

SECTION VIII. FUGITIVE DUST

No person shall cause or permit the handling, transporting, storing or disposing of any substance or material which is likely to be scattered by the wind, or is susceptible to being wind-borne, without taking effective precautions or measures to prevent air contamination. No person shall operate or maintain, or allow or cause to be operated or maintained, any premises, open area, right of way, storage piles, or vehicle, or any construction, alterations, demolition, or wrecking operation, or any other enterprises, which involves any material or substance likely to be scattered by the wind, or susceptible to being wind-borne, without effective precautions or measures to prevent air contamination. No person shall maintain, conduct, or use, or cause to be maintained, conducted, or used, any parking lot, or similar areas, unless the lot, area, or roadway is maintained in such manner as to prevent air contamination.

SECTION IX. CONTROL OF DUST FROM CONSTRUCTION AND DEMOLITION ACTIVITIES

Notwithstanding Sections IV., VII., and VIII. of this Regulation governing visible, particulate, and fugitive dust emissions, the following requirements apply specifically to construction and demolition.

- A. Public Notification of Construction and Demolition Activities to Occupants of Nearby Properties
 1. The owner or operator of construction or demolition activity, where the structure being constructed or demolished is less than two (2) stories in height shall:
 - a. Not less than ten (10) days before commencing construction or demolition activities, distribute written notification that: 1) identifies the owner and or operator of the construction or demolition activity, 2) identifies the construction contractors working on the site, 3) states the date(s) and duration of the construction or demolition activity, 4) identifies dust control measures that will be used on the work site, and 5) includes contact information for the Department. The written notification must be distributed to the occupants of properties that are immediately adjacent to the work site.

2. The owner or operator of construction or demolition activity, where the structure being constructed or demolished is greater than or equal to two (2) stories in height shall:
 - a. Not less than ten (10) days before commencing construction or demolition activities, distribute written notice that 1) identifies the owner and operator of the construction or demolition activity, 2) identifies the construction contractors working on the site, 3) states the date(s) and duration of the construction or demolition activity, 4) identifies dust control measures that will be used on the work site, and 5) includes contact information for the Department. The written notification must be distributed to the occupants of the three (3) nearest properties on either side of the work site, the seven (7) nearest properties across the street from the work site, and the seven (7) nearest properties to the rear of the work site.
3. If construction or complete demolition is to be performed to correct unsafe or imminently dangerous conditions on the property as determined by the Department of Licenses and Inspections, the public notice requirements of Section IX.A.1.-2. of this Regulation must be complied with as early as possible before commencement of such construction or demolition activities.
4. Copies of any written notification required by this Section must be retained at the work site by the owner and operator, and otherwise be available for inspection by the Department.
5. The public notification requirements of Section IX.A. of this Regulation do not apply to the following activities:
 - a. Construction, installation, or repair of buildings' structural beams, load bearing supports, walls, ceilings, floors, mechanical systems, electrical systems, plumbing, fixtures, cabinets, shelves, countertops, appliances, and other interior finishing work when such construction or installation will occur in a completely enclosed space or structure that is not open to the outside air.
 - b. Demolition or removal of buildings' structural beams, load bearing supports, walls, ceilings, floors, mechanical systems, electrical systems, plumbing, fixtures, cabinets, shelves, countertops, and other interior finishing work when such construction or installation

will occur in a completely enclosed space or structure that is not open to the outside air.

- c. Installation or removal of portable units, including ventilation equipment, heating appliances, cooling units, evaporative coolers, clothes drying appliances, and fuel cell appliances that are not connected to a fixed piping system and are not interconnected to a power grid.
- d. Installation or removal of steam, hot or chilled water piping within any heating or cooling equipment regulated by Title 4 of The Philadelphia Code, known as the “Philadelphia Building Construction and Occupancy Code.”
- e. Construction or demolition of water tanks supported directly on grade where the tank capacity does not exceed five thousand (5,000) gallons and the ratio of height to diameter or width does not exceed 2-to-1.
- f. Construction, demolition, or repair of utility infrastructure (sewer, electrical, water, telecommunications), street furniture, sidewalks, surface streets, tunnels, bridges, and other similar structures within the public right-of-way.
- g. Replacement of exterior stairs, ramps, platform lifts, steps and landings accessory to a one or two family dwelling, provided that the replaced structure does not exceed 6 feet in vertical height; does not encroach upon the public right-of-way; and the landing does not have a surface area greater than 36 square feet with no individual dimension greater than 6 feet. This exclusion does not require vertical enclosure of the covered element(s) except guards required by the Philadelphia Building Construction and Occupancy Code.
- h. Construction or demolition of sidewalks, driveways, patios, and similar concrete or other hard surface materials constructed on grade where they are not part of an accessible route. This exception includes decks of any material, if accessory to Group R-3 occupancies where the deck is located not more than twelve (12) inches above the ground surface below and is not over a story or basement.

