DUST AND DEBRIS MANAGEMENT PROCEDURES

HPD HOUSING REHABILITATION PROGRAMS

Dust and Debris Management Procedures refers to preventive measures that shall be undertaken by the contractor to prevent exposure of building occupants or future occupants and their belongings as well as the contractor's workers to lead contaminated dust, paint chips and debris during the course of the Contractor's renovation, painting, plumbing, electrical, or other work activities within a building. These procedures shall apply to all activities which disturb intact building material and cause, or have potential to cause, dusts, chips, or other construction-related debris.

GENERAL REQUIREMENTS

1. All demolition and removal work and all other work which may create lead contaminated dust, paint chips or debris shall be performed in accordance with the procedures listed herein.

2. The Contractor shall not perform the following activities on painted surfaces: dry scraping, dry sanding, open-flame removal or on-site methylene chloride stripping.

   Other prohibited activities shall include, but not be limited to, dry sweeping of dust, paint chips or debris, storage of debris, building components, or equipment in a manner inconsistent with all applicable waste regulations, or the use of standard shop or household vacuums for the removal of dust or debris.

3. Wet methods shall be employed to suppress the generation and distribution of dust, paint chips, or debris. Wet Methods are defined as misting of surfaces with water, wet-mopping, wet-wiping using sponges or cloths, and wet-scraping of paint.

4. Any vacuums used to containerize dust, paint chips, or debris shall be equipped with a High Efficiency Particulate Air (HEPA) filtration at the exhaust and shall meet all applicable federal, state, and local guidelines.

5. It shall be the Contractor's responsibility to dispose of all waste generated during a project in accordance with all applicable federal, state and local requirements.

6. Any lead contaminated dust, paint chips, or other debris generated by the contractor shall be contained in leak-tight containers for through occupied areas. No such waste shall be taken from the work area through occupied areas of the building/dwelling unless it is sealed to prevent any leakage. Non-painted building components or building components whose surface(s) are free of any peeling, flaking, or blistering paint may be removed using normal procedures.

   The contractor shall ensure that any large building components transferred from the work area through occupied areas are either wrapped in plastic or HEPA vacuumed and wet-cleaned to prevent any dust or paint chips from falling off the component during transport.

7. All workers disturbing painted surfaces will follow decontamination procedures when entering occupied area. At minimum, this will include the removal of personal protective equipment (if applicable) inside the work area before exiting. At no time may a worker exit the work area and walk through an occupied area of the building without removing personal protective clothing and equipment.

8. All applicable regulations including OSHA, NYS DEC, EPA, HUD and NYC regulations shall apply to all work on surfaces painted with lead paint and all activities generating dust and debris.

9. Proper cleaning shall be done after work is completed. This shall consist of:

   9.1) Remove the inner layer of vertical polyethylene first, starting at the top and folding downward and on to the floor. Then remove the top layer of floor poly by continually folding inward. Remove the second layer of floor poly.

   9.2) Remove the remaining poly barrier and the poly covering the furniture and personal items which shall be the last to be removed.

   9.3) Clean the work area of all visible debris and clean all ceilings, walls, and floors using the standard HEPA vacuum/wet wash/HEPA vacuum procedure.

REQUIREMENTS - VACANT APARTMENTS in an OCCUPIED BUILDING

1. The entire vacant apartment may be considered one work area. At the apartment entrance door the contractor shall construct a protective entrance/exit to the apartment as described below. The integrity of this doorway shall be maintained at all times during the project.

2. After demolition work has been completed and the work area visibly cleaned, other workers may enter the apartment.

3. After all work has been completed, the apartment shall be properly cleaned before any tenants are permitted to move in.

REQUIREMENTS - VACANT APARTMENTS in an VACANT BUILDING

1. The entire vacant building may be considered one work area.

2. After demolition work has been completed and the work area visibly cleaned, other workers may enter the building.

3. After all work has been completed the building shall be properly cleaned before any tenants are permitted to move in.

REQUIREMENTS - PUBLIC AREAS IN OCCUPIED BUILDINGS

1. The contractor shall perform all work in public spaces in accordance with the procedures listed herein. The contractor shall erect protective barriers before commencing any work. The spaces must be properly cleaned before the protective barriers are removed or the building occupants are allowed into or to pass through the work area unless this is determined to be impractical by the owner and/or HPD.

2. In those areas where it is impractical for the building occupants to enter or leave their apartments without passing through the work area these procedures may be modified as follows:

   2.1) The contractor shall notify the occupants that work involving possible hazardous dust will take place in the work area.

