

## **Occupational Licensing and Certification**

Part 61 of Title 12 of the Official Compilation of Codes, Rules, and Regulations of the State of New York (Cited as NYCRR 61)

(Statutory authority: General Business Law Section 483)



Effective 10/20/2010

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- §1. Section 23-8.5 and 23-11 of 12 NYCRR are repealed.
- §2. Subparts 39.5 and 39.7 of 12 NYCRR are repealed.
- §3. Subpart 50.9 of 12 NYCRR is repealed.
- §4. Subchapter A of 12 NYCRR is amended by adding a new PART 61 to read as follows:

## **Part 61**

### **Occupational Licensing and Certification (Statutory authority: General Business Law Section 483)**

#### **SUBPART 61-1 General Provisions**

**Section 61-1.1 Application.** (a) The legislature has determined that certain industries, trades, and occupations involve such elements of potential danger to the lives, health and safety of the citizens of this state and to their property that special regulations are necessary to insure that only individuals of proper ability and experience shall engage in the uses and operations identified in General Business Law Section 480. Except as provided for by Section 485 of the General Business Law, this Part shall apply throughout the state to those occupations where the Commissioner has been authorized to prescribe rules and regulations by Section 483(1)(a) of the General Business Law, (hereinafter referred to as “certified occupations”). Such occupations include pyrotechnicians and laser operators statewide and blasters and crane operators outside of the City of New York. Applicants must still comply with local laws and obtain applicable permits and variances in addition to obtaining a state issued license.

- (b) Where the specific provisions applicable to a certified occupation conflict with the general provisions provided in Subpart 61-1 of this Part, the specific provisions shall apply.

#### **Section 61-1.2 Definitions.**

As used in this Part the following terms mean:

- (a) *Acceptable* – Satisfactory to the Commissioner as complying with the provisions of this Part.
- (b) *Certificate of Competence* – A document issued by the Commissioner to evidence acceptance by the Commissioner of the individual’s qualifications, proper ability and experience to engage in the certified occupation.
- (c) *Certificate* – Includes a certificate of competence, a learner’s certificate of competence, and renewals, issued by the Commissioner in accordance with the provisions of this Part.
- (d) *Commissioner* – The Commissioner of Labor of the State of New York.
- (e) *Department* – The Department of Labor of the State of New York.

- (f) *Direct Supervision* – Supervision in a close enough proximity where the individual supervising another is able to observe the activity and give instructions to the individual being supervised.
- (g) *IME* – The Institute of Makers of Explosives, or any functional equivalent successor organization.
- (h) *Learner's Certificate of Competence* – A document issued by the Commissioner to evidence acceptance by the Commissioner of the individual's qualification to obtain hands on training and work experience in the certified occupation under the direct supervision of an individual who possesses a certificate of competence.
- (i) *NFPA* – The National Fire Protection Association, or any functional equivalent successor organization.
- (j) *Unusual incident* – Any incident or event that results in personal injury requiring medical treatment beyond first aid, or in property damage in excess of \$1000, or both, where such incident or event arises out of, or in the course of, performance of a certified occupation subject to the certification requirements of this Part.

**Section 61-1.3 Certificate required.** (a) Unless otherwise stated in this Part:

- (1) No individual shall engage in a certified occupation unless such individual holds a valid certificate of competence issued by the Commissioner.
  - (2) No employer, contractor or agent including a sponsor or supplier shall knowingly permit any individual to engage in a certified occupation unless such individual holds a valid certificate of competence issued by the Commissioner.
  - (3) An individual holding a valid learner's certificate of competence may obtain hands on training and work experience in the certified occupation only under the direct supervision of an individual who possesses a certificate of competence. In any certified occupation where the Commissioner does not offer a learner's certificate of competence, an individual may assist and obtain hands-on training and work experience in the certified occupation under the direct supervision of an individual who possesses a certificate of competence for such certified occupation.
- (b) *Carrying certificate.* All certificate holders shall carry the certificate on their person when working and shall produce the certificate upon request of the Commissioner, or his or her designee. Failure to produce a certificate shall be presumptive evidence that the individual does not hold a valid certificate of competence or learner's certificate of competence.
  - (c) *Restricted certificate.* The Commissioner may issue restricted or limited use certifications to address physical limitations or unique circumstances.

