbestos abatement activities for monitoring of compliance purposes.
- H. Violations of this policy may result in disciplinary action up to and including dismissal.

1.07 RESPONSIBLE ASBESTOS MANAGEMENT GROUPS AND STAFF

- A. The ADOT Facilities Management and Support Group Manager or Designee is responsible for the management and monitoring of asbestos and asbestos related issues associated with all buildings that are ADOT owned, leased, operated, controlled or supervised by ADOT for business purposes.
- B. The ADOT Right-Of-Way Property Management Section Manager, Demolition Coordinator and/or Environmental Liaison position is responsible for the management and monitoring of asbestos and asbestos-related issues associated with buildings acquired as part of ADOT's right-of-way acquisitions: otherwise known as ADOT Asbestos Program Coordinator.
- C. The ADOT ITD Office of Environmental Services (OES) Environmental Planning Group Hazardous Material Coordinator and Hazardous Materials Planner II are responsible for the management and monitoring of asbestos and asbestos related issues associated with all ADOT bridges and highways structures on highway development and construction projects.

Effective: August 30, 2010 Transmittal: 2010-August

Supersedes: SAF-6.01 (2/23/2004) Page 9 of 59

D. The District Maintenance Superintendents, the Phoenix Construction Superintendent, and ADOT designated EPA/NESHAP primary and backup contacts are responsible for monitoring of compliance with asbestos NESHAP regulations on all ADOT asbestos abatement, demolition, and renovation projects for both highway development and non-development- as needs and circumstances require.

- E. The ADOT Safety and Health Group, (S&HG)in coordination with other relevant ADOT organizations, is responsible for facility maintenance work orders and, in coordination with OES, for the writing the Asbestos Management Policy. S&HG is responsible for providing consultation on safety and health issues pertaining to asbestos work activities and for providing Class IV Asbestos Awareness training. The S&HG is also responsible for providing to ADOT Facilities Management and Support Group (FM&SG), those asbestos abatement services required of Assessment/Oversight Contractors. S&HG is also responsible for scheduling annual contractor/supervisor refresher training.
- F. The Assessment/Oversight Contractors are responsible for providing asbestos management and consulting services, for assessing and characterizing the ACM, for developing primary and alternative recommendations for remediation, providing oversight on NESHAP-regulated abatement projects, coordinating project activities and ensuring project compliance with contract provisions and with all applicable Federal, State, County, tribal and local rules and regulations on ADOT projects. All Assessment /Oversight Contractors must hold current AHERA contractor/supervisor and AHERA building inspector certifications.
- G. Assessment/Oversight Contractors must be on the ADOA (or ADOT, if appropriate) Asbestos Assessment or Oversight Contract list, as appropriate.

1.08 PROCEDURES FOR ASBESTOS INSPECTIONS

Responsibility

Action

Requesting Party Project Manager

 For a facility owned, operated, and maintained by ADOT FM&SG, the requesting party project manager shall generate a work order by calling the FM&SG Call Center at (602) 712-7888. Work Requests can also be made through e-mail by addressing the message to "Facilities Work Order Desk". An Asbestos Clearance Request Form (ACRF) does not need to be completed for asbestos inspection request.

For a facility owned by ADOT situated within the roadway prism, and has been identified for demolition or renovation as a result of highway construction, the following process for asbestos inspections shall be followed:

a. The ADOT District representative, who maintains a current asbestos program accreditation, shall provide a draft asbestos notification at least 15 working days prior to demolition/renovation activity start date, to ITD Asbestos NESHAPS coordinator. The ITD Asbestos NESHAPS coordinator shallreview, comment, and approve notification and communicate these results to the ADOT District representative within five calendar days.

Effective: August 30, 2010 Transmittal: 2010-August

Supersedes: SAF-6.01 (2/23/2004) Page 10 of 59

Responsibility

Action

- The District representative shall ensure the project construction contractor with supervisory responsibility provides the notice to the appropriate regulator within 10 working days of start date.
- c. The ITD Asbestos NESHAPS Coordinator will provide a copy of the notification to the ADOT Asbestos Coordinator for records retention.
- 2. The form (ACRF) shall include the following.
 - a. Where appropriate, the project number, parcel number, any identifying signs, structure or building type, numbers or names, and address of the facility.
 - b. Photos, site plan and/or floor plan.
 - c. Description of what work is to be performed that necessitates the need for an inspection.
 - Desired or mandated completion date of the planned work.
 - e. Instructions on how to gain access to the facility.
- Responsible Asbestos Management Group
- 3. Checks files to determine if an asbestos inspection has been completed and if it is current. If an inspection has not been performed or the existing inspection is out of date, arranges for an inspection or recertification of existing inspection in accordance with all federal, State, County, tribal, OSHA regulations, and State procurement rules and contracts. See the "Asbestos Identification Requirements" flowchart in Appendix C for asbestos inspection requirements.

NOTE: Maricopa County Air Pollution Control regulations Rule 370, Section 301.8 Subpart M states that "Each owner or operator of a demolition activity or renovation activity involving a facility as defined in 40 CFR 61, Subpart M shall...inspect the facility within 12 months of commencement of demolition activity.

*(All facilities, regardless of the date of construction)." This means that if a building has not been re-certified within 12 months of a

Supersedes: SAF-6.01 (2/23/2004) Page 11 of 59

Responsibility

Responsible Asbestos Management Group (con't)

Assessment/Oversight Contractor

Action

demolition or renovation activity, a new asbestos inspection must be conducted or re-certified.

- 4. If an asbestos inspection needs to be performed, all asbestos inspections shall be performed by an AHERA accredited building inspector. Inspections shall include, at a minimum:
 - a. A review of available documents, blueprints, construction specifications, etc.
 - A visual inspection of the facility areas and elements to locate suspect ACM.
 - c. Identification of all homogeneous areas of friable suspected ACM and all homogeneous areas of non-friable suspected ACM.
 - d. Sampling of suspect ACM. The inspector shall use safe handling procedures and generally accepted laboratory practices for sample preparation and analysis. Sampling of suspect ACM shall be conducted as followed.
 - Surfacing Material. The inspector shall collect, in a statistically random manner that is representative of the homogeneous area, bulk samples from each homogeneous area of friable surfacing material that is not assumed to be ACM, and shall collect the samples as follows:
 - At least three bulk samples shall be collected from each homogeneous area that is 1.000 ft² or less.
 - At least five bulk samples shall be collected from each homogeneous area that is greater than 1,000 ft² but less than 5,000 ft².
 - c) At least seven bulk samples shall be collected from each homogeneous area that is greater than 5,000 ft².

2) Thermal system insulation

 a) Except as provided in paragraphs b) through c) of this section, an accredited inspector shall collect, in a randomly distributed manner, at

Effective: August 30, 2010 Transmittal: 2010-August

Supersedes: SAF-6.01 (2/23/2004) Page 12 of 59

Responsibility

Action

Assessment/Oversight Contractor (con't)

least three bulk samples from each homogeneous area of thermal system insulation that is not assumed to be ACM.

- b) Collect at least one bulk sample from each homogeneous area of patched thermal system insulation that is not assumed to be ACM if the patched section is less than 6 linear or square feet.
- c) In a manner sufficient to determine whether the material is ACM or not ACM, collect bulk samples from each insulated mechanical system that is not assumed to be ACM where cement or plaster is used on fittings such as tees, elbows, or valves.
- 3) Miscellaneous Material. In a manner sufficient to determine whether material is ACM or not ACM, an accredited inspector shall collect bulk samples from each homogeneous area of friable miscellaneous material that is not assumed to be ACM.
- 4) Non-friable suspected ACM. If any homogeneous area of non-friable suspected ACM is not assumed to be ACM, then an accredited inspector shall collect, in a manner sufficient to determine whether the material is ACM or not ACM, bulk samples from the homogeneous area of non-friable suspected ACM that is not assumed to be ACM.

NOTE: A homogeneous area shall be determined to contain ACM based on a finding that the results of at least one sample collected from that area shows that asbestos is present in an amount greater than 1%.

 e. Analysis of the samples shall be by an accredited NVLAP (National Voluntary Laboratory Accreditation Program) laboratory. Analysis of the samples collected shall be by, at a minimum, polarized light microscopy.

Effective: August 30, 2010 Transmittal: 2010-August

Supersedes: SAF-6.01 (2/23/2004) Page 13 of 59

Responsibility

Action

Assessment/Oversight Contractor (con't)

- f. If asbestos is present and proposed work may alter the ACM, schedule a meeting as required with ADOT responsible individual(s) to develop plans for asbestos management or abatement.
- g. Designation of appropriate response action.
- The Assessment/Oversight Contractor shall provide a report for each inspection conducted. The report shall include, at a minimum:
 - a. Details of the property surveyed including physical address and legal description.
 - Classification of ACM materials in categories of RACM (TSI, surfacing, Category I, and II) and non-friable Category I and II ACM materials.
 - Description, location and quantity of RACM and non-friable Category I and II ACM present at the facility surveyed.
 - d. Condition of ACM, if present.
 - e. Type and details of any recommended remediation or removal.
 - f. A site plan of the exact locations where samples were collected during the inspection and where asbestos-containing materials are located, a description of the manner used to determine sampling locations, the name and signature of each accredited inspector who collected the samples, and a copy of the AHERA Inspector certificate.
 - g. Name of accredited analytical laboratory, the laboratory's accreditations, methods of sample analysis, chain of custody records and laboratory reports.
- Responsible Asbestos Management Group:
- 6. Forwards a copy of the current inspection results to the requesting party. A copy of the inspection results shall also be forwarded to the appropriate District Maintenance Superintendent and/or Phoenix Construction Superintendent and ADOT designated EPA/ NESHAP primary and backup contact personnel for monitoring compliance during demolition and asbestos abatement projects regulated by NESHAP.

Supersedes: SAF-6.01 (2/23/2004) Page 14 of 59

1.09 PROCEDURES FOR DEMOLITION ACTIVITIES

Responsibility

Action

Requesting Party Project Manager

Completes the Asbestos Clearance Request

- For a facility owned, operated and maintained by ADOT Facilities Management Group, the requesting party project manager calls the FM&SG Call Center and (602) 712-4249 or sends an email to 'Facilities Work Order Desk'. This work order request will be processed through the ADOT TRIRIGA work order tracking data management system.
- For a facility owned by ADOT situated within the roadway prism, and has been identified for demolition or renovation as a result of highway construction, the following process shall be followed:
 - a. The ADOT District representative, who maintains a current asbestos program accreditation, shall provide a draft asbestos notification at least 15 working days prior to demolition/renovation activity start date, to ITD Asbestos NESHAPS coordinator. The ITD Asbestos NESHAPS coordinator shall review, comment, and approve asbestos communicate notification and this information to the ADOT District representative within five working days.
 - The District representative shall ensure the project construction contractor with supervisory responsibility provides the notice to the appropriate regulator within 10 working days of start date.
 - c. The ITD Asbestos NESHAPS Coordinator will provide a copy of the notification to the ADOT Asbestos Coordinator for records retention.
- 3. The clearance request shall include the following:
 - a. Where appropriate, the project number, parcel number, any identifying signs, building or structure function type, numbers or names, and address of the facility.
 - b. Description of recommendations for demolition.
 - c. The desired or mandatory completion date.