   2.2) The contractor shall encourage the building occupants to plan their activities so they will not have to pass through the work area during working hours. This would necessitate them remaining in their apartments or out of the building for the day.

   2.3) The contractor shall construct the necessary protective barriers with two layers of 6-mill plastic and with protective entrances which shall be in the form of a primitive air-locks constructed using two sheets of 6-mill plastic as described herein. Post warning signs outside that work involving possibly hazardous dust is being done.

   2.4) The contractor shall wet scrape all deteriorated paint and spot prime with fast drying water based primer and shall cover all exposed chases or other wall openings with a plywood cover before removing the protective barriers.

   2.5) At the end of the working day and or when the work is completed in a work area, the contractor shall clean the work area of all visible debris and remove all polyethylene and the containment barrier, folding it inward to prevent contamination. Once this is removed and sealed in a leak-tight container, the contractor shall clean all ceilings, walls, & floors using the standard HEPA vacuum/wet wash/HEPA vacuum procedure. The polyethylene shall also be sealed in a leak-tight container and disposed of in accordance with applicable federal, state and local regulations.

2.6) After following the above clean-up procedure the contractor may then open the work area to passage by the building occupants.

2.7) If during the working day a tenant insists on passing through the work area while work is underway the contractor shall stop work, clean the area of visible debris, issue the tenant disposable shoe covers to the tenant, escort them through the work area, and then collect and properly dispose of the shoe covers. In lieu of shoe covers, the contractor may provide tenants with the means to clean their shoes after passing through the work area.

3. The contractor shall normally do all work in the public areas from the top floor down.

REQUIREMENTS - OCCUPIED APARTMENTS

1. The Contractor shall ensure that occupants, and their belongings, of any dwelling affected by dust and debris generating procedures are protected by plastic from any exposure to dust, chips or other debris arising out of work activities performed by the contractor.

2. The Contractor will remove furniture and other personal items from the room where dust and debris generating activities take place. If this is not feasible, all furniture and personal belongings will be moved as far from the work area as possible and covered by a minimum of two layers of 6-mill polyethylene secured with duct tape. In the case of refrigerators the Contractor shall make every effort to move the appliance out of the work area prior to work. If this is not possible, the appliance shall be covered with at least two layers of 6-mill polyethylene to protect it from dust, chips, etc.

   NO STOVE OR OVEN WILL BE ALLOWED TO REMAIN COVERED BY POLY UNLESS THE CONTRACTOR HAS DISCONNECTED THE APPLIANCE. If this is not possible, the contractor shall erect a barrier to prevent dust from getting into or on to the appliance. This barrier shall be a safe distance from the stove to prevent fire. The stove will be thoroughly wet-cleaned and HEPA vacuumed at lunch breaks and at the end of the day/project.

3. As soon as practical, the disturbed or broken surfaces in the work area should be "safely restored" to enable the occupant to resume use of the space. "Safely restored" means:

   3.1) All surfaces from which paint or plaster has been removed have been re-sealed with paint, spray glue, epoxy or other approved sealant,

3.2) or any openings made in a wall is restored with sheetrock or new lath and plaster, and seams between the new installation and old surface are securely sealed,

3.3) and all demolition and removal work or other work likely to produce lead contaminated dust, paint chips, or debris has been completed. (It does not mean that all construction work in the area is necessarily complete.)

3.4) And the work area has been properly cleaned.

4. If the demolition work in the work area is not accomplished in one day the area shall be HEPA vacuumed prior to the contractor leaving the work area. Until the contractor can safely restore and clear the work area he must maintain the protective enclosure and attach a warning notice.

5. When work has been completed the contractor shall clean in the following order:

5.1) Remove the inner layer of vertical polyethylene first, starting at the top and folding downward and on to the floor. Then remove the top layer of floor poly by continually folding inward. Remove the second layer of floor poly.

5.2) Remove the remaining poly barrier and the poly covering the furniture and personal items which shall be the last to be removed.

5.3) Clean the work area of all visible debris and clean all ceilings, walls, and floors using the standard HEPA vacuum/wet wash/HEPA vacuum procedure.

6. The contractor shall seal the polyethylene in a leak-tight container and dispose of all debris in accordance with applicable federal, state, and local regulations.

ADDITIONAL PROCEDURES

1. Protective Barriers

   The contractor shall construct protective barriers to protect the work area or room with a minimum of minimum of two layers of 6-mill polyethylene sheeting. There shall be a protective entrance into the work area. The entire floor of the work area/room shall be covered in two layers of 6-mill polyethylene sheeting. The sheeting shall be secured on all four sides by duct tape and the integrity of this protective barrier shall be maintained at all times.

