# AIR POLLUTION CONTROL DISTRICT REGULATORY COMPLIANCE DIVISION

## POLICIES AND PROCEDURES

Policy NoII.Q Supersedes Date DateNovember 7, 1994	Draft Final X Pages 10
Topic: <u>Asbestos Guidelines</u>	
Distribution: All Policy Holders	

# ASBESTOS POLICY AND PROCEDURE GUIDELINES ON NOTIFICATIONS AND INSPECTION

The purpose of this policy and procedure (P&P) is to provide direction and guidance to inspection staff regarding standards set forth in 40 CFR (Code of Federal Regulations) Part 61 NESHAPS standard (referred to as "standard" in this document), for asbestos demolition and renovations (D&R).

There are six parts to this policy: 1) Notification Standards, 2) Renovation, 3) Demolition, 4) Safety Equipment, 5) Containment Access Requirements, 6) Compliance Inspection. Federal law allows the US Environmental Protection Agency (US EPA) to delegate enforcement authority to the APCD. All policies are subject to oversight by the US EPA, Region IX, NESHAPS Coordinator in San Francisco. The APCD has adopted the Federal law by reference as APCD Rule 1001.

The APCD's scope of jurisdiction is limited to demolition and renovation (D&R) of applicable facilities, as defined in the standard. The standard describes applicable facilities as any institutional, commercial, public, industrial, or residential structure, installation, or building, (including any structure, installation, or building containing condominiums or individual dwelling units operated as a residential cooperative, but excluding buildings having four or fewer dwelling units); any ship; and any active or inactive waste disposal site. For the purposes of this definition any building structure or installation that has a loft used as a dwelling is not considered a residential facility. Any facility that was previously used as a commercial facility is not excluded, regardless of its current use. Single family homes, duplexes, and apartment/condominium complexes with four or less units are exempt from the standard.

#### NOTIFICATION STANDARDS

1. Prior to the <u>renovation</u> of any <u>regulated</u> facility containing regulated asbestos containing materials (RACM), the owner or operator must notify the APCD. Furthermore, <u>all demolitions</u> of regulated facilities must also notify the APCD. All D&R notifications of RACM shall use an US EPA-approved written format for reporting AND/OR must include all information required by the

standard. RACM is described as Friable¹ Asbestos Containing Materials (ACM), Category I ACM that has been become friable and/or subjected to sanding, grinding, cutting, or abrading or Category II ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to a powder by the forces (the energy used in the destruction of the facility) in the course of a demolition or renovation. The following information must be included in the notification:

- A. An indication whether the notification is the original or a revision.
- B. Name, address, and telephone number of both the facility owner and operator, and the asbestos removal contractor owner or operator.
- C. Type of operation: demolition or renovation.
- D. Description of the facility or affected part of the facility including the size (square meters or square feet) and (number of floors) age, and present and prior use of the facility.
- E. The procedure including analytical methods employed to detect the presence of RACM and Category I and II non-friable ACM.
- F. An estimate of the approximate amount of RACM to be removed from the facility in terms of length of pipe in linear meters (linear feet), surface area in square meters (square feet) on other facility components, or volume in cubic meters (cubic feet) if the RACM is from the facility components. Also, estimate the approximate amount of Category I and II nonfriable ACM that will not be removed before demolition.
- G. Location and street address (including building number, if appropriate), city, county, and state of the facility being demolished or renovated.
- H. Scheduled starting and completion dates of asbestos removal work.
- I. A description of planned demolition or renovation work to be performed and method(s) to be employed, including D&R techniques to be used and work practices.
- J. Name and address of waste transporter and the disposal site.

Friable ACM means any material containing more than one percent asbestos as determined by the use of Polarized Light Microscopy (PLM), that when dry, can be crumbled, pulverized or reduced to powder by normal hand pressure.

