



ORDINANCE

AMENDMENTS TO THE EXPLOSIVE MATERIALS CODE

CITY OF NASHUA

In the Year Two Thousand and Eighteen

The City of Nashua ordains that Part 2 “General Legislation”, Chapter 156 “Fire Prevention”, Article IV “Fire Prevention Code” of the Nashua Revised Ordinances as amended, is hereby further amended by adding the following new underlined section:

§ 156-8.1. Amendments to the Explosive Materials Code.

Section 65.9.1 of the 2009 Edition of the National Fire Protection Association NFPA 1 Fire Prevention Code states:

“65.9.1 The manufacture, transportation, storage, sale, and use of explosive materials shall comply with NFPA 495, *Explosive Materials Code*, and NFPA 498, *Standard for Safe Havens and Interchange Lots for Vehicles Transporting Explosives.*”

In addition to State law, State administrative rules, and the above-referenced adopted NFPA Codes, the City has the following additional requirements with respect to explosives and blasting:

A. Permit Application.

- (1) Permit applications and all required documentation shall be submitted to the Nashua Fire Marshal a minimum of seven (7) days prior to scheduled commencement of work for review and verification of completeness of application. Any omission of required information shall be considered a reason for denial.
- (2) Permits will be issued no more than seven (7) days in advance of the blast and will be valid for no more than seven (7) days as identified by the dates listed on the permit, and may be extended per approval of the Fire Marshal, subject to an additional fee.

(3) The following must be submitted with the application:

- (a) A copy of the license issued under RSA Chapter 158 by the State Police to the Applicant allowing purchase, storing, and transport of high explosive, along with proof of identification.
- (b) A copy of blasting supervisor's and all other blaster's Certificates of Competency for Explosives issued under RSA Chapter 158 by the State Police.
- (c) A list of owner(s) of the property and/or responsible parties.
- (d) A letter of permission from the property owner(s) of the blasting or explosives discharge site.
- (e) Approved, stamped Site Plan delineating area of blasting.
- (f) A Blast Plan consisting of a detailed map and plan locating the blast site, blast area, all buildings and structures within five hundred (500) feet of the blast area or such extended distance as may be specified by the Fire Marshal.
- (g) Copies of Safety Data Sheet (SDS) and/or Technical Data Sheet information for all products, materials and compounds that will be used on the site in association with the blasting operation.
- (h) Insurance requirements as follows:
 - 1. Coverage must be written with an insurance carrier licensed to do business in the State of New Hampshire. Certificate of insurance must name the City of Nashua as additional insured.
 - 2. City of Nashua requires thirty (30) days written notice of cancellation or material change in coverage.
 - 3. Comprehensive General Liability - \$1,000,000 per occurrence; \$2,000,000 aggregate.
 - 4. Certificate of insurance must reflect that coverage includes blasting.
 - 5. Motor Vehicle Liability - \$1,000,000 combined single limit.
 - 6. The certificate holder must be listed as: City of Nashua, 229 Main Street, Nashua, NH 03060
 - 7. Workers' Compensation – As required by statute.

(4) Prior to acting on any permit the Fire Marshal may consult with such federal, state and/or City officials and employees whose area(s) of responsibility are, or may be, affected by the proposed blasting operation.

(5) After review and verification by the Fire Marshal, or as determined by the Fire Marshal by an independent expert on an as needed basis at the applicant's expense, the Fire Marshal shall act on the application and either issue the permit, with any condition(s) necessary to achieve the purposes of State Law or Regulation, NFPA Codes, or City Ordinances, or deny the permit application, along with the reason(s).

B. Additional Pre-Blast Inspection Requirements.

(1) Prior to conducting any blasting, the Applicant or their agent shall conduct pre-blast structural condition inspections on all structures within two hundred and fifty (250) feet from the location of all proposed blasts or such extended distance as may be specified by the Fire Marshal prior to permit issuance. The preblast survey shall document the existing visual conditions of the interior and exterior of the structure including improvements to the property and other physical factors that could reasonably be affected by the blasting. Structures such as pipelines, cables, transmission lines, cisterns, wells, and other water systems warrant special attention; however the assessment of these structures may be limited to surface conditions and other readily available data.

(2) The individual person or entity conducting the inspection shall give written notice, not less than ten days in advance, to the owner of the property concerned, as well as to any tenants of the property. The notice shall include:

(a) Information on the blasting that will take place.

(b) When blasting may occur, including dates and times, or a range of dates and times.

(c) A five (5) business day window for a property owner and/or tenant to request a pre-blast inspection.