Effective: August 30, 2010 Transmittal: 2010-August

Supersedes: SAF-6.01 (2/23/2004) Page 15 of 59

Responsibility

Action

Requesting Party Project Manager (con't)

- d. Digital photos of the facility to be demolished.
- e. Instructions for gaining access to the facility.

For Facilities Management and Support Group (FM&SG) only:

4. Forwards an Authorization For Demolition of ADOT Building (see Exhibit B) form to the ADOT Fixed Assets Manager.

Fixed Assets Manager

- Determines the appropriate authorization process and authorizes demolition by ADOT or disposal through the Arizona Department of Administration Surplus Property.
- 6. If demolition is authorized, the Fixed Assets Manager will sign the authorization form and forward it to Facilities Management and Support Group.

For Facilities Management and Support Group only:

- Has the State Building Inspector conducted an inspection of the building to be demolished and prepared a written report and recommendation to the Facilities Management and Support Group Manager.
- If the demolition is warranted, the Building Inspector will sign the authorization form provided by the Fixed Assets Manager and forward it to the Facilities Management and Support Group Manager.
- If the demolition is unwarranted, the Facilities Management and Support Group shall notify the requesting party of the finding and determine if additional action is required.

Responsible Asbestos Management Group:

- 10. If demolition is warranted, the Responsible Asbestos Management Group shall check the files to determine if an asbestos inspection has been completed and if it is current. inspection has not been performed or the existing inspection is out of date as per county regulations and ADOT internal practices, e.g. greater than one year, the group arranges for an re-certification of inspection or existing inspection in accordance with all State and County DEQ and OSHA regulations, State procurement rules and contracts and as outlined in paragraph 1.08.
- 11. If asbestos is present in the facility, see Section 1.11.

Supersedes: SAF-6.01 (2/23/2004) Page 16 of 59

Responsibility

Responsible Asbestos Management Group (con't):

Action

- 12. If asbestos is not present, determines with the requesting party how demolition will be accomplished. If an outside contractor will be used, arranges for a demolition contractor in accordance with State procurement rules.
- 13. Obtains municipal, county, or tribal demolition permit(s) as necessary.
- 14. Ensures that the required NESHAP Notification for Renovation and Demolition Activities form (see Exhibit C) is submitted to the applicable EPA, State, County or Tribal NESHAP Coordinator. The "Asbestos NESHAP Notification Requirements Summary" in Appendix A and the "Asbestos EPA Notification Requirements" flowchart in Appendix C shall be utilized to ensure compliance with NESHAP regulatory requirements.
 - The demolition contractor must send a copy of the NESHAP notification form to ADOT for review prior to the start of any demolition work.
 - b. The NESHAP notification form sent to the applicable EPA, State, County or tribal NESHAP Coordinator must be properly filled out and must bear a postmark or dated receipt stamp of at least ten (10) working days prior to the planned demolition start date.
 - c. When the demolition start date will begin on a date earlier than the original start date, ADOT shall require the contractor to notify applicable EPA, State, County, or tribal NESHAP Coordinator and ADOT with a written notice of the new start date at least 10 working days before the new start date.
 - d. When the planned start date for demolition is revised to begin after the date contained in the notice, ADOT shall require the contractor to notify the applicable EPA, ADEQ, County, or tribal NESHAP Coordinator and ADOT by telephone and Fax as soon as possible and before the original start date and also notify the applicable EPA, ADEQ, County or tribal NESHAP Coordinator in writing by hand delivery or by certified mail, prior to the expiration of the original start date.

Supersedes: SAF-6.01 (2/23/2004) Page 17 of 59

Responsibility

Action

Responsible Asbestos Management Group (con't):

e. The notice must be submitted to the applicable EPA, State, County or tribal NESHAP Coordinator, even if no asbestos was found in the facility to be demolished.

NOTE: The demolition/abatement contractor is the person or entity that <u>MUST</u> file the 10-day notice prior to demolition or partial demolition.

15. Sends a signed and dated copy of the Authorization for Demolition of ADOT Building form, a copy of the NESHAP notification form, a copy of the asbestos inspection report and any other applicable information to the appropriate District Maintenance Superintendent, and/or Phoenix Construction Superintendent, and the ADOT designated EPA/NESHAP primary and backup contact personnel for the monitoring of compliance during demolition.

ADOT NESHAP Monitoring Personnel:

- 16. Review all forms and reports received from responsible ADOT Asbestos Management Group to ensure that there are no discrepancies with any NESHAP regulations.
- 17. Notify responsible ADOT Asbestos Management Group if any discrepancies are found.

Responsible Asbestos Management Group:

- 18. Ensures that the facility demolition activity begins on the start date as specified on the NESHAP Notification of Renovation and Demolition Activities form.
- 19. Oversees actual demolition and ensure compliance with all applicable State and County DEQ and OSHA regulatory requirements.

NOTE: If suspect material(s) were not accessible for testing and is therefore discovered during the demolition project, the demolition of those material(s) shall not proceed until the suspect material(s) is tested to confirm whether or not it is RACM.

NOTE: If the material(s) is RACM, and for safety reasons cannot be safely removed, the exposed RACM and any asbestos-contaminated debris must be treated as asbestos-containing waste material and be kept adequately wet at all times until disposed of.

Effective: August 30, 2010 Transmittal: 2010-August

Supersedes: SAF-6.01 (2/23/2004) Page 18 of 59

Responsibility

Action

Facilities Management and Support Group only:

- 20. Secures appropriate witness signatures of demolition authorization form attesting to the demolition of the facility or facility component.
- 21. Forwards copies of completed forms to the Fixed Assets Manager and Building Inspector.

Responsible Asbestos Management Group:

22. Retains a copy of all demolition records, including NESHAP Notification forms for at least 5 years.

1.10 PROCEDURES FOR RENOVATION, REPAIR AND MAINTENANCE ACTIVITIES INVOLVING NO ASBESTOS MATERIALS

Responsibility

Action

Request Party Project Manager:

 For a facility owned, operated and maintained by ADOT Facilities Management Group, the requesting party project manager calls the FM&SG Call Center and (602) 712-4249 or sends an email to 'Facilities Work Order Desk'. This work order request will be processed through the ADOT TRIRIGA work order tracking data management system.

NOTE: Work orders are required for maintenance and repair work when there will be a disturbance of materials other than glass, wood or metal.

NOTE: If buildings are in F&SG inventory then follow Section 1.09 Paragraph 1.

NOTE: If buildings are not in F&SG inventory, then contact the Right of Way Demolition Coordinator for additional instructions.

NOTE: If structures are not buildings then follow Section 1.09, Paragraph 2 and 3.

- The clearance request form shall include the following:
 - a. Where appropriate, the project number, parcel number, any identifying signs, building or structure function numbers or names, and address of the facility.
 - b. Site plan and/or floor plan.
 - c. Description of what planned work is to be performed that necessitates the need for an asbestos inspection or clearance.

Effective: August 30, 2010 Transmittal: 2010-August

Supersedes: SAF-6.01 (2/23/2004) Page 19 of 59

Responsibility

Request Party Project Manager

(con't):

Responsible Asbestos Management Group:

Action

- d. The desired or mandated completion date of the planned work.
- e. Instructions on how to gain access to the facility.
- 3. If the renovation, repair or maintenance request is not approved, the Responsible Asbestos Management Group shall notify the requesting party by e-mail or inter-office memorandum
- 4. If renovation, repair or maintenance request is approved, the Responsible Asbestos Management Group shall checks the files to determine if an asbestos inspection has been completed and if it is current. If an inspection has not been performed or the existing inspection is out of date, arranges for an inspection or re-certification of existing inspection in accordance with all State and County State and OSHA regulations, State Procurement rules and contracts and as outlined in paragraph 1.08.
- 5. If asbestos is present, see Section 1.11
- If asbestos is not present, works with the requesting party how the renovation, repair or maintenance work will be accomplished. If an outside contractor will be used, arranges for a contractor in accordance with State procurement rules.
 - a. All contracts shall require all materials installed in any renovation, repair and maintenance project to be asbestos free.
 - The contractor shall be required to supply Material Safety Data Sheets (MSDS) for all materials, with the exception of glass, wood and metal, installed during any renovation, repair and maintenance project.
- 7. Forwards a copy of the signed and dated Asbestos Clearance Request form indicating asbestos clearance has been given for the work planned to appropriate District Maintenance Superintendent, and/or Phoenix Construction Superintendent and the ADOT designated EPA/NESHAP primary and backup contacts. The clearance request form must be signed and dated by the responsible ADOT Asbestos Management Group authorized to give clearance.

Effective: August 30, 2010 Transmittal: 2010-August

Supersedes: SAF-6.01 (2/23/2004) Page 20 of 59

Responsibility

Action

Requesting Party Project Manager:

- 8. Oversees actual renovation, repair and maintenance to ensure compliance with all OSHA regulations and MSDSs.
- 9. Forwards all MSDSs received to appropriate ADOT Asbestos Management Group.

1.11 PROCEDURES FOR ASBESTOS ABATEMENT ACTIVITIES SUBJECT TO NESHAP REQUIREMENTS

Responsibility

Action

Responsible Asbestos Management Group:

1. If the review of asbestos inspection reports for requested demolition, renovation, repair or maintenance work shows asbestos is present and the requested work is approved, the responsible ADOT Asbestos Management Group who received the clearance request form shall arrange for an Assessment Contractor and asbestos abatement contractor for the planned work in accordance with all State procurement rules and State contracts. The checklists in Appendix B and the Flowcharts in Appendix C shall also be utilized to ensure compliance with EPA and OSHA regulations.

NOTE: If the planned work involves the removal of ACM not subject to NESHAP regulations see Section 1.12. See definitions of regulated ACM for abatement work regulated by NESHAP.

- a. Contracts shall only be awarded to abatement contractors that have had no enforcement action issued to them in the past two years by a regulating NESHAP program authority and/or any unresolved outstanding enforcement actions imposed upon them by a regulating enforcement authority as a means of ensuring ADOT's compliance with all State and County NESHAP regulations. Compliance and enforcement history for contractors, consultants, etc. can be found at: http://www.epa.gov/echo/
- Responsible Asbestos Management Group (con't)
- b. Contracts shall only be awarded to abatement contractors who are currently on State approved contractors list. Contractors must possess current Asbestos Contractor/Supervisor certifications and ensure their workers possess the appropriate current Class I, II, III and/or IV certifications depending upon the type of asbestos work activities that are required to be performed.