- K. Certification of current supervisor training in compliance with the standard.
- L. If a state or local agency has ordered demolition due the unsound nature of the facility, a copy of the demolition order shall be attached to the notification.
- M. A description of procedures to be followed in the event unexpected RACM is discovered or nonfriable Category II ACM becomes crumbled, pulverized, or reduced to powder.
- 2. Notifications must be submitted by US mail or by courier ten working<sup>2</sup> days prior to D&R start-up, as set forth in the standard. For mail delivery, post marks will be accepted as the date of original submittal. The APCD date stamp will be used to establish the submittal date in the case of courier delivery. The ten working day requirement may be set aside only in the cases allowed for in the standard. If it is a situation where an annual plan is being submitted in order to notify the APCD of planned unscheduled renovations for an entire year, the notification must be received ten days prior to the start of the calendar year (December 20th). If a site visit by APCD personnel is conducted prior to the end of the ten working day period, active demolition or renovation may proceed.
- 3. Fees pursuant to APCD Rule 210 are to be submitted at the time of original notification. If fees are not submitted, the notice is considered incomplete.
- 4. An original notification received via facsimile will not be accepted. Any notification deemed to be incomplete may also be subject to rejection and/or enforcement action. Notifications received without fee per APCD Rule 210, shall be documented with an Administrative Infraction Document (AIDOC). Start of the D&R without payment will result in a Notice of Violation (NOV). APCD staff will telephone, send by facsimile transmission, and/or notification by mail the responsible party (R/P), notice of the incomplete status (AIDOC) prior to the start date noticed.
- 5. A revision of the notification may be delivered to the APCD via US Mail, facsimile transmission, or courier. It is the burden of the (R/P) to demonstrate that the document has been received by the APCD. Revisions must be **received** prior to the revised work practice. The R/P is the person who signs the notification form.
- 6. The R/P shall be subject to enforcement action (NOV) in the event of the following:

Working day means Monday through Friday and includes holidays that fall on any of these days, Monday through Friday.

- A. Failure to start the project on the date supplied in notification.<sup>3</sup>
- B. Failure to give ten working day prior notification of D&R from date of original submittal.
- C. Demolition of a regulated facility without prior notification, even if the facility does not contain RACM.
- D. Start of a D&R after APCD notification of a rejected or incomplete notification. Notification to the R/P, of rejected notifications will be by telephone with follow-up mail.
- E. Start of a D&R prior to start date in the notification.
- F. Courtesy notifications are not accepted without the required APCD Rule 210 fee, due to costs associated to staff time review. Courtesy notifications will be subject to the standard.
- G. Failure to submit fees pursuant to APCD Rule 210 are to be documented with an AIDOC and enforcement action if fees are not submitted prior to start.
- 7. The RCD staff member responsible for asbestos tracking shall be responsible for the maintenance of the notification log. Log maintenance includes assigning tracking numbers, data entry to the tracking database, and dealing with the randomly generated process of spot inspection of renovation projects. One half of the renovation abatement projects will be scheduled for inspection at various stages of progress, however, all demolitions will be inspected. Any renovation notification that specifies a contractor that is not listed as being certified by any of the agencies that regulate ACM removal may be assigned to the inspection case load by the appropriate enforcement supervisor. A log shall be kept of all US EPA guidance documents.

## RENOVATION STANDARDS

A removal of regulated asbestos containing materials (RACM) or non-regulated asbestos containing materials (ACM) whose removal technique causes the material to become friable during D&R activity, is subject to the reporting requirements of the standard if the following is true:

If a violation is documented by an admission by the R/P or without an onsite visit by APCD staff, the infraction will be documented via the issuance of an AIDOC. Otherwise a NOV will be issued to document the violation.

The R/P is subject to the all provisions of the standard if a notification is submitted. Notifications describing non-regulated ACM removals or notifications submitted due to contractual obligations are also subject to the standard.

The RACM to be removed is at least 80 linear meters (260 linear feet) on pipes/ducting or at least 15 square meters (160 square feet) on other facility components, or at least 1 cubic meter (35 cubic feet) of facility components where the length or area could not be measured previously AND one or more of the following,

- 1. RACM to be removed is in an applicable facility as described in the standard.
- RACM removal is from single family residences due to an urban renewal project or eminent domain condemnation.
- 3. RACM is to be removed prior to destruction of premises via Fire Department training burn.
- 4. ACM, in the case of Category I ACM, that is subject to a removal technique that causes the material to become friable.
- 5. RACM removal from a residence that had previous commercial use.

A renovation may be exempt from reporting under one or more of the following conditions:

- 1. The quantity of RACM to be removed is under the 40 CFR NESHAPS standard minimum.
- 2. The ACM to be removed is Category I ACM (packings, gaskets, resilient floor covering, and asphalt roofing products) containing more than 1% asbestos as detected by Polarized Light Microscopy (PLM) AND the removal method does not cause the material to become friable. A Category I ACM removal shall not be subjected to sanding, grinding, cutting, or abrading. A non-reportable removal is citrus or hydrocarbon solvent removal of floor tile, with hand tools, whole without break up of the material.