**Section 61-1.4 Qualifications.** Unless otherwise stated in this Part, all applicants for a certificate shall:

- (a) be at least 18 years of age;
- (b) not have a physical or mental condition that would prevent them from properly performing the essential functions of the certified occupation, or any restricted or limited performance of the occupation, in accordance with a restricted or limited use certification;
- (c) have not less than one year of necessary experience in the certified occupation certificate sought, unless another minimum experience period is otherwise required by law or regulation; and
- (d) successfully complete training acceptable to the Commissioner for occupations whose subparts require training.

**Section 61-1.5 Certification procedures.** (a) *Applications.* (1) Submission of forms. Every application for a certificate or for a renewal shall:

- (i) be made on forms provided by the Commissioner;
  - (ii) be true and correct, as attested to by the applicant under penalty of perjury as being true and correct; and
  - (iii) be complete and include such additional information related to evaluating the experience, training and fitness for the specific occupation as required by the Commissioner.
- (2) **Application Fee.** Unless otherwise provided by this Part, Part 82 or other applicable regulation or statute, each application shall include a non refundable processing fee of \$150.00.
- (3) **Investigation.** The Commissioner may require a personal interview with, and inquire into the background of, applicants to determine their fitness to meet the safe execution of the essential functions of the certified occupation. Depending on the specific certified occupation this inquiry may include investigation into:
- (i) mental health history;
  - (ii) physical health history;
  - (iii) criminal history;
  - (iv) employment history; and
  - (v) training.
- (b) *Examination.* Depending on the occupational certificate sought, the Commissioner may require applicants to successfully demonstrate their knowledge and skill by passing a written examination, a practical examination, or both.
- (c) *Application determination; denials.* The Commissioner shall either grant or deny the completed application. In denying an application the Commissioner

shall provide written notification of the reason(s) for such denial. An applicant may request an administrative review of the reasons for the denial and a written response will be provided to such applicant but no hearing shall be granted in connection with a denial of an application other than a renewal.

- (d) *Term and content of certificate.* (1) Term. Unless otherwise provided in law or this Part, each certificate or renewal shall be valid for three years from the date issued, unless suspended or revoked. A term may be extended in a certified occupation by the Commissioner for good cause shown.
- (2) Content of certificate. Each certificate of competence or renewal thereof shall include the certified individual's name and address, photograph, and brief physical description, and identify the appropriate occupation and classification.
- (e) *Certificate renewal.* An application for the renewal of a certificate of competence shall be filed with the Commissioner not more than six months nor less than three months prior to the expiration date of the certificate sought to be renewed, except that the Commissioner may alter such time limitation to prevent unnecessary hardship to any certified individual.
- (f) *Suspension, revocation, restriction, or refusal to renew, certificates; hearings.* (1) The Commissioner, upon notice to the certificate holder and after a hearing, may suspend, revoke, restrict or refuse to renew a certificate upon finding that:
- (i) the certificate holder has violated a regulation or law, or failed to comply with an order of the Commissioner;
  - (ii) the certificate holder is not an individual of proper competence, judgment or ability in relation to the certified occupation; or
  - (iii) for other good cause shown.
- (2) Such hearings shall be conducted by two or more members of the examining board for such certified occupation, where a board has been established by the Commissioner and where the board has sufficient members available and not subject to conflict to render decision.
- (3) For occupations where no examining board has been established, or where fewer than two members are currently serving, such hearing shall be conducted by a hearing officer designated by the Commissioner.
- (4) Within thirty days of the conclusion of the hearing, the examining board or hearing officer shall make a recommendation to the Commissioner. The Commissioner shall promptly issue a written notice of decision, containing the reasons thereof, to the certificate holder. A certificate holder may appeal the Commissioner's order by commencing a proceeding pursuant to Article 78 of the Civil Practice Law and Rules.