Supersedes: SAF-6.01 (2/23/2004) Page 21 of 59

Responsibility

Action

- c. Contracts shall require the abatement contractors to have an AHERA accredited Contractor/Supervisor on site for the duration of any asbestos abatement projects.
- d. Contracts shall require abatement contractors to have sufficient number of "inspection viewing windows" on all NESHAP regulated asbestos-abatement projects. Inspection viewing windows shall be required so as to allow ADOT personnel to view the regulated activities inside a regulated area from the outside which will in turn limit the need for ADOT personnel to enter a regulated area for monitoring purposes

NOTE: There should be a singularly compelling reason for ADOT personnel to enter containment.

NOTE: Maricopa County already requires inspection-viewing windows/devices on all NESHAP regulated asbestos abatement projects.

NOTE: ADOT's designated monitoring personnel including the Physical Plant Directors, Phoenix Construction Superintendent and District Maintenance Superintendents are required to enter into ADOT's Respiratory Protection Program as the need for them to enter a regulated area may become necessary.

- Works with the Assessment/Oversight Contractor and asbestos abatement contractor to coordinate their activities to establish a start date and completion date.
- 3. Provides the abatement contractor with specific written information concerning the project; this may be accomplished via a task order format. The information provided shall include:
 - The address of the site where services are required including a specific description of the site (e.g., boiler room, steam tunnel, residential structures, commercial building, etc.).
 - A drawing, map or similar illustration of the area buildings and any construction, records, e.g. floor plan, that might identify asbestos construction materials.
 - c. Other inspection reports.

Supersedes: SAF-6.01 (2/23/2004) Page 22 of 59

Responsibility

Responsible Asbestos Management Group (con't)

Action

- d. Purpose for the project: emergency removal/cleanup, renovation, demolition, and repair or maintenance.
- e. Other hazards, which require assessment by technically trained inspectors.
- f. Other abatement contractors whose work they may be monitoring, and items in other contracts that need to be coordinated with the assessment contractor's service activities.
- g. Coordination for moving of employees, inmates, etc.
- 4. Ensures that the required NESHAP Notification for Renovation and Demolition Activities form is submitted to applicable federal, State, County or tribal NESHAP Coordinator. The "Asbestos NESHAP Notification Requirements Summary" in Appendix A and the "Asbestos EPA Notification Requirements" flowchart in Appendix C shall be utilized to ensure compliance with NESHAP regulatory requirements.
 - a. The abatement contractor must send a copy of the NESHAP notification form to ADOT for review at least three weeks prior to the start of any asbestos abatement work.
 - b. The NESHAP notification form sent to the applicable federal, State, County, or tribal Asbestos Coordinator must be properly filled out and must bear a postmark or dated receipt stamp of at least ten (10) working days prior to the planned asbestos abatement start date. The start date includes any site preparation that would break up, dislodge or similarly disturb ACM.

NOTE: The abatement contractor is the person or entity that must send the 10-day notification to the applicable federal, State, County or tribal Asbestos Coordinator.

c. When the asbestos abatement activity will begin on a date earlier than the original start date, ADOT shall require the contractor to notify applicable federal, State, County or tribal NESHAP Coordinator and ADOT with a written notice of the new start date at least 10 working days before the new start date.

Effective: August 30, 2010 Transmittal: 2010-August

Supersedes: SAF-6.01 (2/23/2004) Page 23 of 59

Responsibility

Action

Responsible Asbestos Management Group (con't)

- d. When the planned start date for asbestos removal is revised to begin after the date contained in the notice, ADOT shall require each contractor to notify the applicable federal, State, County or tribal NESHAP Coordinator and ADOT by telephone and Fax as soon as possible and before the original start date and also notify ADEQ and/or appropriate NESHAP Coordinator in writing by hand delivery or by certified mail, prior to the expiration of the original start date.
- 5. Sends copy of Asbestos Clearance Request form as required, signed and dated by responsible ADOT Asbestos Abatement Management Group authorized to give clearance, the NESHAP notification form, the asbestos inspection report and any other applicable information to the appropriate District Maintenance Superintendent and/or Phoenix Construction Superintendent, and the ADOT designated EPA/NESHAP primary and backup contacts for monitoring of compliance during asbestos abatement.

Assessment/ Oversight Contractor:

- Oversees the actual asbestos abatement or repair and maintenance project to ensure compliance with all applicable NESHAP and OSHA regulatory requirements and State contract requirements.
- 7. The Assessment/Oversight Contractor responsibilities shall include:
 - a. Acts as ADOT's Agent throughout the asbestos abatement project. The Assessment/Oversight Contractor shall have the authority to stop the work if the asbestos abatement contractor is violating any laws or regulations. A written report shall be completed for any violation found on an abatement project. The report shall include:
 - The date and time the violation was observed.
 - The name of the abatement contractor and name of the contractor's AHERA accredited Contractor/Supervisor on the project.
 - 3) Description of the violation.

Effective: August 30, 2010 Transmittal: 2010-August

Supersedes: SAF-6.01 (2/23/2004) Page 24 of 59

Responsibility

Action

Assessment/ Oversight Contractor (con't):

- Any comments given by the abatement contractor's supervisor regarding reasons or causes for observed violation.
- 5) If possible, photos of the observed violation.
- 6) Date and time the violation was corrected.
- 7) Date and time the abatement project was allowed to resume.
- b. Complies with the requirements of the following regulations governing asbestos projects, removal, training, and disposal:
 - 1) NESHAP regulations: 40 CFR, Part 61, Subpart M.
 - 2) AHERA regulations: 40 CFR, Part 763, Subpart E.
 - 3) OSHA regulations: 29 CFR Part 1926.1101.
 - 4) Arizona Revised Statutes Title 49.
 - 5) Any other applicable Federal, State, County, tribal, or local rules and regulations.
- Retains all copies of the regulations stated above on each site when work is being accomplished.
- d. Ensures the abatement contractor notifies ADOT, ADEQ, designated county agencies, local, and tribal agencies and prior to the scheduled work being implemented.
- e. Meets with ADOT to review the work schedule and specify special needs. At that time, the assessment contractor shall identify a project manager who shall be on-site for the duration of the project with authority to act as the assessment contractor's authorized representative.
- f. Provides a safety plan with provisions including:
 - 1) First aid and emergency procedures and equipment.

Effective: August 30, 2010 Transmittal: 2010-August

Supersedes: SAF-6.01 (2/23/2004) Page 25 of 59

Responsibility

Action

Assessment/ Oversight Contractor (con't):

- Delineation of restricted work zones and barricading of openings in the work area.
 Any restrictions shall be coordinated in advance with ADOT.
- 3) Securing of equipment and materials against accident or tampering.
- 4) Air monitoring for detection of possible explosive or toxic vapors, or oxygen deficient atmosphere, as necessary.
- 5) Designated "No Smoking" areas.
- 6) Personal protective equipment requirements.
- Employee training in pertinent safety procedures including fire and explosion prevention, heat stress, confined spaces, and toxic vapors identification.
- 8) Sanitation, eating and drinking facilities.
- 9) Traffic control and safe vehicle operations.
- 10) Safety of State employees and visitors.
- 11) Dust control.
- 12) Housekeeping.
- 13) Site restoration.
- 14) Posting, if necessary, of any contaminated areas.
- g. Checks the asbestos abatement contractor's employee records to ensure all medical and training records and certifications are current. The assessment contractor shall have at the site a copy of the current written safety, respiratory, and hazardous communications program manuals.
- h. Meets and distributes all notes of project meetings.
- Ensures that all barriers, signs, and appropriate labels are posted as required pursuant to any or all regulations.

Supersedes: SAF-6.01 (2/23/2004) Page 26 of 59

Responsibility

Assessment/ Oversight Contractor (con't):

Action

- Inspects the enclosure or regulated area during construction, and approve, prior to completion and before asbestos abatement is implemented.
- k. Authorizes ADOT representatives access to the work site, materials, records, or any other relevant data specified herein, and, furthermore, the assessment contractor shall provide proper facilities for such access and inspection. Only authorized personnel will be allowed on the work site providing that they have obtained an IT infrastructure security clearance permit from ADOT.
- Conducts any and all site inspections, estimations of quantity of work, or recognitions of unusual or special situations, which may affect a timely and scheduled completion of the work.
- m. Performs work space air monitoring in accordance with NESHAP and OSHA standards and as follows:
 - For all Class I and II abatement projects, the Assessment Contractor shall conduct air monitoring for background or reference ambient asbestos fiber levels before the asbestos projects begin.
 - 2) Personnel monitoring, independent of that done by the asbestos Abatement Contractor, as a quality assurance measure. A minimum of one worker per day shall be monitored during actual removal of asbestos. Additional personnel monitoring shall be accomplished when warranted by the size of the project or by circumstances that may require excursion level monitoring.
 - Area monitoring outside the exhaust, decontamination and load-out areas when full enclosures are used, to demonstrate control of fiber release to the outside air.
 - 4) Monitoring to ensure that the negative air condition is maintained inside the enclosure when they are used.

Effective: August 30, 2010 Transmittal: 2010-August

Supersedes: SAF-6.01 (2/23/2004) Page 27 of 59

Responsibility

Action

Assessment/ Oversight Contractor (con't):

- 5) Final clearance monitoring for all enclosures when required by NESHAP and OSHA regulations. The number of samples shall be determined by the size of the area and the configuration of the space in each enclosure. However, a minimum set of five samples should be taken. Analysis shall be by Phase Contrast Microscopy (PCM) unless otherwise specifically stated. Air samples results shall be available on the job site within 24 hours (turnaround time), or less.
- 6) PCM final air clearance shall be to the AHERA standard of less than or equal to 0.01 f/cc for all samples before the enclosure can be removed and the area reoccupied. If TEM is used for final clearance, TEM final air clearance shall be less than or equal to 70 asbestos structures/mm² of filter surface area.
- n. Submits final report including all the monitoring results, copies of manifests, field notes, floor plan showing location of work, reports of abatement contractor violations and recommendations related to the project to the responsible ADOT Asbestos Management Group prior to final payment.

ADOT NESHAP Monitoring Personnel

8. Visit the work site at least once per work shift during the course of the asbestos abatement project to ensure the regulated area is in compliance with all NESHAP and OSHA regulatory requirements. The checklists in Appendix B and the Flowcharts in Appendix C shall be utilized for monitoring the contractor's compliance with EPA and OSHA regulatory requirements.

NOTE: The responsible ADOT Asbestos Management personnel may also be the ADOT NESHAP monitoring personnel.

- If the regulated area is not in compliance with NESHAP regulations, the ADOT Monitoring Personnel shall instruct the Assessment/ Oversight Contractor to stop work until the violation is rectified.
- 10. A written report shall be completed for any violation found on the project. In addition to

Effective: August 30, 2010 Transmittal: 2010-August

Supersedes: SAF-6.01 (2/23/2004) Page 28 of 59

Responsibility

Action

ADOT NESHAP Monitoring Personnel (con't)

identifying the Assessment Contractor (company name) and their authorized Project Manager for the project, the report shall include all information outlined in Paragraph 7(a) of this section. These reports, in addition to the Assessment/Oversight Contractor's reports shall be used to determine future contract awards.

