

CHAPTER XVII

NATICK BOARD OF HEALTH

RULES AND REGULATIONS FOR CONDUCTING ABRASIVE BLASTING

SECTION I GENERAL STATEMENT

- 1.0 No person shall engage in abrasive blasting within the Town of Natick without first obtaining a license.

SECTION II ABRASIVE BLASTING

- 2.0 Dry and wet abrasive blasting on the exterior surfaces of a building or other structure is prohibited.
- 2.1 Dry and wet abrasive blasting on interior surfaces is permitted if the licensee is in compliance with Sections VI through IX inclusive.
- 2.2 Abrasive blasting is allowed as part of a manufacturing or repair process conducted at a location zoned for manufacturing, if licensee is in compliance with Sections VI through IX inclusive.
- 2.3 Mist abrasive blasting is allowed if the licensee is in compliance with Sections VI through IX inclusive.

SECTION III DEFINITIONS

- 3.0 Abrasive Blasting - As used in these regulations shall include both dry, wet and mist abrasive blasting.
- 3.1 Abrasive Material - Substance which is used to abrade or clean a surface.
- 3.2 Air Contaminant - any substance in the ambient air space including, but not limited to dust, fume, mist, odor, smoke, vapor, heat, any combination thereof, or any reaction product thereof.

- 3.3 Air Contamination Source - Any source at, from, or by reason of which any air contaminant is emitted directly into the ambient air space.
- 3.4 Ambient Air Space - The unconfined space occupied by the atmosphere above the geographical area of Natick.
- 3.5 Atmosphere Pollution - The presence in the ambient air space of one or more air contaminants or combination thereof in such concentration and of such duration as:
- (a) To cause a nuisance;
 - (b) To be injurious or tend to be injurious to human or animal life, vegetation, or to property, or
 - (c) To unreasonably interfere with the comfortable enjoyment of life and property or the conduct of business.
- 3.6 By-products - Used abrasive material, paint chips, dust or any other material resulting from the operation.
- 3.7 Contractor - A person who contracts to perform abrasive blasting work at a certain price or rate.
- 3.8 Dangerous Level of Lead - Level which materially endangers the health of children or adults, by producing a substantial and serious danger of lead poisoning. When present in paint, a dangerous level shall be deemed, pursuant to M.G.L. Chapter III section 194 and 196, to be following:
- (a) More than 0.5 percent lead by dry weight as measured by an atomic absorption spectrophotometry test of sample or by testing with 6 to 8 percent sodium sulfide solution.
 - (b) More than 1.2 milligrams of lead per square centimeter of surface as measured on site by a mobile x-ray

fluorescence analyzer or comparable equipment.

- 3.9 Department - The Natick Board of Health.
- 3.10 Dry Abrasive Blasting - Propulsion of a stream of abrasive material by means of air, steam, or other gas under pressure, for the purpose of abrading or cleaning a surface.
- 3.11 Dust - Finely divided solid matter.
- 3.12 Emission - Discharge or release to the ambient air space of any air contaminant.
- 3.13 Fume - Any aerosol resulting from chemical reaction, distillation, or sublimation.
- 3.14 Mist - Any liquid aerosol formed by the condensation of vapor or by the atomization of liquids.
- 3.15 Mist Abrasive Blasting - Application, for the purpose of abrading or cleaning a surface, of a water mist together with an abrasive material which has been propelled by means of compressed air, steam or other gas.
- 3.16 Odor - That property of gaseous, liquid or solid materials that elicits a physiologic response by the human sense of smell.
- 3.17 Operator - A person who performs abrasive blasting.
- 3.18 Particulate Matter - Any material that exists in a finely divided form as a liquid or solid in the ambient air.
- 3.19 Person - An individual, partnership, association, firm, syndicate, company, trust, corporation, city department, bureau, agency, or any other entity recognized by law as the subject of rights and duties.
- 3.20 Smoke - Visible aerosol, which may contain fly-ash, resulting from combustion of materials.