**Section 61-1.6 Examining board.** The Commissioner may, unless prohibited by statute, appoint an examining board, which shall consist of at least three members. The members of such board shall serve at the pleasure of the Commissioner and their duties shall include:

- (a) Examining applicants' qualifications and making recommendations to the Commissioner with respect to the experience and competence of such applicants;
- (b) Holding of hearings prior to determinations of the Commissioner to suspend, or revoke certificates or to refuse to issue renewals of certificates.
- (c) Reporting of findings and recommendations to the Commissioner with respect to such hearings.
- (d) Advising the Commissioner on matters within the areas of the examining board's expertise.

**Section 61-1.7 Reporting and recordkeeping requirements.** (a) *Reporting requirement.* Each individual who holds a certificate of competence issued under this Part shall report any unusual incident, as herein defined. Such report shall be made to the Commissioner no later than the close of the next business day, either by phone, fax, email, in person, or by other means acceptable to the Commissioner. The report shall include the name and certificate number of the individual making the report, the name of the employer, contractor, owner, or entity employing or contracting for the services of such reporting individual, and a description of the unusual incident, including date, time, location and the nature of the personal injury or property damage.

**Section 61-1.8 Standards, incorporation by reference.** (a) The Commissioner adopts the following standards, as referenced in this Part and hereinafter referred to as provided below.

- (1) IME Safety Library Publication No. 3, Suggested Code of Regulations For The Manufacture, Transportation, Storage, Sale, Possession And Use Of Explosive Materials, Institute of Makers of Explosives, 1120 19<sup>th</sup> Street, N.W., Suite 310, Washington, DC 20036-3605. (hereafter IME No. 3)
- (2) IME Safety Library Publication No. 20 Safety Guide For The Prevention Of Radio Frequency Radiation Hazards In The Use Of Commercial Electric Detonators, Institute of Makers of Explosives, 1120 19<sup>th</sup> Street, N.W., Suite 310, Washington, DC 20036-3605. (hereafter IME No. 20)
- (3) NFPA 1123 Code for Fireworks Display, 2010 Edition, National Fire Protection Association, 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101. (hereinafter "NFPA 1123")
- (4) NFPA 1126 Standard for the Use of Pyrotechnics Before a Proximate Audience, 2011 Edition, National Fire Protection Association, 1

Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101.  
(hereinafter "NFPA 1126")

- (b) Copies of referenced material are available for inspection at the New York State Department of Labor, Division of Safety and Health, Governor W. Averell Harriman State Office Building Campus, Building 12, Albany, New York or at the Department of State in Albany, New York.

**Section Section 61-1.9 Severability.** If any provision of the Part or the application thereof to any individual or circumstance is held invalid by a court of competent jurisdiction, such invalidity shall not affect other provisions or applications of the Part which can be given effect without the invalid provisions or applications and to this end the provisions of this Part are declared to be severable.

## **SUBPART 61-2 Special Provisions for Pyrotechnicians**

**Section 61-2.1 Application.** This Subpart applies to every individual who acts as a pyrotechnician on any show, as those terms are defined in 61-2.2 of this Subpart.

### **Section 61-2.2 Definitions.**

- (a) *Authorized assistant* -- An individual who has been authorized by the certified operator to work on a show after such operator has confirmed that the individual is either a certified pyrotechnician, or otherwise meets the following qualifications:
  - (1) is at least eighteen years old;
  - (2) has been trained in the performance of the tasks to be assigned; and
  - (3) has been educated with regard to safety hazards.
- (b) *Certified operator* -- An operator who is a certified pyrotechnician.
- (c) *Certified pyrotechnician* -- An individual who holds a valid certificate of competence as a pyrotechnician issued by the Commissioner of Labor pursuant to this Subpart.
- (d) *Fireworks* -- Any composition or device for the purpose of producing a visible or an audible effect for entertainment purposes by combustion, deflagration, or detonation that meets the definition of Consumer Fireworks or Display Fireworks as set forth in NFPA 1123 and NFPA 1126.
- (e) *NFPA 1123* -- NFPA 1123, Code for Fireworks Display, 2010 edition, which applies to outdoor fireworks displays as set forth at Chapter one of such code.
- (f) *NFPA 1126* -- NFPA 1126, Standard for the Use of Pyrotechnics Before a Proximate Audience, 2011 edition, which applies to certain shows conducted indoors or outdoors before a proximate audience.
- (g) *Operator* -- The individual who has overall responsibility for the operation and safety of a show.

