

**Chapter 47**

**BLASTING AND/OR EXPLOSIVE DEMOLITION**

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**Appendix A, Blasting Application-Permit**

**[HISTORY: Adopted by Annual Town Meeting May 14, 2008 as Article 27.]**

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### **§ 47-1. Purpose.**

It is hereby found and declared that the preservation and promotion of the public safety and the preservation of community peace and quiet requires that the Town of Bow (hereinafter "Bow" or "Town") act to assure that blasting within the Town is conducted in a safe, responsible and proper manner.

### **§ 47-2. Authority.**

This ordinance is adopted pursuant to the authority of state law, currently codified as New Hampshire RSA 31:39(e) and (n), RSA 154:18, RSA 153:5 and RSA 158:9-f II.

### **§ 47-3. Title.**

This ordinance shall be known as, and may be cited as, the Bow Blasting Ordinance.

### **§ 47-4. Definitions.**

For the purpose of this ordinance, the following words and phrases when used herein shall be construed as follows:

**BLASTING** - The detonation of an explosive device as defined by National Fire Protection Act (NFPA) 495.

**CHIEF OR FIRE CHIEF** - The Chief of the Bow Fire Department or a designee.

**FIRE DEPARTMENT** - Town of Bow Fire Department

**SELECTMEN OR BOS** - Town of Bow Board of Selectmen

### **§ 47-5. Administrative responsibility.**

The Fire Department, by its Fire Chief, shall administer this ordinance, conduct appropriate oversight of all blasting and, in cooperation with other officials, departments and agencies, enforce the provisions of this ordinance.

### **§ 47-6. Permit.**

No person shall engage in blasting or detonation of explosive materials within the Town of Bow without first obtaining a permit to conduct such operations from the Fire Chief or the designated representative of the Town. Permits in the Town of Bow shall be valid for no more than ninety (90) days. A permanent record of all permits issued under this ordinance will be kept in the Fire Department.

**§ 47-7. Fee.**

No permit shall be issued unless the fee has been paid. This non-refundable fee shall be established by the Board of Selectmen and shall be collected at the time of application.

**§ 47-8. Application form.**

- A. A properly executed application form shall be submitted to and approved by the Fire Chief for all blasting permits, prior to commencement of any blasting or detonation. Applications shall be made to Fire Department headquarters, during customary office hours, on a form to be prescribed by the Department. All applications shall be viewed and signature required by the Town of Bow Building Department prior to any submission to the Fire Department. The Building Department shall inform the Fire Department of any particular topography requirements established by the Planning Board for this application.
- B. Approval of the blasting permit will not relieve the applicant of full and complete responsibility for the results of the blasting operations. The applicant also has full responsibility for the accuracy and adequacy of the blasting plan when implemented in the field.
- C. The application form shall require the following information:
  - (1) Name, address, and daytime phone number of the applicant.
  - (2) A copy of license issued by the State Police to the applicant along with proof of identification, under RSA 158:9-b.
  - (3) Name, address and daytime phone number of blasting supervisor.
  - (4) A copy of blasting supervisor's Certificate of Competency issued by the State
  - (5) Police pursuant to RSA 158:9-h
  - (6) The tax map, lot number and physical locations where blasting is to be conducted, as well as the date(s) of detonation.
  - (7) A map or plan at a scale not greater than 1"=200' depicting the approximate location of the proposed blasting/detonation, and all properties within one thousand (1000') feet thereof.
  - (8) List of all owners of all such properties within one thousand (1000') feet thereof, and the type of occupancy (i.e., residential, commercial, industrial).
  - (9) Letter of permission from the property owner of the blasting site.

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- (10) Signature from the Town of Bow Building Department.
- (11) Evidence of liability insurance in an amount of not less than One Million (\$1,000,000) dollars combined single limit per occurrence by a carrier authorized by the State of New Hampshire Insurance Commissioner to do business in New Hampshire.

D. The Applicant shall submit the following information to the Fire chief or an authorized representative, at least two weeks prior to commencing drilling and blasting operations:

- (1) Sequence and schedule of production blast rounds, including the general method of developing the excavation, lift heights, starting locations, estimated starting dates, estimated rates of progress, etc.
- (2) Written evidence of the licensing, experience, and qualifications of the blaster who shall be directly responsible for the loading and firing of each shot.
- (3) Name of the person responsible for designing and directing the applicant's blasting operations.
- (4) Name of the person to be used to conduct pre-blast survey.
- (5) Name of the person to be used in monitoring blast vibration.

**§ 47-9. Authority to issue.**

Permit applications shall be received, reviewed and the information contained therein verified as necessary by the Fire Chief or a designee. Prior to issuing any permit the chief may consult with such federal, state and/or Town officials and employees whose area(s) of responsibility are, or may be, affected by the proposed blasting operation. After review and verification the Chief shall approve the application and issue the permit, issue the permit with condition(s) necessary to achieve the purpose of this ordinance or deny application. Any denial, along with reason(s) therefore, shall be provided in writing to the applicant.