(d) The mailing address, e-mail address and telephone number those property owner and/or tenants can use to obtain information regarding the blasting or inspections, and to request at no cost, pre-blast inspections.

(e) The mailing address, e-mail address and telephone number and instructions about how and where to contact the Applicant, or his or her representative concerning blast-related complaints or claims.

(3) Pre-blast inspections.

(a) Descriptions on the pre-blast inspection shall locate any existing cracks, damage, or other defects, and shall include such information so as to make it possible to determine the effect, if any, of the blasting operations on the defect.

(b) Where significant cracks or damage exists, or for defects too complicated to describe in words, photographs or videos shall be taken. A photographic or video survey can be used in lieu of a written form.

- (c) The Applicant, as well as the owner and/or tenant of the property being inspected, shall sign all such inspections once completed.
- (d) A property owner and/or tenant refusal, for whatever reason, to allow a pre-blast inspection, or to sign a pre-blast inspection form, shall be noted on the pre-blast inspection form.
- (e) The Applicant shall provide copies of the completed pre-blast inspections to each property owner and/or tenant. When a blast inspection is complete, with written consent of the property owner and/or tenant, the Fire Chief, the Fire Marshall or their designees shall be permitted to request a copy.
- (f) The inspections shall be kept by the Applicant and be made available to the City, property owner and/or tenant pursuant to B.3(e), upon request, for a minimum of five (5) years from the end date of the last blasting permit issued.

C. Post-Blast Inspections and Blasting Damage Complaints.

- (1) Any property owner and/or tenant can request, and receive at no charge, a post-blast inspection, following the same requirements in B(3), above.
- (2) Upon receipt of any blasting damage complaint, the Applicant shall notify the Fire Marshal of the complaint and provide a copy of the blasting complaint within twenty-four (24) hours. The Applicant shall also provide a copy of the Applicant's blasting complaint investigation findings when completed to the Nashua Fire Marshal's Office.

D. Seismic Measuring Devices.

- (1) Prior to conducting any blasting, the Applicant or their agent shall identify the two closest structures to the blasting site not owned by the owner of the blast site, that are within five hundred (500) feet or such distance as designated by the Fire Marshal, and request written permission from the owner(s) thereof to install and monitor seismic measuring equipment.
- (2) The Applicant shall make two attempts to obtain such permission.
- (3) If the second attempt is unsuccessful, the seismic measuring equipment shall be installed between the structure and the blast location as close as reasonable to the structure.
- (4) An explanation of the reason for such location shall be made on the vibration monitoring report for such structure and the peak particle velocity (in inches/second) shall be extrapolated to the structure using standard relations.
- (5) Blasting seismographs used to monitor ground and air vibrations shall comply with the most recent version of the International Society of Explosive Engineers (ISEE) "Performance Specifications for Blasting Seismographs".

- (6) Where used, blasting seismographs shall be deployed in the field according to the most recent version of the ISEE "Field Practice Guidelines for Blasting Seismographs".
- (7) The Fire Marshal may require additional measuring devices when necessary to protect property.
- (8) If an owner refuses to allow for or waives the placement of seismic measuring equipment, the Applicant shall note this on the vibration monitoring report.
- (9) Documentation of any such refusal shall be filed with the Nashua Fire Marshal's Office to include the date, time and, if available, the names of the persons giving the refusal.

E. Blasting Notification.

- (1) The Applicant shall contact the non-emergency number for Nashua Fire Dispatch not less than each day before blasting, and fifteen (15) minutes before the scheduled blast and provide the address of the blasting site, the total pounds of explosives and the number of charged holes.
- (2) The Applicant shall notify the Fire Dispatch when the "all clear" has been given after the scheduled blast.
- (3) Signboards and flags indicating areas where blasting operations are occurring shall be clearly visible and legible from all points of access to the area.
- (4) Blast area signs shall clearly indicate the length and nature of audible blast warning and all clear signals.
- (5) The Applicant shall use sirens or horns or both sirens and horns with sufficient intensity such that they can be heard for a minimum distance of one thousand (1,000) feet in all directions.

F. Fly Rock Control.

- (1) Except as previously approved by the Fire Marshal, all blasts within one thousand (1,000) feet of any structure, power transmission line or communications tower shall be covered with an adequate blasting mat or shield and secured together properly.
- (2) In the event that flyrock is identified beyond the blast site or lands on or within fifteen (15) feet of a traveled roadway the Applicant shall cease all blasting operations.
- (3) Immediate notification shall be made to the Fire Marshal of the flyrock incident and the locations of where the flyrock had landed.