- (h) *Proximate audience* -- An audience closer to pyrotechnic devices than permitted by NFPA 1123.
- (i) *Pyrotechnic devices* -- Any device containing pyrotechnic materials and capable of producing a visual or audible effect used for entertainment purposes, often produced to create an illusion.
- (j) *Pyrotechnician* -- An individual who performs any tasks on a show including setting up the equipment, fireworks, or pyrotechnics, loading mortars (loader), spotting bursting locations (spotter), tending a ready box (ready box tender), igniting the fireworks (shooter), striking the equipment, or cleaning the site.
- (k) *Pyrotechnics* -- Controlled exothermic chemical reactions that are timed to create the effects of heat, gas, sound, dispersion of aerosols, emission of visible electromagnetic radiation, or a combination of these effects to provide the maximum effect from the least volume.
- (l) *Show* -- A presentation of fireworks or pyrotechnics for public or private gatherings, including performances where pyrotechnic special effects are used within the meaning and scope of coverage of NFPA 1123 or NFPA 1126, or both, or that would have fallen within such scope of coverage if such editions of NFPA 1123 and NFPA 1126 had been in effect at the time of the presentation.

**Section 61-2.3 Certification.** (a) *Classifications of certificates of competence.* There shall be three classifications of certificates of competence issued to pyrotechnicians, as follows:

- (1) Class A (Unrestricted) – Unrestricted: may act as an operator conducting and taking charge of all shows that are subject to NFPA 1123, or NFPA 1126, or both.
  - (2) Class B (NFPA 1123) – Restricted: may act as an operator conducting and taking charge of all outdoor displays that are subject to NFPA 1123, but not those that are also subject to NFPA 1126
  - (3) Class C (NFPA 1126) – Restricted: may act as an operator conducting and taking charge of all indoor displays and outdoor displays before a proximate audience that are subject to NFPA 1126, but not those that are also subject to NFPA 1123.
- (b) *Certification required.* No individual shall act as a pyrotechnician unless such individual possesses a current certificate of competence issued by the Commissioner and is working within the scope of the classification for which they are certified. Authorized assistants may work as a pyrotechnician under the supervision of a certified pyrotechnician.
  - (c) *Operator's responsibilities.* Each operator who conducts a show shall be responsible for complying with the standards for conduct of such show and the reporting and recordkeeping requirements of this Subpart at sections 61-2.7 and 61-2.8 below. Such responsibilities include, but are not limited to,

confirming that each member of the crew is an authorized assistant and that a permit has been granted for the show.

- (d) *Responsibilities of certified pyrotechnicians.* Certified pyrotechnicians who are not designated as the operator for a show are responsible for ensuring that their own activities, and those of any authorized assistants that they have been assigned by the operator to directly supervise, comply with the standards for conduct of show of this Subpart at section 61-2.8. In addition, each certified pyrotechnician shall confirm whether the show has been granted a permit.
- (e) *Permits under Penal Law Section 405.00.* Fireworks displays subject to the permitting requirements of Penal Law Section 405.00 may be conducted by a single certified operator, who shall ensure that a sufficient number of authorized assistants are available for the safe conduct of the fireworks display.
  - (1) Applications for permits. Applications for permits under Penal Law Section 405.00 shall identify such certified operator together with any other certified pyrotechnicians who will be available to serve as the certified operator, as the individuals actually in charge of the firing of the display, or the individuals authorized to fire the display, or both.
  - (2) Firing the display. The firing of the display, as that term is used in this part and in Penal Law Section 405.00, shall refer to the actions of the certified operator in issuing a signal to start, or halt, the ignition of fireworks, but shall not include the actions of authorized assistants, including shooters, who ignite fireworks in response to such signal.
  - (3) Second operator. The certified operator may designate an authorized assistant to serve as a second operator to comply with permits that require, pursuant to Penal Law Section 405.00, that there shall be two operators constantly on duty during the discharge of fireworks. The certified operator shall continue to supervise the authorized assistant who has been designated as a second operator.