2. Protective entrances

   The contractor shall construct a protective entrance/exit into any barrier protected areas. This protective entrance shall be in the form of a primitive air-lock which shall be constructed using two sheets of 6-mill plastic. First, securely tape one sheet of plastic on the top, bottom, and two sides of the doorway. Next, cut a vertical slit about 5 ft long down the middle of this plastic sheet. Finally, tape the second sheet of plastic across the top of the doorway so that hangs down to the floor and acts as a flap covering the slit in the first sheet of plastic. The flap should open into the work area. The integrity of this doorway shall be maintained at all times during the project.

3. Tenting for demolition of small areas

   When conducting removal of minor amounts of plaster, wallboard, etc., or removing windows, doors etc., the contractor may erect a "tent" containment in lieu of the procedures listed above. The tent shall be a fully contained work area independent of the rest of the dwelling. Wood 2" x 4"'s, piping, or other rigid material may be used to frame the enclosure.

   The interior of the framework shall be fully lined with 2 layers of 6-mill polyethylene and a protective entrance shall be installed. The tent shall be sealed on all sides so that the demolition and removal work will not cause dust, paint chips, or debris to affect the outside area.

   Clean-up and removal of debris shall be done as described above.

4. Window Replacement

   When conducting window replacement or other window treatment in an occupied unit or public area, the contractor may place two layers of 6-mill plastic sheeting on the floor or ground extending 5 feet beyond the perimeter of the window (the work area).

The contractor should take precautions to prevent debris and dust from falling out of window.

Remove furniture, other personal items and equipments, etc. from the work area and adjacent areas outside of building or seal with taped sheeting.

The resident may remain inside the dwelling but must stay outside of the work area. Residents must have access to a lead-safe entry/egress pathway.

Clean-up inside of the dwelling and outside of the building, as required, and remove debris as described above. HEPA vacuum, wet wash and HEPA vacuum all interior surfaces within 10 feet of work area in all directions.

5. Carpet Cleaning

The contractor shall clean carpets to remain using the following procedure:

5.1) HEPA vacuum with beater bar at a rate no faster than 1 minute for every 10 square feet.

5.2) Fold rug in half and HEPA vacuum bottom of rug without beater bar at a rate no faster than 1 minute per 10 square feet.

5.3) HEPA vacuum bare floor and any padding (no rate restriction or beater bar, but approximately 10-30 sec/10 sq. ft).

5.4) Fold other half of rug over and repeat steps 2 and 3 (no rate restriction and no beater bar, but approximately 10-30 sec/10 sq. ft).).

5.5) Fold rug back over so it is in its original position (approximately 10-30 sec/10 sq. ft).

5.6) HEPA vacuum top side of rug a final time with the beater bar. The rate is no faster than 2 minutes per 10 square feet.

6. Floor Sanding (Painted floors)

The contractor shall use a "negative air" machine (NI0SH, 1993a) to control contamination of adjacent areas when sanding all floors which have been painted. Work areas shall be secured with the protective barrier described above. At least 10 air changes per hour should be provided and all exhaust air must be passed through a HEPA filter.

7. Paint Removal (as required for radiators, blind risers, stair metal work and misc. metals where required and for wood trim in historic buildings).

A. The recommended method of paint removal for the above components is to use chemical paint removers which do not contain methylene chloride. On-site use of such chemical strippers shall be done with the proper precautions with regard to protecting workers and tenants. The contractor shall use special care with caustic paint removers and those containing volatile substances (mechanical ventilation is required for by the latter). The contractor must follow all OSHA rules, i.e. chemically resistant clothing and gloves and face shields, proper ventilation and a full shower within the abatement area. Follow instructions for chemical stripping application as recommended by manufacturer. Floors shall be properly protected and plastic may not be an effective barrier.

The contractor shall take similar precautions if carrying out the paint removal off-site. Before materials are returned from the paint stripper, they should be wrapped in 6-mill plastic and sealed with tape to avoid recontamination on-site. Before reinstallation, the treated components should be cleaned using the standard HEPA vacuum/wet wash/HEPA vacuum cycle.

B. The Contractor shall properly dispose of the chemical stripper waste; it is almost always a hazardous waste. Subsequent to the paint removal, the stripped surface shall be thoroughly cleaned to remove all paint remover residues.

C. Other methods of paint removal may be used if applicable and pre-approved by HPD such as HEPA sanding, HEPA vacuum blasting and using a HEPA vacuum needle gun.

D. The Contractor shall not use “prohibited methods” of paint removal such as a)open flame burring or torching; machine sanding or grinding; c) uncontained hydro-blasting or high -pressure water wash; d) abrasive blasting or sandblasting.