

Draft2 Comments by Covino Environmental Associates, Inc.
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DRAFT

AC/Ventilation System Cleaning Procedures

General

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. 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. Vacuum collection systems are employed by duct cleaning contractors for this purpose, although AFDs may be acceptable in some cases, e.g., in smaller systems with light dust loading.

The AFD or vacuum collection equipment shall be adequate to collect all dust and debris released by the cleaning process and shall be attached to the existing ductwork with air-tight connections and located to attain maximum collection efficiency.

- X 2. A temporary containment should be installed around the air handling unit during cleaning to provide additional protection against the release of dust.
- X 3. When cleaning the AC/ventilation system fan unit or other components, it is important that all components in contact with the air stream are cleaned. This procedure anticipates that once an air handling system has been selected for cleaning, all components, not just those with visible WTC dust, are cleaned.
4. Provisions must be made to prevent the release of dust or debris at access points that are 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 diffuser or grille opening of 200 to 500 feet per minute (fpm). For longer 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 diffuser or 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.
5. 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.
6. Note that porous interior duct insulation may be located in some of the AC/ventilation fan units or in ducts. Unless the insulation is protected by a metal screen, care must be taken to avoid damaging or tearing the insulation. For duct cleaning, soft rotary brushes, compressed air or HEPA vacuums may be used for cleaning. In AC/ventilation fan units, HEPA vacuums may be used for cleaning. After satisfactory cleaning of porous interior insulation, an appropriate encapsulant shall be applied to the porous surface.