**Section 61-2.4 Qualifications.** The general provisions set forth at Section 61-1.4 shall apply under this Subpart except as follows:

- (a) *Age.* The minimum age of each applicant shall be twenty-one years;
- (b) *Experience.* (1) *New Applicants.* The minimum necessary experience for new applicants shall be at least three years of actual experience as an operator or assistant on the types of shows that are covered by the particular classification being sought, which experience shall include the following:
  - (i) NFPA 1123. Actively participating as an operator or assistant in the performance of at least five outdoor fireworks shows not before a proximate audience, within the scope of coverage of NFPA 1123 for those seeking a Class A or a Class B certificate; and

- (ii) NFPA 1126. Actively participating as an operator or assistant in the setup and loading of at least five shows before a proximate audience within the scope of coverage of NFPA 1126 for those seeking either a Class A or a Class C certificate under this Subpart.
- (2) Renewals. The minimum necessary continuing experience requirements for applicants seeking renewal of certificates shall be the same as those set forth above for new applicants, except that the number of shows shall be reduced from five to three for each type of show: three NFPA 1123 shows for Class A or Class B and also three NFPA 1126 shows for Class A or Class C.
- (c) *Training*. Each applicant shall provide evidence of successful completion of appropriate training programs that may be required by the Commissioner and approved by the Pyrotechnic Examining Board.

**Section 61-2.5 Certification Procedures.** The general provisions set forth at Section 61-1.5 shall apply under this Subpart, except as follows:

- (a) *Investigations*. For certification under this Subpart, each of the items set forth at Section 61-1.5(a)(3) will be part of the Commissioner's investigation of applicants.
- (b) *Examination*. Each applicant for a certificate of competence shall, and each applicant for a renewal of such certificate may, be required by the Commissioner to take and successfully pass an appropriate written examination.
- (c) *Issuance of certificates without examinations*. The Commissioner may issue a certificate of competence without a written examination to:
  - (1) The holder of a license or certificate issued by another state or government entity that allows such holder to engage in pyrotechnic operations when, in the opinion of the Commissioner, the standards used by such other entity for the certification or licensing of pyrotechnicians are comparable to this Subpart.
  - (2) Any individual who files an application prior to the Commissioner's determination of a schedule for conducting written examinations under this Subpart and establishes at least three years of actual experience as an operator on the types of shows covered by the particular classification being sought: an operator on five NFPA 1123 shows for Class A or Class B, and an operator on five NFPA 1126 shows for Class A or Class C. Such individuals may be required to take and successfully pass an appropriate written examination before renewing their certificates.

**Section 61-2.6 Pyrotechnician Examining Board.** The Commissioner shall appoint an examining board, which shall consist of at least three members. At least one member of such board shall be a certified pyrotechnician and at least one other member

of such board shall be a representative of a company that conducts pyrotechnics or fireworks shows.

**Section 61-2.7 Reporting and Recordkeeping.** Each operator shall maintain a copy of every permit for each show conducted in New York, together with a record identifying every individual who actually worked on such show as a pyrotechnician, including, but not limited to, operators and authorized assistants. Such records shall be maintained for no less than five years after the date of the show and shall be made available to the Commissioner, upon request. The Commissioner may, after consultation with the Pyrotechnics Examining Board, establish additional recordkeeping and reporting requirements concerning accidents and incidents that may warrant investigation or study to protect the public safety.

**Section 61-2.8 Standards for Conduct of Shows.** (a) No employer, contractor, or agent, including a sponsor or supplier, shall knowingly permit any individual to act as a certified operator unless such individual is a certified pyrotechnician working within the scope of the individual's certified classification.