**§ 47-10. Minimum standards of conduct.**

Unless more stringent provisions are contained herein, the conduct of all blasting or explosive detonations shall be governed by the standards in New Hampshire Code of Administrative Rules, Saf-C Section 1600, et seq., as it may be amended or superseded by other similar regulations from time to time.

**§ 47-11. Local requirements.**

In addition to any other requirements of State law, the following additional requirements shall apply to blasting activity within the Town of Bow:

- A. **General.** All blasting operations, including the storage and handling of explosives and blasting agents, shall be performed in accordance with the applicable provisions of this ordinance and all other pertinent federal, state, and local regulations to include NFPA 1 Fire Prevention Code, NFPA 495 Explosive Materials Code, New Hampshire State Building Code, and New Hampshire Code of Administrative Rules Saf-C1600 (State Police Regulations), all as may be amended or superseded by similar regulations from time to time. Whenever explosives are used, they shall be of such character and in such amount as are permitted by the state and local laws and ordinances, and all respective agencies having jurisdiction over them.
- B. **Site monitoring.** The Fire Chief reserves the right to visit any blasting sites to monitor the operation. The Chief may also confer with other Town departments or private blasting consultants for advice or assistance in the review or monitoring of a blasting site. The Chief may require a Fire Department work detail to standby a site for safety or monitoring duties. The cost of a Fire Department work detail or any other private consultants necessary for enforcement of these regulations will be at the applicant's expense.
- C. **Pre-blast condition survey.** Prior to conducting any blasting, the applicant or their agent shall conduct a pre-blast structural condition survey of all existing structures and conditions on the site, adjacent to the site or in the vicinity of the site. This survey shall extend to such structures or conditions as may be affected by the applicant's construction operations. As a minimum, pre-blast structural inspection condition surveys shall be performed on all structures, including homes, foundations, driveways, roadbeds, swimming pools, wells and mobile homes, within 500' of the anticipated blasting areas. The applicant as well as the owner of the property being surveyed shall sign all such surveys once completed. If an owner refuses to allow for the conducting of a pre-blast survey or sign a pre-blast survey form for whatever reasons the applicant shall note this on the form. The applicant shall make at least three attempts to notify the owner of the need for such surveys, the last such attempt shall include a written notification by certified mail and individual to contact.
  - (1) The pre-blast structural inspection condition survey shall consist of a written description of the interior and exterior condition of each of the structures examined. Descriptions 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 construction operations on the defect. Where significant cracks or damage exist, or for defects too complicated to describe in words, photographs shall be taken. A good quality videotape survey with appropriate audio

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description of locations, conditions, and defects can be used in lieu of a written form. This survey shall be kept for a minimum of seven (7) years and filed with the Town of Bow Fire Department.

- (2) The individual person conducting the survey shall give written notice, not less than 10 days in advance, to the owner of the property concerned and tenants of the property. The notice shall state the dates on which surveys are to be made. Copies of all notices shall be provided to the fire chief.
- (3) Upon completion of all earth/rock excavation and blasting work, the applicant shall conduct a post-blast survey of any properties, structures and conditions for which complaints of damage have been received or damage claims have been filed. Notice shall be given to all interested parties so they may be present during the final examination. Records of the final examination shall be distributed the same as the original pre-blast survey.
- (4) All costs associated with condition surveys shall be borne by the applicant.

D. **Seismic measuring devices.** Prior to conducting any blasting, seismic measuring equipment shall be placed adjacent to the two closest structures to the blasting site not owned by the owner. The fire chief or their authorized representative may require additional measuring devices when necessary to protect property. If an owner refuses to allow for or waives the placement of a device at their property, the applicant shall note this on the form. All costs associated with the analysis and monitoring shall be borne by the applicant.

E. **Map of operations.** The applicant shall provide a vicinity map or plan, locating the blast site, and the locations of all measuring devices required hereunder.

F. **Additional surveys/seismic devices.** The Town reserves the right to require additional condition surveys and/or placement of seismic measuring equipment on properties further away than 500' should the need arise due to complaints or other causes. Further, the Town reserves the right to require geological surveys of the area around the blasting location should conditions warrant such analysis. Such additional requirements may be prerequisites to attaining any permit renewals.

G. **Timing of blasting operations.** Drilling is to take place between the hours of 7:00 a.m. and 7:00 p.m., and shall not be permitted on Sundays or observed holidays. Blasting and/or detonation shall be conducted only between the hours of 9:00 a.m. and 4:00 p.m. and shall not be permitted on Saturdays, Sundays or observed holidays.

**H. Blast vibration control and monitoring.** The applicant shall be required to comply with the blasting vibration limits established by the applicable State of New Hampshire rules and regulations.

**I. Report of monitoring results.** If required by the Fire Chief or their authorized representative, the applicant shall provide within twenty-four (24) hours, in writing, the following items:

- (1) Details of the round as shot.
- (2) Results of the blast monitoring at each instrument location, including PPV in millimeters per second (inches per second), as well as a copy of the strip chart recording for each monitoring location, marked with the date, time, location of the equipment, and signature of the seismograph operator.
- (3) If the seismic ground vibration or air concussions, or both ground vibration and air concussions caused by the applicant's blasting operation attain or surpass the State of New Hampshire established limits, the operations shall cease and the permit revoked.