- i. Installation or removal of non-masonry fences that do not exceed six feet in height.
- j. Construction or demolition of masonry fence walls that do not exceed two feet in height.
- k. Construction or demolition of retaining walls that do not exceed two feet in height measured from the lowest level of grade to the top of the wall. This exemption does not include retaining walls that support surcharges or impound Class I, II or III-A liquids.
- l. Installation of window awnings that are supported solely by, and do not project more than fifty-four (54) inches from, the exterior wall of buildings containing Group R-3 or Group U occupancies.
- m. Replacement of non-fire-resistant rated windows and doors in one- and two-family dwellings without structural change (no change in shape or size of existing openings).
- n. Installation or removal of prefabricated swimming pools accessory to Group R-3 occupancies, where the pool is less than twenty-four (24) inches deep, does not exceed five thousand (5,000) gallons and is installed entirely above ground.
- o. Installation or removal of shade cloth structures constructed for nursery or agricultural purposes that do not include service systems.
- p. Installation or removal of swings, playground equipment and structures limited to the use of a household pet, accessory to Group R-3 occupancies.
- q. Construction or demolition of temporary motion picture, television, and theater stage sets and scenery.
- r. Demolition of a structure or building to be performed at the work site via implosion, in compliance with the blasting operation guidelines promulgated by the Office of Emergency Management.

- s. Any other construction or demolition activity that the Department determines to be unlikely to release dust into the outside environment.

B. Dust Control Permits

- 1. Notwithstanding the public notification requirements set forth in Section IX.A. of this Regulation, no person shall -

- a. completely demolish a building or structure that is more than three (3) stories, greater than forty (40) feet tall, or encompasses more than ten thousand (10,000) square feet; or
- b. completely or partially demolish any building or structure by implosion;

without first obtaining a permit from the Department.

- 2. The Department will not issue a permit pursuant to Section IX.B. of this Regulation unless and until the applicant has met all of the following requirements:

- a. For demolitions specified in Section IX.B.1.a. of this Regulation, applicant must submit to the Department a permit application accompanied by the fee required pursuant to Section 3-307(f) of the Air Management Code. The permit application shall include:
 - (1) the name, address, and telephone number of the construction contractor or other person responsible for the demolition;
 - (2) the name, address, and telephone number of the building or structure owner;
 - (3) the address and function (e.g. hospital, office, school, etc.) of the building or structure;
 - (4) a description of the anticipated demolition activity, and the various procedures and related equipment that will be used to comply with work practices and requirements established by Section IX.C. of this Regulation, and any Alternative Methods Requests made pursuant to Section IX.E of this Regulation;

- (5) scheduled starting and completion dates for the project; and
 - (6) any other information which the Department may require.
- b. For implosions specified in Section IX.B.1.b. of this Regulation, applicant must submit to the Department a permit application accompanied by the fee pursuant to Section 3-307(f) of the Air Management Code at least ninety (90) calendar days prior to the scheduled starting date of the implosion. The permit application shall include:
- (1) the name, address, and telephone number of the construction contractor or other person responsible for the implosion;
 - (2) the name, address, and telephone number of the building or structure owner;
 - (3) the address and function (e.g. hospital, office, school, etc.) of the building or structure;
 - (4) a description of the anticipated implosion activity, and the various procedures and related equipment that will be used to comply with work practices and requirements established by Section IX.C. of this Regulation, and any Alternative Methods Requests made pursuant to Section IX.E of this Regulation;
 - (5) plans for conducting air sampling, dust sampling, and post-implosion dust cleanup that comply with the requirements set forth in Section IX.D. of this Regulation;
 - (6) scheduled starting and completion dates for the implosion activity; and
 - (7) any other information which the Department may require.
3. A copy of any Dust Control Permit issued pursuant to Section IX.B. of this Regulation shall be retained at the work site and be available for inspection by the Department.