- 3.21 Vapor - The gaseous state of certain substances that can exist in equilibrium with their solid or liquid states under standard conditions.
- 3.22 Wet Abrasive Blasting - Application, for the purpose of abrading or cleaning a surface, of a stream of water under pressure together with an abrasive material which has been propelled by means of compressed air, steam or gas.

SECTION IV LICENSE

- 4.0 A license may be obtained by filing an application with the Department on forms provided by said department.
- 4.1 All licenses shall expire 12 months from date of issue.
- 4.2 Fee for annual license shall be as posted in the Natick Board of Health Regulations-Fee Schedule.
- 4.3 All license holders must comply with the regulations adopted herein.

SECTION V PERMITS

- 5.0 A permit, specific in location and time, shall be obtained from the Department before abrasive blasting is commenced.
- 5.1 Permits shall be granted only to abrasive blasting license holders.
- 5.2 Application for permit (s) shall be made on forms provided by the Department.
- 5.3 Fee for each permit shall be as posted in the Natick Board of Health Regulations - Fee Schedule.
- 5.4 Permits shall be available at the work site during the duration of the blasting process.
- 5.5 A permit shall not be necessary when the blasting operations are conducted on the premises of the license holder.

- 5.6 Authorized agents of the Department shall conduct on-site inspections to ensure compliance with all applicable regulations.

SECTION VI REQUIREMENTS

6.0 Dry Abrasive Blasting

- (a) Dry abrasive blasting may be used as part of an indoor abrasive blasting process in which the operation is completely enclosed to prevent emission to the ambient air space. Cleanup must be accomplished inside the enclosed space.
- (b) Dry abrasive blasting may be used as part of a manufacturing or repair process.
- (c) All dry abrasive blasting shall meet all of the requirements listed in Sections 6.1 through IX, inclusive.

6.1 Mist Abrasive Blasting

- (a) Mist abrasive blasting activities shall be so enclosed or curtained off to prevent the escape onto public property, rights-of-way, or the property of others, any air contaminant, particulate matter, or by-products of the operation. A drop cloth shall be spread on the ground at the base of the work area to prevent contamination of the soil. No abrasive blasting may take place if the wind would cause particulate matter to escape outside the area enclosed in accordance with this regulation.

(b) All enclosures are to be inspected prior to the start of each work day by the contractor or operator. Enclosures which show excessive wear at any time, e.g. large holes or tears, are to be adequately repaired or discarded. All enclosures which are joined together shall be adequately fastened to prevent any escape of particulate matter.

(c) The following precautions shall be taken at all times during the blasting operation:

1. Protection of gardens, vegetation or specially planted areas on-site and adjacent properties.
2. Protection of permanent play equipment, sandboxes, pools, and any other items that may not be readily removed from possible exposure to particulate matter on-site or adjacent properties.
3. Adequate protection of all areas where the blasting operation is in close proximity to playgrounds, parks, or any other area where use by the general public may pose a potential health problem.

(d) The operator shall be responsible for securing the work site against on-lookers, especially children who reside at the work site, and cease operation immediately if it is found that any

member of the general public is exposed to the abrasive material, air contaminants, or any by-product of the operation.

(e) Every attempt shall be made to locate and eliminate the source of offensive odors, smoke, dust or any air contaminant either resulting from the abrasive operation or equipment used in conducting said operation.

6.2 (a) The re-use of abrasive material is prohibited.

(b) Abrasive material shall not contain any free silica.

6.3 Employees or persons engaged in the performance of any aspect of the blasting operation shall be protected against the inhalation of particulate matter through the use of all protective devices including without limitation dust respirators approved by OSHA, or the American National Standards Institute (ANSI). Employees and other persons engaged in abrasive blasting should also wear goggles when blasting or cleaning up.

SECTION VII LEAD TESTING

7.0 If the surface to be abraded has been painted, the paint shall be tested for the presence of lead by the Department or the Massachusetts Department of Public Health, Division of Lead Poisoning Prevention, before a permit will be issued.

