

Draft 2 Comments by Covino Environmental Associates, Inc.
January 5, 2003

DRAFT

Exhaust System Cleaning Procedures ?

General 1) CAN EPA get Access to All APTS
 2) Should Contractor Scope ducts to see Extent of dust

1. It is necessary to ensure that sufficient air velocity and/or negative pressure is maintained in the duct during cleaning, to prevent the dispersion of dust outside of the duct and to ensure that debris dislodged by mechanical cleaning devices is transported to a collection device. A HEPA filtered Air Filtration Device (AFD), which is typically used for asbestos abatement and is not designed for use within exhaust systems, may not provide sufficient velocity for this purpose, although AFDs may be acceptable in some cases, e.g., in smaller systems with light dust loading. Vacuum collection systems are employed by duct cleaning contractors for this purpose.
2. Provisions must be made to prevent the release of dust or debris at access points that is disturbed by the cleaning activities. If the branch ducts are accessible (typically 6' or less in length from access point) it is not necessary to construct a temporary containment at the access point provided that a) they may be cleaned using HEPA vacuums with brush attachments and wet methods and b) negative pressure within the system is sufficient to provide a face velocity at the grille opening of 200 to 500 feet per minute (fpm). For larger branches that require the use of mechanical devices such as whips, brushes, and compressed air, or where it is not possible to establish a face velocity at the grille opening of 200 to 500 fpm, construct a temporary containment (e.g., a "cube" or "cocoon") at the access point to provide protection against the release of dust.
3. It is recommended that air filtration devices and vacuum collection equipment be exhausted to the outdoors unless special measures are taken to control the leakage of air contaminants from the exhaust of such equipment.

Procedures

1. Identify the system to be cleaned including exhaust fan (e.g., "mushroom" fans), number and location of risers, and apartments or common spaces affected.
2. Determine how many floors on a riser will be cleaned as part of one continuous cleaning (5 – 10 floors).
3. Lock out and tag out the exhaust fan.
4. Attach a local capture, HEPA filtered, ~~Air Filtration Device (AFD)~~ vacuum collection system or AFD to the lowest opening of the riser to place the system under negative pressure (exhaust i.e., exhaust vent in an apartment in an apartment at the bottom of the riser being cleaned). Polyethylene sheeting should be used to protect the floor underneath the vacuum collection equipment.
5. Exhaust the vacuum collection system to the outdoors through a window. If no window is available, a stairwell may be appropriate. Alternately, two vacuum collection systems