An example of a **regulated** or mechanical removal technique is removal of floor tile or mastic using a bead-blaster. On a case by case basis, the US EPA has approved bead blasting for removal of this material. However, the process must meet the adequately wet requirement for removal, storage, and waste handling of the RACM debris prior to removal from the site.

## DEMOLITION<sup>5</sup> STANDARDS

Reporting standards for ACM removal involving demolition of a regulated facility are the same as in Section 2. The ten working days prior notification requirement is not applicable in the following cases:

Demolition means the wrecking or taking out of any load-supporting structural member of a facility together with any related handling or the intentional burning of any facility.

- 1. A regulated facility has been ordered to be demolished under an order from a state or local governmental agency. Such order is issued because the facility is structurally unsound and in danger of imminent collapse. The ten working day waiting period is not required and Category I and II may be left inside the structure, only if the structure is in imminent danger of collapse. A wet demolition is required to reduce the possibility of asbestos fiber emissions, however, a written notification must be sent as soon as possible detailing the particulars of the event.
- 2. An emergency renovation operation means a renovation operation that was not planned but results from a sudden, unexpected event that, if not immediately attended to, presents a safety or public health hazard, is necessary to protect equipment from damage, or is necessary to avoid imposing an unreasonable financial burden (e.g., fire, flood, explosion etc.). The term includes operations necessitated by nonroutine failures of equipment. A stand alone declaration of financial hardship does not qualify for the waiver of time. In the event of a financial hardship, detailed evidence including fully auditable financial information must be provided in order for the APCD to justify a finding of hardship.

A demolition of <u>any</u> (including single family residences) structure by way of burning the facility for the purposes of fire suppression training (see APCD Rule 313), requires both friable and non-friable Category I and II ACM to be removed prior to the demolition. In order to maintain compliance with the reporting standards, a complete application and plan addressing the ACM removal must be sent in by the responsible party for RACM removal. The non-regulated Category I ACM removal is exempt from reporting. A survey/inspection from a person that has ASHERA credentials and registration must accompany the demolition notification affirming to the complete removal of all ACM.

Procedures for asbestos emissions control during demolition are as follows:

- 1. Remove all RACM from a facility prior to demolition or renovation before any activity begins that would cause the ACM to be disturbed to the point of being friable. RACM need not be removed if:
  - A. It is category I non-friable ACM.
  - B. It is on a facility component that is encased in concrete or other similarly hard material and is adequately wet whenever exposed during demolition.
  - C. It was not accessible for testing and was, therefore not discovered until after the demolition began and can not be safely removed. If it can not be removed then the exposed RACM must be kept adequately wet until disposed of.
  - D. It is Category II non-friable ACM and there is a low probability that the materials will become friable.

## SAFETY EQUIPMENT

The inspector shall be issued and maintain the following APCD required equipment:

- 1. Steel-toe boots and hard hat.
- 2. Full face PAPR type respirator w/spare HEPA filters.
- 3. Supply of "Tyvex" suits with hood and booties.
- 4. Supply of rubber gloves.
- 5. Duct tape.
- 6. Camera with adequate supply of film.
- 7. Chain of custody forms.
- 8. Sample containers and tools.
- 9. Waste disposal containers.

## CONTAINMENT ACCESS REQUIREMENTS

Asbestos is a known environmental carcinogen, and inhalation of asbestos fibers may increase the risk of serious diseases of the respiratory tract. An inspection of an asbestos area may result in an occupational exposure to ACM and associated fibers. If an inspector is required to enter a containment area of a known or unknown abatement, it is required to take precautions in the following cases:

- 1. Inspection of interior containment shall be conducted by Regulatory Compliance Division (RCD) staff that has completed the following:
  - A. Has APCD issued full face respirator, fit tested and recertified periodically, according to OSHA guidelines.
  - B. Has initiated baseline and maintained medical monitoring and participated in an approvable respirator program compliant with OSHA standards.
  - C. Has documentation of medical monitoring available for inspection by D&R personnel.
  - D. Has credentials bearing a photograph, with signature, expiration date, ID#, title of inspector, legal authority, and name of agency. A separate, current document is also required showing date of expiration, name of institution of an US EPA approved inspection (primary or refresher) training course.
  - E. Has registered with the State of California Department of General Services, Office of Local Assistance pursuant to Chapter 1601, Asbestos Hazard Emergency Response Act of 1988, (AHERA).
- 2. At no time will RCD staff use equipment supplied by the contractor, with the exception of decontamination and waste disposal containers.

#### COMPLIANCE INSPECTION

During the course of an inspection of an active D&R site an APCD inspector will be expected to observe and document the following to determine compliance with the standard. Use of the APCD asbestos checklist shall be used when appropriate.