Responsible Asbestos Management Group:

 Retains a copy of all NESHAP notifications, project reports, notes and records and waste shipment records in accordance with ADOT records retention policies.

1.12 WORK ACTIVITIES INVOLVING THE REMOVAL OF ASBESTOS-CONTAINING MATERIALS NOT SUBJECT TO NESHAP REGULATIONS

The following policy and procedures applies to all asbestos related work activities involving the abatement of ACM not subject to the NESHAP regulations. This includes all OSHA Class I, II, III, IV asbestos work activity. Contracting with an Assessment/Oversight Contractor for oversight shall be at the discretion of the responsible Asbestos Management Group. In the unlikely event that a contract is not awarded to an Assessment Contractor, oversight of project shall be the responsible Asbestos Management Group. The checklists in Appendix B and the Flowcharts in Appendix C shall be utilized for monitoring the contractor's compliance with EPA and OSHA regulatory requirements.

Responsibility

Action

Responsible Asbestos Management Group:

- 1. If the review of asbestos inspection reports for requested renovation, repair or maintenance work shows asbestos is present and the requested work is approved, the responsible ADOT Asbestos Management Group who received the clearance request form shall arrange with ADOT Asbestos Monitoring Personnel for an asbestos abatement contractor or an appropriate repair and maintenance contractor for the planned work in accordance with all State procurement rules.
 - a. Contracts shall only be awarded to contractors that have had no enforcement action issued to them in the past two years by a regulating DEQ authority and/or have no unresolved outstanding enforcement actions imposed upon them by a regulating DEQ authority. Compliance and enforcement history for contractors, consultants, etc. can be found at: http://www.epa.gov/echo/
 - Contracts shall only be awarded to contractors who possess current Asbestos Contractor / Supervisor certifications and whose workers possess the appropriate current Class I, II, III and/or IV certifications

Effective: August 30, 2010 Transmittal: 2010-August

Supersedes: SAF-6.01 (2/23/2004) Page 29 of 59

Responsibility

Responsible Asbestos Management Group (con't):

Action

depending upon type asbestos work activities that are required to be performed.

- c. Contracts shall require the contractors to have an AHERA accredited Contractor/ Supervisor on site the duration of the any asbestos abatement or repair and maintenance projects.
- d. Contracts shall require contractors to have sufficient number of "inspection viewing windows" on all NESHAP regulated asbestos abatement projects. Inspection viewing windows shall be required so as to allow ADOT personnel to view the regulated activities inside a regulated area from the outside which will in turn limit the need for ADOT personnel to enter a regulated area for monitoring purposes.
- 2. Works with the contractor to coordinate their activities to establish a start date and completion date.
- Provides the contractor with specific written information concerning the project and may be accomplished via a task order format. The information provided shall include:
 - The address of the site where services are required including a specific description of the site (e.g., boiler room, steam tunnel, residential structures, commercial building, etc.).
 - A drawing or map of the area buildings and any construction records, e.g. floor plan showing location of work which might identify asbestos construction materials.
 - c. Other inspection reports.
 - d. Purpose for the project: emergency removal/cleanup, renovation, demolition, and repair or maintenance.
 - e. Other hazards, which require assessment by technically trained inspectors.
 - f. Other abatement contractors whose work they may be monitoring, and items in other

contracts that need to be coordinated with the assessment contractor's service activities.

Effective: August 30, 2010 Transmittal: 2010-August

Supersedes: SAF-6.01 (2/23/2004) Page 30 of 59

Responsibility

Action

Responsible Asbestos Management Group (con't):

- g. Coordination for moving of employees, inmates, etc.
- 4. Oversees the renovation or repair and maintenance project to ensure compliance with all OSHA regulatory requirements and State contract requirements. The checklist and flowchart in Appendix B and C shall be used to ensure the contractor is in compliance with all OSHA regulatory requirements.
- 5. Checks the contractor's employee records to ensure all medical and training records and certifications are current.
- 6. The contractor's responsibilities shall include:
 - a. Provide a safety plan with provisions as outlined in Section 1.11.
 - b. Comply with all OSHA regulations governing Class I, II, and III asbestos projects, removal, training and disposal.
 - c. Retain a copy of the OSHA regulations 29 CFR Part 1926.1101 on the site when work is being accomplished.
 - d. On multi-employer worksites, the contractor shall inform other employers on the site of the nature of the contactor work with asbestos and/or PACM, of the existence of and requirements pertaining to regulated areas, and the measures taken to ensure that employees of other employers are not exposed to asbestos.
 - e. Ensure that all barriers, sign, and appropriate labels are posted as required by OSHA.
 - f. Inspect the enclosure or regulated area before the renovation, repair or maintenance project is implemented and at least once during each work shift. If there is a breach of the enclosure, the contractor shall repair the breach immediately.
 - g. Authorize ADOT compliance monitoring personnel access to the work site, materials, records, or any other relevant data specified herein, and, furthermore, the proper facilities for such access and inspection. Only

Contractor

Effective: August 30, 2010 Transmittal: 2010-August

Supersedes: SAF-6.01 (2/23/2004) Page 31 of 59

Responsibility

Contractor (con't)

Action

authorized personnel will be allowed project access provided that they have records of proper training and have obtained project clearance from ADOT.

- h. Conduct site inspections, estimations of quantity of work, or recognition of unusual or special situations which may affect a timely and scheduled completion of the work.
- Ensure through on-site supervision, that employees set up, use, and remove engineering controls, use work practices and protective clothing and equipment in compliance with all requirements.
- j. Ensure employees use the hygiene facilities and observe the decontamination procedures specified by OSHA.
- Ensure that through on-site inspection, engineering controls are functioning properly and employees are using proper work practices.
- I. Perform air monitoring in accordance with NESHAP and OSHA standards and as follows:
 - 1) For all Class I and II abatement projects, the contractor shall conduct air monitoring for background or reference ambient asbestos fiber levels before the asbestos projects begin.
 - 2) For Class I and II abatement projects, the contractor shall conduct daily monitoring that is representative of the exposure of each employee who is assigned to work within the regulated area who is performing Class I or II work, unless the employer has made a negative exposure assessment for the entire operation. Additional personnel monitoring shall be performed when warranted by the size of the project or by circumstances that may require excursion level monitoring.
 - Area monitoring outside the exhaust, decon and load-out areas when full enclosures are used, to demonstrate control of fiber release to the outside air.

Effective: August 30, 2010 Transmittal: 2010-August

Supersedes: SAF-6.01 (2/23/2004) Page 32 of 59

Responsibility

Action

Contractor (con't)

- 4) Monitoring to ensure that the negative air condition is maintained inside the enclosure when they are used.
- 5) On all operations other than Class I and II operations, the contractor shall conduct periodic monitoring of all work where exposures are expected to exceed a PEL, at intervals sufficient to document the validity of the exposure prediction.

Responsible Asbestos Management Group:

- Visit the work site at least once per work shift during the course of the asbestos abatement or repair and maintenance project to ensure the regulated area is in compliance with all OSHA regulations.
- If the regulated area is not in compliance with OSHA regulations, the responsible Asbestos Management Group shall stop work until the violation is rectified.
- A written report shall be completed for any violation found on the project. The report shall include:
 - The date and time the violation was observed.
 - b. The name of the abatement contractor and name of the contractor's AHERA accredited Contractor/Supervisor on the project.
 - c. Description of the violation.
 - Any comments given by the abatement contractor's supervisor regarding reasons or causes for observed violation.
 - e. If possible, photos of the observed violation.
 - f. Date and time the violation was corrected.
 - g. Date and time the abatement project was allowed to resume.

NOTE: These reports shall be used to determine future contract awards.

10. The responsible Asbestos Management Group, ADOT Industrial Hygienist or a qualified consultant shall perform final clearance monitoring for all Class I and II work as required

Effective: August 30, 2010 Transmittal: 2010-August

Supersedes: SAF-6.01 (2/23/2004) Page 33 of 59

Responsibility

Action

Responsible Asbestos Management

Group:

by OSHA before the enclosure can be removed and the area is reoccupied. The number of samples shall be determined by the size of the area and the configuration of the space in each enclosure. Analysis shall be by PCM unless otherwise specifically stated. Air samples results shall be available on the job site within 24 hours (turnaround time), or less. PCM final air clearance shall be to the AHERA standard of less than or equal to 0.01 f/cc per sample. If TEM is used for final clearance, TEM clearance shall be less than or equal to 70 asbestos structures/mm² of filter surface area.

1.13 **CLASS IV ASBESTOS WORK**

All Facilities Management and Support Group Building Maintenance Specialist and Supervisors and ADOT Information Technologies Technicians shall receive and maintain OSHA Class IV training and certification. Class IV asbestos work activities are OSHA regulated maintenance and custodial activities during which employees contact ACM and PACM. Class IV asbestos work also includes activities that involve cleaning up waste and debris containing ACM and PACM. This includes dusting surfaces, vacuuming carpets, mopping floors, cleaning up ACM or PACM materials from thermal system insulation or surfacing ACM/PACM. Workers may contact ACM or PACM when performing a wide variety of routine jobs that result in incidental disturbance such as removing a cover plate from an outlet or light switch, moving ceiling panels to gain access to areas above suspended ceilings, changing a light bulb in a light fixture that is attached to a ceiling containing ACM, taping a tear in TSI material where there will be no disturbance of the matrix and the removal and disposal of loose or broken floor tiles. Two (2) hours of training and certification is required for all employees who perform Class IV asbestos work.