- (4) The blasting contractor shall review the flyrock incident and determine the cause and solution for the incident. This report shall be filed with the Fire Marshal prior to issuance of any further blasting permits.

G. Blasting Monitoring.

- (1) The Fire Marshal reserves the right to have personnel on site at any time at a cost to the Applicant to monitor any and all activities of the Applicant. These representatives shall have the right to order all blasting operations to cease at any time.
- (2) The City reserves the right to require additional condition surveys and/or placement of seismic measuring equipment on properties should the need arise due to complaints or other causes.
- (3) The City reserves the right to require an independent expert observer to ensure that all laws and requirements are being met should there be a concern based on prior experiences or acts.
- (4) The costs associated with these additional requirements shall be borne by the Applicant.

H. Storage of Explosive Materials On Site.

- (1) The unsupervised storage of explosive materials or blasting agents on site is hereby prohibited in the City of Nashua.
- (2) The supervised storage amount on-site is limited to the amount planned for a single daytime use for times outlined in the Blasting Permit.
- (3) Loaded explosives intended for detonation are considered storage for blasting purpose. In the event that there are issues that may arise preventing the detonation of explosives, the Applicant shall immediately notify the Fire Marshal for further actions and requirements.

I. Notifications.

- (1) Emergency Notifications. An Applicant shall immediately report to Nashua Fire Rescue and Nashua Police Department:
 - (a) The discovery of any loss, theft, or unlawful removal of explosive materials.
 - (b) If there is any explosion, fire or other accident occurring in connection with the keeping, storage, manufacture, handling, transportation, use or other disposition of explosives causing loss of life or injury to any person or damage to property.
 - (c) Any loading of holes or blasting which occurred without a valid permit issued by the Fire Department.

- (2) Non-Emergency Notifications. Notification shall be made by telephone to the Fire Marshal's Office for incidents involving, but not limited to:
 - (a) Improper loading of holes.
 - (b) Minor damage following any blast.
 - (c) Any complaints received.
- (3) The Applicant shall follow up any Emergency or Non-Emergency Notification with a written incident report, submitted to the Fire Marshal's Office within twenty-four (24) hours.
- (4) These notifications will not relieve the Applicant of any other required state or federal notifications.

J. Additional Prohibitions.

- (1) Applicants shall only detonate explosives between the hours of 8:00 a.m. and 5:00 p.m. unless authorized by the Fire Marshal.
- (2) No blasting or explosive discharge shall be conducted on Saturdays or Sundays or on days observed as state or national holidays unless approval has been obtained from the Fire Marshal.
- (3) No blasting or loading of explosives shall be conducted after an order to cease blasting operations has been issued by the Fire Marshal and communicated to the Applicant.
- (4) No drilling shall take place within fifty (50) feet of any loaded hole(s.)
- (5) No holes shall be loaded except those to be fired in the next round of blasting
- (6) Impacts to surface water or groundwater shall be controlled by using industry best practices.
- (7) All explosives are to be shot on the day they are loaded.
- (8) After loading, all remaining explosives shall be immediately returned to the appropriate magazine or storage containers. Any residue spilled shall be completely cleaned up and containerized or reloaded into another hole to be shot.

K. Revocation and Restoration of Permit; Violations.

- (1) The Fire Marshal may revoke any permit upon a showing that the Applicant has violated any provision of State Law or Regulation, NFPA Codes, City Ordinance, or any requirement or condition of the issued permit.
- (2) Any blasting or explosive discharge that occurs without a permit may result in a thirty (30) day revocation pending an investigation by the Fire Marshal and/or the New Hampshire State Police.

- (3) Any permit may be revoked or suspended upon a showing that a condition or conditions exist which warrant such revocation or suspension upon determination by Fire Marshal.
- (4) The Fire Marshal may restore any permit that has been revoked upon a showing that the conditions(s) leading to the revocation have been corrected.
- (5) Violations of these ordinances shall be subject to the general penalty provision of §1-12 of this code. Each day a violation exists shall be a separate offense.

L. Waivers for Emergency Conditions.

In situations that pose a possible or perceived danger to safety, the Fire Marshal may, for a limited time, waive any City Ordinance as may be necessary to avoid and/or lessen that danger.

M. Interpretation.

If there is any conflict between, or different requirements or standards found in, State Laws and Regulations, the NFPA Codes, and City Ordinances, the more stringent requirement or standard shall apply.”

All ordinances or parts of ordinances inconsistent herewith are hereby repealed.

This legislation shall take effect upon passage.