C. General Work Practice Standards

1. No person shall engage in any cutting, sawing, grinding, wrecking, smashing, or mechanically breaking of construction materials –without the use of at least one of the following:
 - a. Grinders, saws, or other power tools equipped with Dust Collection / Extraction Systems, in accordance with manufacturer recommendations, or
 - b. Adequately wetted construction materials or structure surfaces, weather permitting (e.g. > 32 Degrees Fahrenheit at source of dust emission).
2. The requirements of Section IX.C.1.a. of this Regulation notwithstanding, dry abrasive blasting of exterior surfaces, building facades, and other surfaces open to the outdoor air is prohibited when the temperature at point of abrasive blasting is > 32 Degrees Fahrenheit. When the temperature at point of abrasive blasting is < 32 Degrees Fahrenheit, dry abrasive blasting of exterior surfaces, building facades, and other surfaces open to the outdoor air will be permitted only with the erection of a temporary enclosure, maintained under negative air pressure and equipped with a Dust Collection / Extraction System, around the immediate work area.
3. Debris generated from construction and demolition must be adequately wetted and covered before being transported from the site.
4. Construction materials that are stored on site must be adequately wetted and covered when possible to prevent dust emissions.
5. Roadways on the site, and all vehicle access points to the site, must be adequately wetted and swept of materials that will give rise to dust emissions.
6. Sufficient drainage must be provided to prevent the uncontrolled discharge of water or other liquid applied to the site for dust control.
7. The Department may promulgate Guidelines to establish new work practice requirements, or to clarify existing work practice requirements outlined in this Regulation.

D. Implosion Demolition Requirements

1. Air and Dust Sampling – No person may demolish any building or structure via implosion without conducting sampling that demonstrates the impact of implosion-generated dust in the Dust Impact Zone for the blasting site. Factors including, but not limited to, the location of the blasting site, the condition and use of the various properties around the blasting site, the structure or building to be demolished (e.g. area, height, construction, and age) via implosion, and the prevailing wind direction at the blasting site must be accounted for when designating the Dust Impact Zone, and the sampling locations within.
 - a. At minimum, eight (8) sampling locations spread out within the Dust Impact Zone must be identified. Air and dust wipe samples must be taken at each of the location as follows:
 - (1) Twenty Four – Forty Eight (24-48) Hours Before Implosion – airborne respirable dust sampling, airborne asbestos sampling, and dust wipe samples.
 - (2) Immediately Before Implosion – airborne respirable dust and airborne asbestos sampling only.
 - (3) Fifteen (15) Minutes After Implosion – airborne respirable dust and airborne asbestos sampling only.
 - (4) Fifteen - One Hundred Twenty (120) Minutes After Implosion – airborne respirable dust sampling, airborne asbestos sampling, and dust wipe samples.
 - b. All airborne asbestos samples required by Section IX.D.1.a. of this Regulation shall be taken and analyzed in accordance with National Institute for Occupational Safety and Health (NIOSH) Method 7402 or Environmental Protection Agency (EPA) Interim Electron Transmission Microscopy Analytical Method, 40 C.F.R. § 763, Subpart E, Appendix A. Analysis of these samples shall be completed by an analytical testing laboratory certified pursuant to § 6-604(3) of The Philadelphia Code.

- c. All dust wipe samples required by Section IX.D.1.a. of this Regulation shall be taken from window ledges in the vicinity of previously identified sampling locations and analyzed for lead content pursuant to EPA Method SW846/7420 by an accredited laboratory that participates in the Environmental Lead Proficiency Analytical Testing Program or the National Lead Laboratory Accreditation Program.
- d. All airborne respirable dust samples shall be taken and analyzed in accordance with an applicable NIOSH, EPA, Occupational Safety and Health Administration (OSHA) method, or other equivalent method approved by the Department.
- e. Analysis of all airborne respirable dust, airborne asbestos, and dust wipe sample results shall be submitted to the Department as promptly as possible, but no later than forty eight (48) hours following the implosion event.

2. Post-Implosion Demolition Dust Clean Up

- a. Debris piles on the implosion site shall be adequately wetted as soon as practicable after the implosion event, to suppress dust formation.
- b. All properties, buildings, and sidewalks around the work site that are impacted by implosion-generated dust shall be cleaned with water applied via hand sprayers.
- c. All streets around the work site impacted by implosion generated dust shall be cleaned with water and swept as necessary.
- d. Discharge of water applied for dust control or post-implosion dust clean up pursuant to this Section into the City sewer system is prohibited.

E. Alternative Method Requests

The Department may approve alternative methods for dust control during construction and demolition activities. Any request for approval of alternative dust control measures shall include the reasons for not using the methods prescribed by Section IX.C.-D. of this Regulation, and descriptions of the proposed alternative methods.