1.14 **CORRESPONDING POLICIES**

FIN-9.06 Project Numbers-Project Number Assignment-Project Number Reference Report

MGT-9.02 Records Storage Procedure

MGT-9.03 Records Destruction Procedure

MGT-9.04 Records Management

MGT-9.09 Records Retention and Disposition Schedule

MGT-12.01 Improvements to Facilities

PER-5.05 Guidelines for Progressive Discipline

SAF-5.01 ADOT-Issued Personal Protective Equipment Usage

SAF-5.09 Respiratory Protection Program

Effective: August 30, 2010 Transmittal: 2010-August

Supersedes: SAF-6.01 (2/23/2004) Page 34 of 59

EXHIBIT A

This form can be found on ADOT's intranet at: http://adotnet/forms/indexalpha.asp



ARIZONA DEPARTMENT OF TRANSPORTATION ASBESTOS CLEARANCE REQUEST FORM

CLEARANCE TYPE REQUES		1-22-2				
ASBESTOS SURVE	(TOS ABATEMENT			
		☐ REPAIR	AND MAINTENANCE			
RENOVATION						
Desired Completion Date:						
Address of planned work:						
Project Number:	Parcel Nur	nber:	Building Num	ber: S	Site	
Name:		Building Function	Гуре:			
Structure ID:				MP:		
Description of requested work	10					
#					-	
,					_	
luctification:				1 %		
Justification:						
-						
Consist Instructions:						
Special Instructions:					1	
2 8998	2003		3636 a 114 11			
☐ Photos Attached	☐ Floor F	lan Attached	☐ Site Plan Atta	ached		
Derean requesting elegrance				Date:		
				Date	9	
Title: Org Name:			Dhone Num			
				ber		
Org Supervisor/Manager Sign				D.L.		
Approved By:				_ Date:	1	
Title:						
DECRONGINI E ACRECTO		NIDG.				
RESPONSIBLE ASBESTOS						
OFFICE OF ENVIRONMENTAL ENVIRONMENTAL PLANNING		OFFICE OF ENVIRO OES/ PLANS & PERM	MENTAL SERVICES ITS GROUP:			
Ed Green		Mike Traubert				
Hazardous Materials Coordinator	1	Manager, OES Plans and Permits Group				
(602) 712-7768 Email - Ed Green		ADOT Designated EPA/NESHAP Primary Contact (712) 712-7769				
Estati Est Circui	Email - Ed Green Email - MTraubert@azdot.gov					
ITD/ RIGHT-OF-WAY GROUP:						
Raul Torres Harry De Prins						
Manager of Property Management Se (602) 712-6568		Demolition Coordinator ADOT Designated EPA/NESHAP Backup Contact				
Email - RTorres@azdot.gov	i i	(602) 712-8734				
		Email - <u>Harry DePrins</u>				
TSG /FACILITIES MANAGEME						
Neal Sweeney Facilities Mgt. & Support Group	Scott Fall-Leaf, Central Reg Physical Plant Dir., Central l		nt Dir., South Region	Richard Mock Physical Plant Dir., North Region		
(602) 712-7955	(602) 712-8198	(520) 838-23		(928) 779-7572		
Email - Neal Sweeney	Email - Scott Fall-Leaf	Email - Pat		Email - Richard Mock		

Effective: August 30, 2010 Transmittal: 2010-August

Supersedes: SAF-6.01 (2/23/2004) Page 35 of 59

EXHIBIT B

The demolition authorization form can be found at: http://adotnet/forms/indexalpha.asp



ARIZONA DEPARTMENTOF TRANSPORTATION 206 S. 17th Avenue Phoenix, Arizona 85007

AUTHORIZATION FOR DEMOLITION OF ADOT BUILDING

DESCRIPTION OF BLDG:	BLDG NO:						
SITE NO/ADDRESS:							
The following have reviewed the request for demolition, including pictures or visual inspection of the structure, and hereby approve the demolition.							
ADOT - Property Control Officer	Date						
ADOT - Building Inspector	Date						
ADOT Facilities Management & Support Svcs Mgr	Date						
I hereby certify that the above referenced building has been demolished and that all applicable laws and regulations regarding asbestos inspection and abatement, NESHAP notification, etc. have been complied with prior to, and post demolition.							
ADOT Org Manager/Authorized Representative	Date						
Witness	Date						
When signed, return this form to Manager of Facilities M Mail Drop 100F. Copies of the form will be forwarded to and Fixed Assets Manager.							

PRIOR TO ESTABLISHING A DEMOLITION DATE you must contact ADOT's Safety office and obtain an Asbestos Clearance AND a copy of the NESHAP Notification.

Effective: August 30, 2010 Transmittal: 2010-August

Supersedes: SAF-6.01 (2/23/2004) Page 36 of 59

EXHIBIT C (page 1 of 2)

This form can be found on the intranet at: http://adotnet/forms/indexalpha.asp

NESHAP NOTIFICATION FOR RENOVATION AND DEMOLITION ACTIVITIES Arizona Department of Transportation Facilities - Revised 06/30/2002 National Emission Standards for Hazardous Air Pollutants (NESHAP)

THIS LINE FOR NESHAP REGULATORY U.S. Postal Service Postmark Date:			Commercial Delivery Service Delivery Date:			Other Hand Delivery		ACTS#:		
AGENCY USE Date:										
1. TYPE OF NOTIFICATION: () Origina	1. TYPE OF NOTIFICATION: () Onginal; () Revision 1; () Rev. 2; () Rev. 3; () Rev. 4; () Rev. 5; () Rev. 6; () Rev. 7; () Rev. 9; () Cancel; ()									
2a ADOT FACILITY INFORMATION:										
Purchase Order Number(s) Issued:										
Mailing Address:										
City/Community:							State:	tate: Zip:		
Contact Person				Telephone:			Fex:			
2b. ASBESTOS REMOVAL CONTRACT	TOR/OPER	ATOR:								
Address:										
City:							State:	Zipi		
Contact Person				Telephone:			Fax			
2c. DEMOLITION CONTRACTOR/OPER	RATOR:									
Address:										
City:			_				State:	Zip:		
Contact Person				Telephone			Fax:			
3. TYPE OF OPERATION: () Renovation, () Emergency Renovation, () Demolítion, () Ordered Demolítion, () Annual Non-scheduled Operations										
PROVIDE DATE OF THOROUGH IN AHERA (Asbestos Hazard Emergei	ISPECTIO ncy Respo	N OF FACILITY, OR AFFECTED PART, onse Act) CERTIFIED BUILDING INSPE	BY A	AN R			DATE:			
5. FACILITY DESCRIPTION (Attach	n site locati	on map for multiple structures at one stree	et add	dress or installation)						
Building Name:					Τ	Visible Signage:				
Street Address:				Identifying Features:						
City:				County: State:				Zip:		
City/County Renovation Permit#:				City/County Demolition Permit#:						
Building Size in Floor Area (Sq. Ft.)				Number of Floors Affected:			Age of Facility:			
HOUSING UNITS ACQUIRED BY AD	OT ARE N	IEHSAP FACILITIES		Present Use:			Prior Use:			
6. PROCEDURE, INCLUDING ANALYTICAL METHOD, EMPLOYED TO DETECT THE PRESENCE OF RACM AND CATEGORY I AND CATEGORY II NONFRIABLE ACM. () Polarized Light Microscopy [PLM]; () Point Counting () Assumed; () Other										
7. APPROXIMATE AMOUNT OF ASBES	STOS INC	TIDING		Amount of RACM to be		Amount of Nonfriable ACN				
NOTE: Update notice when amount of RACM changes at least 20% RACM = Regulated Asbestos-Containing Material as defined in				Removed or Generated To Be Removed						
40 CFR 61, Subpart M, Asbestos NES	SHAP §61.	141				CATI	CAT II	CATI	CAT II	
On Facility Components; Pipes (Linea	ar Feet)				_					
On Facility Components; Surface Area (Square Feet)										
Off Facility Components; Volume (Cub	bic Feet)									
8. DATES FOR ASBESTOS REMOVAL	(MM/DD/Y	Y) Start Date: Com	npleti	on Date*:			Days of Operati	ons: M T W TH F.S	SA SU	
9. DATES FOR DEMOLITION (MM/DDA	n Date*:	Hours of Operations.								
Mail/Deliver to:	Copy to AD	OT Procurement Office: Mail origina	al to	County NESHAP Agency lis	ist	ed below if regulated by that c	ounty.			
NESHAP Coordinator Contract Management NESHAP Afrizona DEQ/AQD 4 rizona DEQ/AQD 1739 W. Jackson Rm #100 Attn.Erin 1110 W Washington St. Phoenix, AZ 85001 1001 N (pa County APCD AP Coordinator In Fairbank (Central, #300) A, AZ 85004 (6 6708) Pima County DEQ NESHAP Coordinator Altn: Clem Fernandez 130 W. Congress St. Tucson, AZ 85701 520-740-3360			Pinal County AQCD NESHAP Coordinator Aftin Kale Walch P. O. Box 997 Florence, AZ 95232 520-968-6765				

Effective: August 30, 2010 Transmittal: 2010-August

Supersedes: SAF-6.01 (2/23/2004) Page 37 of 59

EXHIBIT C (page 2of 2)

,			
10. DESCRIPTION OF PLANNED DEMOLITION/RENOVATION WORK: () Thermal System Insulation () Popcorn Ceiling Texture () Duct/Seam Tape () Regulated Drywall System () Asbestos-Containing Roof Removal () Asbestos Cement Pipe () Asbestos Cement Siding ≥5590 sq ft w/rotating blade cut Other, please specify. REMOVAL METHODS: () Hand/Non-Mechanical Tools () Mechanical/Power Tools () Mastic Solvents () Blast Trac™ Machine			
Olher, please specify.			
11. DESCRIPTION OF WORK PRACTICES AND ENGINEERING CONTROLS TO BE USED TO PREVENT ASBESTOS EMISS () Adequately Wet () Full Containment () Critical Barriers () Negative Air Machines, No () Clove-Bag () Leak-Tight Wrap () 6-mil Bags () Mini-containment () Decontamination Unit with Hα/iCold Water and Soap for OSHA Class I work () Other, Describe			
12a ASBESTOS WASTE TRANSPORTER #1:			
Company Name:			
Address:			
City:	State:	Zip:	
Contact Person	Telephone:	Fax:	
12b. ASBESTOS WASTE TRANSPORTER #2:			
Company Name:			
Address:			
City:	State:	Zip:	
Contact Person:	Telephone:	Fax:	
13. ASBESTOS WASTE DISPOSAL SITE:			
Company Name:			
Address:			
City:	State:	Zip:	
Contact Person	Telephone:	Fax:	
14. FOR ORDERED DEMOLITIONS (40 CFR 61, §61.145(A)(3), ATTACH A COPY OF THE AGENCY'S ORDERED DEMOLITION LETTER			
Name:	Title:		
State or Local Government Agency.	Authority:		
Date of Order (MM/DD/YY): Date Demolition Ordered to Begin (MM/DD/YY):			
15. FOR EMERGENCY RENOVATIONS (40 CFR 61, §61.145(a) (4) (iv))			
Date and Hour of Emergency (MM/DD/YY - HH MM):			
Description of the Sudden, Unexpected Event:			
Explanation of how the event caused unsafe conditions or would cause equipment damage or an unreasonable financial burden:			
16. DESCRIPTION OF PROCEDURES TO BE FOLLOWED IN THE EVENT THAT UNEXPECTED RACM IS FOUND OR CATEGORY I OR CATEGORY II NONFRIABLE ACM BECOMES CRUMBLED, PULVERIZED, OR REDUCED TO POWDER: () Stop Work () Notify Owner () Revise Notification () Follow 40 CFR 61, §61.145(c) Procedures () AHERA Certified Contractor/Supervisor on-site			
17. I CERTIFY THAT AT LEAST ONE AHERA CERTIFIED CONTRACTOR/SUPERVISOR WILL SUPERVISE THE STRIPPING AND REMOVAL OF RACM DESCRIBED IN THIS NOTIFICATION AND THAT THE TRAINING CERTIFICATE WILL BE POSTED OR READILY AVAILABLE ON-SITE.			
(Print Name: Owner/Operator) (Title) (Signature of Owner/Operator)	(Date)		
18. CERTIFICATION OF INSPECTION BY AN AHERA CERTIFIED ASBESTOS BUILDING INSPECTOR (All areas of Arizona):			
(Print Name of Inspector) (Company Affiliation and/or phone #) (AHERA Certificate Number & Training Provider (Expiration Date)			
19. I CERTIFY THAT THE ABOVE INFORMATION IS CORRECT: Company Name:	Rev. Date		
(Print Name: Owner/Operator) (Title) (Signature of Owner/Operator)	(Date)		