7.1 If dangerous levels of lead are found to be present, no humans and animals shall be allowed in the immediate area until the clean-up procedures outlined in Section IX have been completed.

SECTION VIII ABUTTER NOTIFICATION

- 8.0 Although not required by these regulations it is recommended and encouraged that the owners of abutting properties be notified of the intended dates of abrasive blasting.

SECTION IX CLEAN-UP PROCEDURES

- 9.1 Cleaning equipment shall include equipment designed to remove used blasting material and surface material, (i.e., paint chips, dust, and other particulate matter) from lawns, shrubs, and any other area exposed to visible abrasive material, or by-products. Cleaning of roofs, gutters, porches, lawns, and any other area shall not be accomplished by using the compressed air system used for blasting purposes. Recovery systems shall also be equipped with filters to prevent the emission of particulate matter, dust, or other visible materials. For the purpose of this section an industrial type vacuum designed and capable of recovering blasting materials and all by-products shall be sufficient and a broom shall be insufficient.
- 9.2 The site is to be cleaned and all abrasive material is to be removed from the site at the end of the work day unless and to the extent that the site can be secured against the potential for exposure, to abrasive material, of children, pets, or any other person(s) after the operator has left the site.
- 9.3 It shall be the responsibility of the contractor or operator to prevent ground contamination as a direct result of any abrasive material, chemical, or solvent used during the blasting operation or failure to recover all material and by-products.
- 9.4 All cleaning operations shall include all adjacent areas as deemed necessary by the inspector.
- 9.5 Disposal of all particulate matter shall be in accordance with DEQE Regulations and at a site approved by DEQE. Lead contaminated paint (waste material) removed from homes by either homeowners or contractors is exempt from the Massachusetts Hazardous Waste Regulations and should be disposed of in accordance with 310 CMR 19.000, Regulations for the Disposal of Solid Wastes by Sanitary Landfills, at an approved DEQE Sanitary Landfill. Such waste material, however, removed from any other structure, which is in a

quantity greater than 20 kilograms and fails the E.P. Toxicity Test is subject to the Massachusetts Hazardous Waste Regulations, 310 CMR 30.000 should be disposed of accordingly.

SECTION X EVIDENCE OF VIOLATION

10.0 Any of the following conditions shall be prima facie evidence of violation and can result in revocation of any license or permit issued and the immediate cessation of the blasting operation:

- (a) Operating without an abrasive blasting license or permit.
- (b) Failure to enclose or curtain off that area of the building undergoing abrasive blasting.
- (c) Visible emission of particulate matter or air contaminants outside of the area enclosed in accordance with Section 6.1.
- (d) Failure to ensure adequate precautions against ground surface contamination as required by Section 6.1 (a).
- (e) Failure to clean property in accordance with Section IX.

Public Hearing
September 14, 1987

Adopted
September 14, 1987

Approved by Massachusetts Department of Environmental Quality Engineering in accordance with the provisions of Section 31C of Chapter III of the Massachusetts General Laws - December 9, 1987.
Effective Date - March 1, 1988

Natick Board of Health

Richard N. Abbott, M.D.
Chairman
Arthur Taddeo, M.Ed.
J. Cary Parsons, M.S.

SECTION XI PENALTY

(a) Criminal Complaint - Whoever violates any provision of these rules and regulations may be penalized by indictment or on complaint brought in the District Court. Except as may otherwise be provided by law, and as the District Court may see fit to impose, the maximum penalty for any violation of these provisions shall be \$300.00 for each offense.

(b) Non-Criminal Disposition - Whoever violates any provision of these rules and regulations may, in the discretion of the Health Agent, be penalized by a non-criminal complaint in the District Court pursuant to the provisions of the Massachusetts General Laws, Chapter 40, Section 21D. For the purpose of this provision the penalty to apply in the event of a violation shall be as follows: \$50.00 for the first offense; \$100.00 for the second offense; \$200.00 for the third offense; and \$300.00 for the fourth and each subsequent offense. Each day on which a violation exists shall be deemed to be a separate offense.

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BOARD OF HEALTH
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