**J. Warning signals.** Adequate warnings shall be given to all personnel in the proximity to the blast site at least three minutes in advance of each blast. 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 1,000 feet. The applicant shall notify the Bow Fire Department and the Bow Police Department Communications Center not less than one (1) hour before the scheduled time of blast or explosion.

**K. Fly rock control.** Before the firing of any blast in areas where flying rock or debris may result in personal injury or damage to property, the rock to be blasted shall be covered with approved blasting mats, soil, or other equally serviceable material to prevent fly rock.

**L. Responsibility for blasting operations.** Review of the applicant's blasting submittals by the Town of Bow, the Fire Chief or an authorized representative will not relieve the applicant of his/her responsibility for the accuracy, adequacy, and safety of the blasting; for exercising proper supervision and field judgment; for preventing damage to structures; and for producing results in accordance with the state of New Hampshire regulations and NHDOT Specifications. The applicant shall be solely and completely responsible for the safety of all persons and property during the performance of his/her works. The applicant shall take whatever measures it deems necessary, in addition to the requirements herein, to protect the safety of persons and property, both at the construction site and away from the site. The applicant shall have full and complete responsibility for the handling, discharging, or settling of any and all

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damage or annoyance claims resulting from the blasting activities on the project. Any monitoring and/or review of the applicant's procedures and performance conducted by the Town of Bow, the fire chief or their authorized representative shall not relieve the applicant of his/her responsibility for safety at and away from the site, or for preventing damage to adjacent structures or property.

### **§ 47-12. Prohibitions.**

- A. No blasting shall be conducted without a valid permit having first been obtained.
- B. No blasting shall be conducted on weekends or on state or national holidays.
- C. No drilling shall be conducted on Sundays or state or national holidays.
- D. No blasting shall be conducted after an order to cease blasting has been issued by the fire chief and communicated to the permit holder.
- E. The overnight storage of explosives or blasting agents, whether supervised or not, is not allowed. Loaded explosives shall have twenty-four (24) hour supervision and guarded overnight when conditions or circumstances delayed the blast and the fire chief approved the overnight delay in blasting.
- F. No drilling shall take place within fifty feet (50') of any loaded hole(s).

### **§ 47-13. Revocation of permit.**

A permit issued hereunder may be revoked by the Fire Chief or the Town Manager for just cause including but not limited to: failure to conduct operations in accordance with the standards herein resulting in property damage that does or has the potential to exceed the amount of liability insurance held by the applicant; lapse or revocation of the state license, or the institution of proceedings (civil, criminal, or administrative) by the state for violation of applicable state law or regulations. The Fire Chief or Town Manager may restore any permit that has been revoked upon showing that the condition(s) leading to the revocation has (have) been corrected.

### **§ 47-14. Appeal.**

Any permit denial, revocation or suspension may be appealed, within ten (10) working days and not thereafter, to the Board of Selectmen. Any such appeal shall be in writing and shall clearly specify the facts and circumstances warranting issue or reinstatement of the permit. The BOS shall order such issuance or reinstatement only on the appellant's showing that the denial, revocation or suspension complained of was erroneous. The BOS may also order that appropriate conditions be attached to any permit that it finds should be issued or reinstated.

**§ 47-15. Penalty.**

Any person found to have violated any provisions of this ordinance shall be guilty of a violation and shall be punished by a maximum fine as provided by applicable state law, which is currently one thousand dollars (\$1,000.00). Each violation and/or each day of violation shall be regarded as a separate offense.

**§ 47-16. Emergency conditions.**

In situations that pose an imminent danger to public safety, the Chief may, for a limited time, waive such provisions of this ordinance as may be necessary to avoid and/or lesson that danger. The details of any waiver granted under the authority of this section shall, as soon as practicable, be reported to the Town Manager and in turn to the Board of Selectmen.

**§ 47-17. Interpretation.**

This ordinance is intended to complement and supplement, and not conflict with, federal and state regulation of blasting operations and explosives and shall be interpreted in accord with that intent. To that end, should the requirements of this ordinance differ from any requirement or regulation prescribed by any law, statute, ordinance, rule or other regulation governing blasting operations and explosives, the provisions that impose the higher standard shall govern.

**§ 47-18. Construction.**

Whenever a word appears in singular form such word shall also include the plural form and vice versa, wherever and whenever the facts and context so permit or require. Whenever masculine, feminine or neuter pronouns appear, each such pronoun shall include all genders.

**§ 47-19. Severability.**

If any provision of this ordinance, or its application to any person or circumstance, is held to be invalid by a court of competent jurisdiction, such invalidity shall not affect any other provision or application of this ordinance that can be given effect without the invalid provision or application and, to this end, the provisions of this ordinance shall be severable.

**Appendix A, Blasting Application-Permit**