References: Title 40, Code of Federal Regulations, Part 61, Subpart M, Asbestos NESHAP §61.145(b): Arizona Revised Statutes: Title 49 §§49-421 &471 et. seq.: and Arizona Administrative Code: Title 18, Chapter 2, Air Pollution Control, Article II. §R18-2-1101. For more information, contact the Asbestos NESHAP Coordinator in Arizona at (800) 234-5677 x2333. Revised: 06/30/2002. Page 2 of 2

Effective: August 30, 2010 Transmittal: 2010-August

Supersedes: SAF-6.01 (2/23/2004) Page 38 of 59

APPENDIX A

This summary can be found on ADOT's intranet at: http://adotnet/forms/indexalpha.asp

ASBESTOS NESHAP NOTIFICATION REQUIREMENTS SUMMARY

As per Title 40 Code of Federal Regulations Part 61, Subpart M, Asbestos NESHAP Section 61.145(b)(4), the notification form will not be considered complete without this information. The following information is required to be included on notifications submitted, prior to the start of the notified renovation and/or demolition activity.

NESHAP NOTIFICATION FOR RENOVATION AND DEMOLITION ACTIVTITES Arizona Department of Transportation Facilities

Line (1)	Original or Revised Notification.		
Line (2)(a)	ADOT Facility Owner Information: Provide name, address, and telephone number.		
Line (2)(b)	Asbestos Removal Contractor/Operator: Provide name address, and telephone number.		
Line (2)(c)	Demolition Contractor/C	Operator: Provide name, address, and telephone number.	
Line (3)	Type of Operation:	Type of planned work.	
Line (5)	Facility Description:	Provide size (square feet), number of floors, age, present and prior use, location, street address; and if appropriate, building number or name, floor number, and room number.	
Line (6)	Procedure(s), including Category I and Category	analytical method(s) employed to detect the presence of RACM, y II nonfriable ACM.	
Line (7)	Amount of RACM to be	removed or generated.	
	Amount of Category I ar	nd Category II nonfriable ACM that will not be removed before demolition.	
Line (8)	Start and Completion dates for Asbestos Removal/Renovation. *NOTE: Start date is defined when asbestos material(s) are disturbed.		
Line (9)	Start and Completion dates for Demolition. *NOTE: Start date of demolition is defined when the wrecking or taking out of any load-bearing structural support member of a facility together with any related handling operations or the intentional burning of a facility begins.		
Line (10)	Description of Demolition and/or Renovation Work.		
Line (11)	Description of Work Practices/Engineering Controls to be used to prevent asbestos emissions.		
Line (12)(a)(b)	Waste Transporter(s):	Provide name, address, and telephone number.	
Line (13)	Waste Disposal Site:	Provide name and location of where generated asbestos- containing material(s) will be deposited.	
Line (14)	Ordered Demolitions:	*NOTE: Attach copy of the demolition order with the notification.	
Line (15)	Emergency Renovations: *NOTE: Provide all information requested on notification form.		
Line (16)	Description of procedures to be followed in the event that unexpected RACM is found or Category I or Category II nonfriable ACM becomes crumbled, pulverized, or reduced to powder.		
Line (17)	Signature verifying that at least one on-site trained representative will be present at the facility or affected area(s) where the stripping and removal described by notification is occurring at all times during that stripping and removal. *NOTE: An on-site trained representative is equivalent to the 40-hour AHERA Contractor/Supervisor training.		

Effective: August 30, 2010 Transmittal: 2010-August

Supersedes: SAF-6.01 (2/23/2004) Page 39 of 59

APPENDIX B

SUMMARY OF CHECKLISTS

The following is an accumulation of checklists that shall be utilized by the ADOT Asbestos Management Group and Monitoring Personnel to ensure all asbestos projects are in compliance with NESHAP and OSHA regulations. The checklists are available on ADOT's Intranet at: http://adotnet/forms/indexalpha.asp

	CONTRACT REVIEW CHECKLIST			
CHECK √	CHECKLIST ITEM DESCRIPTION			
	Does the contract clearly identify the form, condition, quantity and location of asbestos materials to be removed in the description of work?			
	2. Is the abatement contractor responsible for notifying EPA, state and local regulatory agencies, as required, and the responsible ADOT Asbestos Management Group in writing 10 working days prior to commencement of work?			
	3. Is the abatement contractor responsible for furnishing all labor, materials, services, insurance, and equipment necessary for the total removal and disposal of all asbestos in the designated area?			
	4. Is the abatement contractor responsible for supplying personal protective equipment to ADOT monitoring personnel for entry into the asbestos regulated areas?			
	5. Does the contract specification clearly state which operations require a fully enclosed regulated area?			
	6. Does the contract require ADOT to retain the services of an Assessment Contractor to direct all air monitoring?			
	7. Does the contract require the ADOT Assessment/Oversight Contractor or the abatement contractor to meet accreditation and state licensing requirements?			
	8. Does the contract stipulate the abatement contractor's responsibility when unexpected asbestos is encountered during alteration projects?			
	9. Does the contract require the following submittals: a. Asbestos hazard abatement plan b. Safety plan c. Name of accredited testing laboratory d. Name, address, telephone number, and accreditation number and date of AHERA accredited building inspectors and AHERA certified contractor/supervisor e. Name and location of certified waste disposal site f. Certification of worker training			
	10. Does the contract establish an environmental clearance limit (or clean-to-standard) of less than or equal to 0.01 f/cc?			

AS	BESTOS HAZARD ABATEMENT PLAN CHECKLIST
CHECK √	CHECKLIST ITEM DESCRIPTION
	Is the plan prepared and signed by the Assessment/Oversight Contractor, including accreditation number and signature date?
	2. Does the plan include a drawing showing the location, size, and details of asbestos regulated areas, including the following: - location of the clean and dirty areas - buffer zones - showers - storage areas - change rooms - local exhaust equipment
	3. Does the plan include a work area and breathing zone air-monitoring plan?
	4. Does the plan include the precise personal protective equipment to be used?
	5. Does the plan include step-by-step details for the sequencing of asbestos-related work?
	6. Does the plan include a disposal plan?
	7. Does the plan specify the type of wetting agent to be used?
	8. Does the plan include both Fire and Medical Emergency response plans?
	Does the plan include a detailed description of the environmental pollution control method?

PRE-ABATEMENT CHECKLIST			
CHECK √	CHECKLIST ITEM DESCRIPTION	REFERENCE	
	As per contract requirements, has the abatement contractor obtained state or special licenses and permits?	AZ Contract AD050026, Sec 14.3	
	2. Has the abatement contractor notified the EPA, or the appropriate state or local regulatory agency, 10 days prior to the commencement of work?	40 CFR 61.145 (b)	
	3. Has the abatement contractor provided proof that all asbestos workers and supervisors are trained in the proper removal procedures of asbestos?	29 CFR 1926.1101 (k)(9), (o)(4)(i) 40 CFR 763.121 (k)(3)	
	4. Has the abatement contractor provided the name of the "competent" or "qualified" person?	29 CFR 1926.1101 (o)(4)	
	5. As per state contract requirements, has the contractor provided proof that the supervisor, remaining on-site during all abatement operations, is trained in the requirements of AHERA?	40 CFR 763.E	
	6. Has the contractor provided proof that all of the employees have received medical examinations and that medical records are kept?	29 CFR 1926.1101 (m), (n)(3)(i) 40 CFR 763.121 (n)(3)(i)	
	7. Has the contractor provided proof that all of the employees are respirator trained and fit tested?	29 CFR 1910.134 (f), (k) 29 CFR 1926.1101 (h)(2)(i)	
	8. Has the contractor provided proof that all vacuum and ventilation equipment has the manufacturer's certification that it is capable of handling airborne asbestos fibers in conformance with ANSI Standard Z9.2?	40 CFR 61.152	
	9. Has the contractor provided a detailed asbestos hazard abatement plan that complies with EPA/OSHA Safety and Health requirements? (see Asbestos Hazard Abatement Plan Checklist for details)	40 CFR 61.145 (b)(4)(x)-(xi)	
	10. As per appropriate contract requirement, has the contractor provided the name, address, and phone number of the qualified person responsible for the exposure monitoring program and air sampling?	AZ Contract AD050026 Section 14 29 CFR 1910 29 CFR 1926	

Effective: August 30, 2010			i ransmittai:	2010-August
Supersedes: SAF-6.01 (2/23	3/2004)			Page 43 of 59
Project Title:			Date:	
Contract Number:		Site Name:		
Parcel #:	Site #:		Building #:	
Structure ID:	E	Beginning MP:	Ending MP:	·
Building Function Type:				

CHECK √	CHECKLIST ITEM DESCRIPTION	REFERENCE
	11. As per appropriate contract requirement and NESHAPS requirement, has the contractor provided the name, address, and phone number of the testing laboratory for all asbestos sampling analysis?	AZ Contract AD050026 Sec 6.2 40 CFR 61 Subpart M
	12. Has the laboratory shown proof of participation in a proficiency analytical testing (PAT) program, e.g. NVLAP certification program?	29 CFR 1926.1101 App. A
	13. Has the contractor provided a Quality Assurance plan to ensure that laboratory analysis is accurate?	29 CFR 1926.1101 App. A
	14. Has the contractor provided the name and the location of the certified waste disposal site?	40 CFR 61.145 (b)(4)(xii)