## Exterior Inspection:

- 1. Onsite personnel will have a credentialed supervisor at all times. The inspector should check to see if the US EPA approved 40 hour class and/or refresher course has been taken within the past year for work done on AHERA schools K-12 and the last two years for NESHAPS. The supervisor shall maintain onsite copies of this accreditation and the NESHAPS notification with revisions, if any.
- 2. A local exhaust ventilation and collection system designed and operated to capture the particulate asbestos produced by the stripping and removal of ACM shall be in place. The system must exhibit no visible emissions to the outside air.
- 3. If used, a glove bag system designed and operated to collect particulate ACM. Glove bags may be used to abate asbestos containing pipe lagging without resorting to complete containment procedures.
- 4. Leak tight<sup>6</sup> wrappings or drums to contain ACM waste<sup>7</sup>. Containers are to be marked with an asbestos waste legend compliant with the standard.
- 5. Containers of waste material are to be maintained adequately wet<sup>8</sup> during the temporary storage at the site prior to removal.
- 6. If the contractor elects to use a transport system for waste ACM to the transport vehicle, the system shall be maintained leaktight. During the loading of waste ACM, warning placards shall be posted on the vehicle as required by the standard.
- 7. Warning tape and placards are required to be used as a deterrent to unauthorized entry during the course of the abatement.

Leak tight means that solids and liquids cannot escape or spill out. It also means dust tight.

Asbestos containing waste materials means waste that has been contaminated with asbestos during the course of an abatement. This will include filters from masks and control devices, disposable protective equipment and clothing.

Adequately wet means sufficiently mixed or penetrated with liquid to prevent the release of particulate. If visible emissions are observed coming from ACM, then that material has not been adequately wetted. The absence of visible emissions is not sufficient evidence of being adequately wetted.

## Interior Inspections:

During the course of NESHAPS compliance inspections it may become necessary to enter the containment and conduct an interior inspection. An APCD inspector must have documentation of proof for up-to-date medical monitoring certification and NESHAPS/AHERA training such as required by the onsite personnel.

The APCD inspector shall wear all the required protective gear prior to containment entry. At no time shall the inspector rely on contractor supplied equipment, with the exception of decontamination equipment at exit.

Once inside the containment the inspector will observe the method of stripping and removal of ACM. Special care is to be taken in this area due to the potential for contamination by airborne asbestos fibers. Take care to record the following:

- 1. All RACM being removed will remain adequately wet during the removal, collection, and storage.
- RACM will be removed carefully and lowered to the ground and floor, not dropping, throwing, sliding, or otherwise damaging or disturbing the material.
- 3. A measurement of RACM that is being removed will be made by the inspector to determine if adequate APCD Rule 210 fees have been paid by the operator. To be subject to the standard, any enforcement documentation requires an accurate estimate of RACM disturbed. The inability to confirm the presence of RACM over the minimum in the standard shall negate APCD authority.

## When the temperature at the point of wetting is below 0°C (32°F):

- 1. The operator need not comply with the wetting provisions.
- 2. The operator shall remove facility components containing, or covered with RACM as units or in sections to the maximum extent as possible.
- 3. During the periods when wetting is suspended due to freezing temperatures, the operator must record the temperature at the beginning, middle, and the end of the work day. The operator must maintain such records for two years.

## Exit From Containment:

The APCD inspector will decontaminate via the use of the onsite shower and discard disposable protective clothing at the site.

## Compliance Inspections of Regulated Facilities Without RACM:

The APCD shall inspect for compliance, demolitions of facilities that have stated via the NESHAPS notification that RACM is not present or that there is non-regulated ACM to remain in the structure. It is

advisable to conduct an address search of the database to see if there was a prior abatement. Onsite inspection may require sample taking of suspected ACM that is already or may become friable during the demolition.

If suspect RACM is observed, the inspector should take protective precautions before any further inspection. If the suspected RACM is one or more of the following:

1. is or has become friable,

2. is suspect RACM from a prior abatement,

 will have a high probability of becoming friable due to demolition,

The material will be sampled and measured. If available, the inspector should request a copy of any asbestos survey conducted by the R/P. Documentation and chain of custody procedures will be taken at this time. Photographs of areas in question are also advisable.

Prior to sending samples to a laboratory for testing, the inspector shall gain supervisor approval and an APCD purchase order. Samples taken in the field shall be in accordance the APCD P&P on sample taking, along with the required chain of custody documentation.