AREA PREPARATION CHECKLIST			
СНЕСК √	CHECKLIST ITEM DESCRIPTION	REFERENCES	
	If the work site has multiple employers, has the abatement contractor notified the other employers?	29 CFR 1926.1101(d)	
	2. Have the mechanical systems and utilities in the containment area been disconnected from the rest of the building, if possible?	29 CFR 1926.1101 (g)(5)(i)(B)(2)	
	3. Has the HVAC system been deactivated and locked off? If not, have proper isolation techniques been applied?	29 CFR 1926.1101 (g)(4)(iii)	
	4. As per appropriate state contract requirement, is there on site at least one representative with AHERA training? Is proof of training posted at abatement site?	AZ Contract AD050026 Sec 13.5	
	5. Is a "competent" or "qualified" person supervising the regulated work area? Is proof of training posted?	29 CFR 1926.1101 (g)(4)(i), (o)(3)(i) 40 CFR 61.145 (c)(8)	
	Have adequate warning signs been placed on all approaches to asbestos regulated areas?	29 CFR 1926.1101 (k)(7) 40 CFR 763.121 (k)(1)	
	7. Are all non-work surfaces vacuumed? Are the vacuums equipped with HEPA filters?	29 CFR 1926.1101 (g)(1)(i)	
	8. Are all openings to the project area sealed off with only one entry/exit through the decontamination area?	29 CFR 1926.1101(g)(4), App. F	
	Does the project require negative pressure and construction of a plastic sheet temporary barrier system?	29 CFR 1926.1101 (g)(5) 40 CFR 763.121 (e)(6)(i)	
	10. Does the local exhaust system meet ACGIH and ANSI Z9.2 standards?	40 CFR 763.121 (c)(1)(ii)	
	11. As per appropriate state contract requirements, do filters on vacuums and exhaust equipment meet UL586 standards for HEPA filters and are the filters labeled?	AZ Contract AD050026 Sec 8.10.4	
	12. Does the local exhaust system have sufficient capacity to maintain a minimum pressure differential of negative 0.02 inches of water gauge and provide 4 air changes per hour?	29 CFR 1926.1101 (g)(5)(i)(A)(3), App. F	

AREA PREPARATION CHECKLIST			
СНЕСК √	CHECKLIST ITEM DESCRIPTION REFERENCES		
	13. Is the local exhaust system capable of operating 24 hours per day?	29 CFR 1926.1101 (g)(5)(i)(A)(4), App. F	
	13a. As per appropriate contract requirements, has HEPA filtered local exhaust ventilation or equivalent been provided for portable hand and power tools?	29 CFR 1926.1101 (g)(5)(i)(A)(4), App. F	
	14. Is the worker decontamination facility properly designed with a shower facility located between the clean and dirty change rooms? Is the shower facility provided with towels, soap, and hot and cold water?	29 CFR 1926.1101 (j) 40 CFR 763.121 (j)(1)	
	15. Have procedures been established to assure protective clothing and equipment are completed and in good condition prior to entering the regulated area?	29 CFR 1926.1101 (i)(4) 40 CFR 763.121 (i)(4)	
	16. Is contaminated water from the decontamination process filtered or disposed as asbestos waste?	49 CFR parts 171 and 172	
	17. Have adequate procedures governing waste and equipment removal been established?	40 CFR 61.150	
	18. Are selected respirators approved by NIOSH for use with asbestos?	29 CFR 1910.134 (d)(1)(ii) 29 CFR 1926.1101 (h)(2)(i)	

ASBESTOS REMOVAL CHECKLIST			
CHECK √	CHECKLIST ITEM DESCRIPTION	REFERENCE	
	Is the material being treated with a solution of water and a wetting agent to reduce fiber release?	29 CFR 1926.1101 (g)(1)(ii), App. F 40 CFR 61.145(c)(2)(i)	
	2. Has the contractor obtained written approval from the EPA, state, or local agency before a dry removal project begins?	40 CFR 61.145 c(3)(i)(A)	
	3. Is the removal complete to the substrate?	29 CFR 1926.1101 App. F	
	4. Is material packed wet?	40 CFR 61.150(a)(1)	
	5. Is the material being placed in fiber or metal drums lined with 6-mil plastic bags, or in 6-mil or stronger plastic bags?	29 CFR 1926.1101 App G	
	6. Are the drums/bags properly labeled with OSHA approved labels?	29 CFR 1926.1101 (k)(8) 40 CFR 61.150(a)(1)(iv)	
	7. Are the drums/bags being decontaminated prior to removing from regulated area?	40 CFR 61.150(a)	
	8. As per appropriate contract provision, is the "lock down" encapsulant being used in areas where all asbestos has been removed?	AZ Contract AD050026 Sec 16.2	
	9. Is daily air monitoring used?	29 CFR 1926.1101 (f)(3)(i)	

ENVIRONMENTAL MONITORING CHECKLIST			
CHECK √	CHECKLIST ITEM DESCRIPTION	REFERENCE	
	1. As per appropriate contract provisions, has a final clearance level of less than or equal to 0.01 f/cc been set?	AZ Contract AD050026 Sec 17.4	
	2. Is phase contrast microscopy (PCM) used to analyze air samples?	29 CFR 1926.1101 App. A	
	3. Have personal air samples been taken to establish airborne asbestos TWA's during the performance of each new task?	29 CFR 1926.1101 (f)(1)	
	4. Is daily area monitoring provided both inside and outside the regulated area?	29 CFR 1926.1101 (f)(3), (g)(4)(ii)(B)	
	5. As per appropriate state contract provisions, does post- clean-up monitoring meet contract specifications?	AZ Contract AD050026 Sec 14.1.3	
	6. Is air sample analysis conducted in accordance with NIOSH standards?	29 CFR 1926.1101 App. A	
	7. Are monitoring results reported as soon as possible after receipt of results?	29 CFR 1926.1101 (f)(5)(i)	

AREA CLEANUP CHECKLIST			
CHECK √	CHECKLIST ITEM DESCRIPTION	REFERENCE	
	Has the contractor removed all asbestos materials from the building substrate?	29 CFR 1926.1101, App. F	
	Has the contractor wet-cleaned all surfaces and equipment within the work area?	29 CFR 1926.1101, App. F	
	3. If an enclosure was used, have leaks onto the second layer of sheeting and all other surfaces in the work area been cleaned with water and/or HEPA filtered vacuums?	29 CFR 1926.1101, App. F	
	4. Has the area been visually inspected to ensure that it is free of visible friable asbestos material and debris?	29 CFR 1926.1101, App. F	
	5. Does the final inspection reveal a "dust free" work site?	29 CFR 1926.1101, App. F	

ASBESTOS DISPOSAL CHECKLIST		
CHECK √	CHECKLIST ITEM DESCRIPTION	REFERENCE
	Has asbestos waste been collected wet?	29 CFR 1910.1001 (f)(1)(vi) 29 CFR 1926.1101 (g)(1)(ii) 40 CFR 61.150(a)(1)
	2. Have all asbestos waste and scrap material including protective equipment been properly labeled and enclosed in impermeable bags or contained in appropriate drums?	29 CFR 1910.1001(k)(6) 29 CFR 1926.1101(l)(2) 40 CFR 61.150(a)(1)(iii)
	3. Have OSHA warning labels been affixed to waste containers?	29 CFR 1910.1001(j)(4) 29 CFR 1926.1101(k)(8) 40 CFR 61.150(a)(1)(iv)
	4. Have the asbestos-containing waste containers been labeled with the generator name and location at which the waste was generated?	40 CFR 61.150(a)(1)(v)
	5. As per appropriate state contract provisions, has an interim storage area been assigned to the contractor for waste-containing drums?	AZ Contract AD050026 Sec 11.3
	6. Has a manifest/Waste Shipment Record been completed by the waste generator?	40 CFR 61.154(d)(1)(i)-(viii)
	7. Have the transport vehicles been properly posted with danger signs during loading and unloading operations?	40 CFR 61.150(b)(3)(c)
	8. Have sufficient precautions been taken to minimize loss or damage potential during transport?	40 CFR 61.150(a)
	9. Are all workers who are loading the sealed waste drums wearing appropriate respiratory protection?	40 CFR 61.150(a)

FINAL ACCEPTANCE AIR MONITORING CHECKLIST		
CHECK √	CHECKLIST ITEM DESCRIPTION	REFERENCE
	1. As per appropriate state contract provisions, does the contract require using aggressive sampling techniques to collect post-abatement air samples?	AZ Contract AD050026 Sec 17
	2. As per appropriate state contract provisions, does area monitoring reveal acceptable clearance concentrations of less than or equal to 0.01 f/cc?	AZ Contract AD050026 Sec 17
	Do air-sampling procedures comply with NIOSH standards and/or contract requirements?	29 CFR 1926.1101, App. A
	4. As per appropriate state contract provisions, has the contractor satisfied the requirements of checklist item #2 and visual inspection of work site to merit release?	AZ Contract AD050026 Sec 17

CHECK √	CHECKLIST ITEM DESCRIPTION	REFERENCE
	Have copies of all appropriate environmental monitoring documents been supplied to the ADOT Assessment/ Oversight Contractor?	29 CFR 1910.1001(m)(1)(i) 29 CFR 1926.1101(n)(2)(i) & (iii), (n)(3)(i)
	2. As per appropriate contract provisions or other legal document requirements, has the Asbestos Program Manager and Requesting Party Manager been informed of the removal?	AZ Contract D050026 Sec 19.9
	3. Has the contractor provided written proof of the total amount of asbestos received and buried by the landfill?	40 CFR 61.150(d)(3)

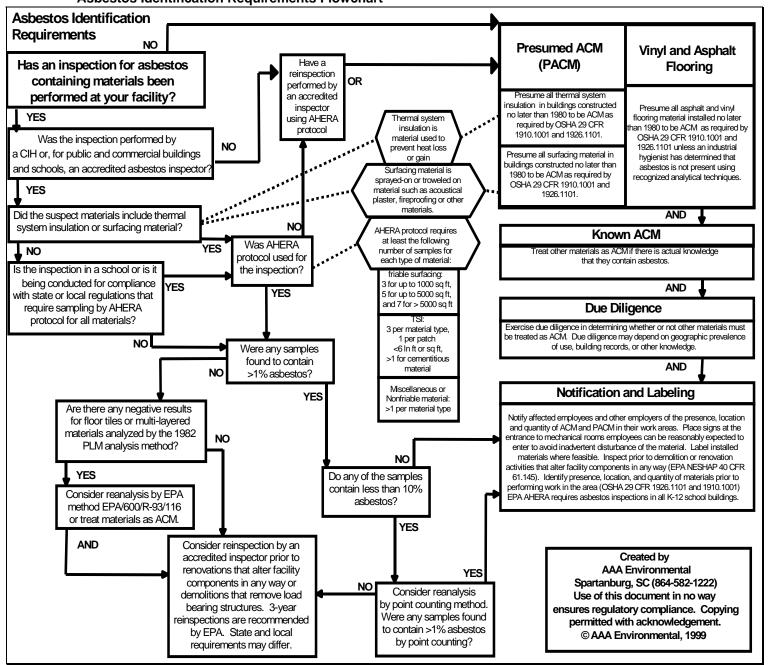
Supersedes: SAF-6.01 (2/23/2004) Page 52 of 59

APPENDIX C

ASBESTOS CONTROL FLOWCHARTS

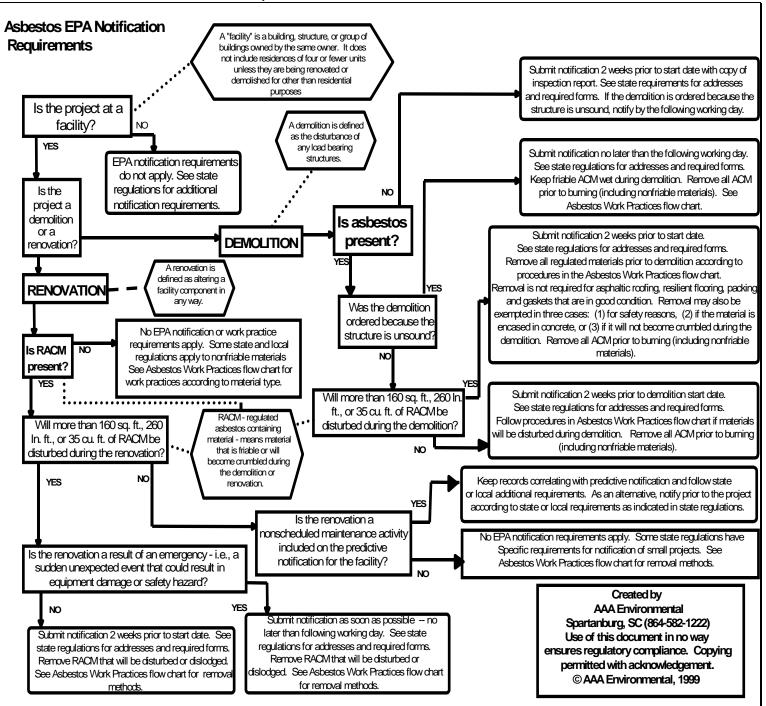
These charts are available on ADOT's intranet at: http://adotnet/forms/indexalpha.asp

Asbestos Identification Requirements Flowchart



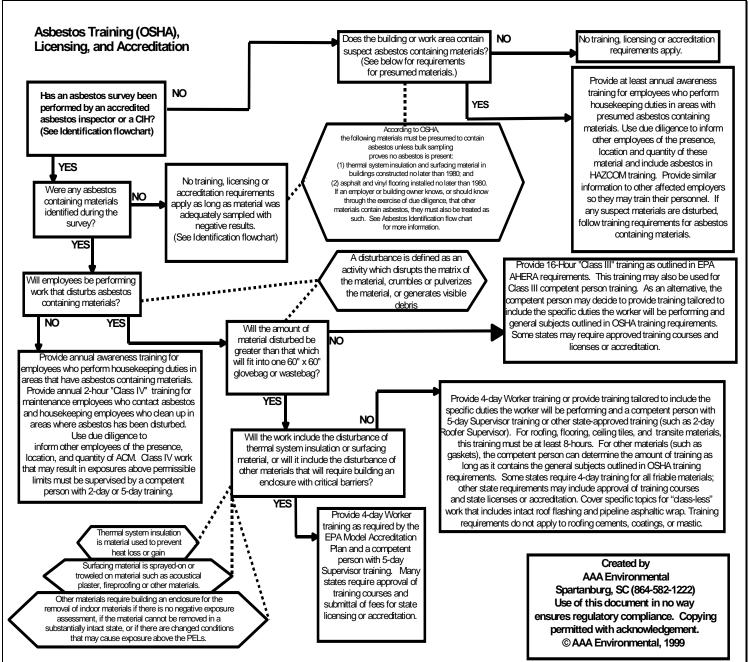
Supersedes: SAF-6.01 (2/23/2004) Page 53 of 59

Asbestos EPA Notification Requirements Flowchart



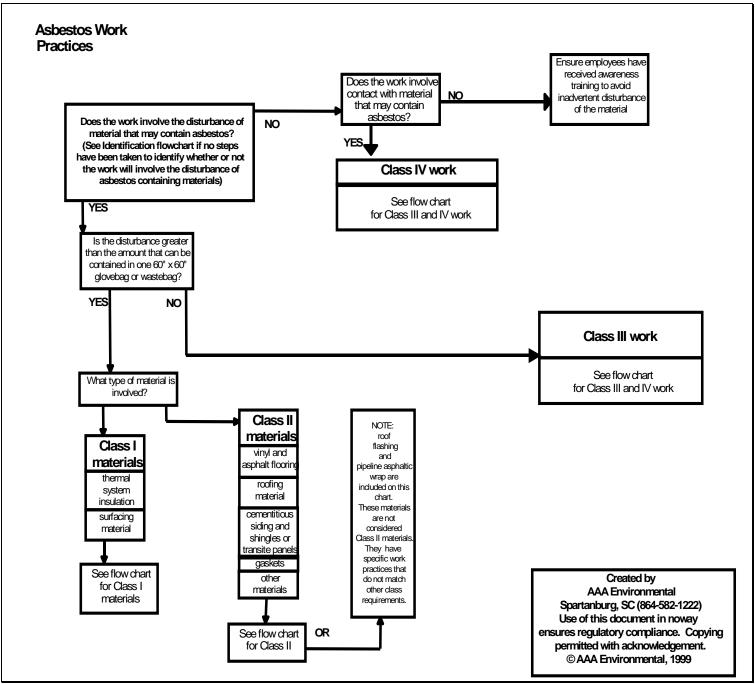
Supersedes: SAF-6.01 (2/23/2004) Page 54 of 59

Asbestos Training (OSHA) Licensing and Accreditation Flowchart



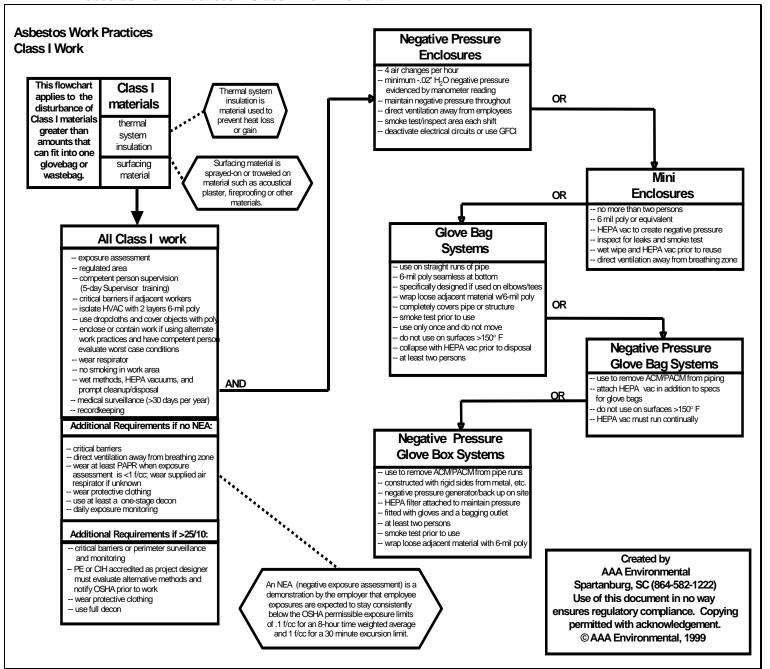
Supersedes: SAF-6.01 (2/23/2004) Page 55 of 59

Asbestos Work Practices Flowchart



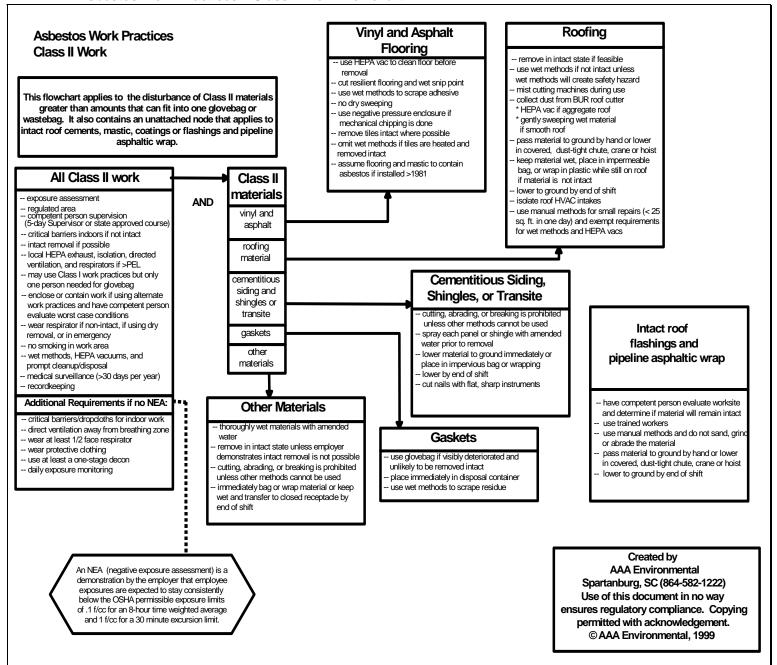
Supersedes: SAF-6.01 (2/23/2004) Page 56 of 59

Asbestos Work Practices - Class I Work Flowchart



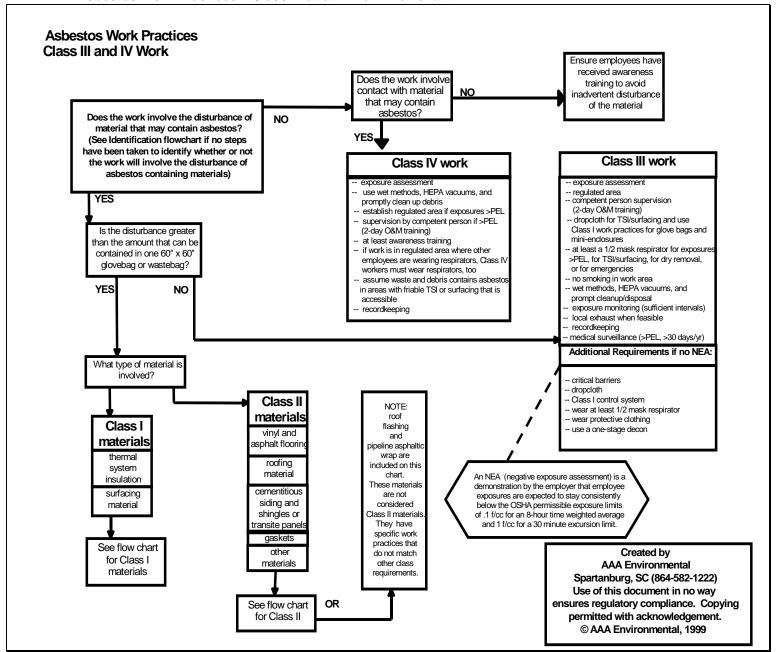
Supersedes: SAF-6.01 (2/23/2004) Page 57 of 59

Asbestos Work Practices – Class II Work Flowchart



Supersedes: SAF-6.01 (2/23/2004) Page 58 of 59

Asbestos Work Practices - Class III and IV Work Flowchart



Supersedes: SAF-6.01 (2/23/2004) Page 59 of 59

Asbestos Waste Disposal Flowchart