- (b) Shows shall be conducted by a certified operator who may be aided by authorized assistants. Every show shall be conducted in compliance with NFPA 1123, or NFPA 1126, or both, if applicable, and with the terms of a permit granted under either Penal Law Section 405.00, Permits for public displays of fireworks, or Penal Law Section 405.10, Permits for indoor pyrotechnics, as applicable.

### **SUBPART 61-3 Special Provisions for Crane Operators**

**Section 61-3.1 Application.** This Subpart applies to every individual who operates a crane, as herein defined, operating in construction, demolition or excavation work. The Commissioner finds that the trade or occupation of operating cranes, as herein defined, in construction, demolition and excavation work involves such elements of danger to the lives, health and safety of persons employed in such trade or occupation as to require special regulations for their protection and for the protection of other employees and the public in that such cranes may fall over, collapse, contact electric power lines, dislodge material and cause such material to fall or fail to support intended loads and convey them safely, unless such cranes are operated by individuals of proper ability, judgment and diligence.

#### **Section 61-3.2 Definitions.**

- (a) *Apprentice* -- An individual who is at least 18 years of age and who has the permission of the owner or lessee of a crane to take instruction in its operation and is operating such crane under the direct supervision of a certified crane operator or public operator.
- (b) *Certified crane operator* -- An individual who holds a valid certificate of competence to operate a crane issued by the Commissioner.

- (c) *Crane*. Shall mean any tower crane or mobile crane.
- (d) *Mechanic* -- An individual who is at least 21 years of age and is employed only to test or repair a crane and is operating it for such purpose while under the direct supervision of a certified crane operator or public operator.
- (e) *Mobile crane* -- A mobile, carrier-mounted, power-operated hoisting machine utilizing hoisting rope and a power-operated boom which moves laterally by rotation of the machine on the carrier having a manufacturers' maximum rated capacity exceeding five tons or a boom exceeding forty feet in length.
- (f) *Public operator* -- An individual who is at least 21 years of age and is employed by the Federal government, the State or a political subdivision, agency or authority of the State and is operating a crane owned or leased by the Federal government, the State or such political subdivision, agency or authority and his assigned duties include operation of a crane.
- (g) *Tower crane* -- Any lifting structure that uses a vertical mast or tower to support a working boom or jib in an elevated position having a base that is either fixed or ballasted and moveable between locations.

**Section 61-3.3 Certification.** (a) *Classifications of certificate of competence for cranes.* There shall be the following classifications of certificates of competence issued to crane operators:

- (1) Class A (Unrestricted) – Unrestricted: may operate all cranes including cranes having a fixed lattice boom, with or without free fall capability, conventional tower cranes, derricks and all cranes with free fall capability. Conventional, cable, lattice boom, and friction are names that have been used in reference to this class. A certificate of competence for Class A allows the holder to operate any crane.
- (2) Class B (Hydraulic) – Restricted: may operate all hydraulic cranes which have a telescopic boom and swinging cab with no restriction on maximum manufacturer's rating. This class also includes small trailer or truck mounted self-erecting tower cranes, as well as boom trucks having a manufacturer's rated capacity of over 28 tons. A certificate of competence for Class B allows the holder to operate Class B, C and D cranes.
- (3) Class C (Boom Truck) – Restricted: may operate cranes having telescopic booms which are generally truck mounted and up to 28 ton maximum manufacturers' rated capacity. A certificate of competence for Class C allows the holder to operate Class C and D cranes.
- (4) Class D (Restricted Boom Truck) – Restricted: may operate cranes having telescopic booms which are generally truck mounted and up to 3 ton maximum manufacturer's rated capacity, and up to 125 feet of boom. These cranes are also referred to as sign hangers, but their use is not restricted to that industry. A certificate of competence for Class D allows the holder to operate Class D cranes only.

- (5) Class E – Reserved
  - (6) Class F (Line Truck) – Restricted: may operate cranes that have up to 15 ton maximum manufacturers’ rated capacity, 65 foot maximum boom length, utilize a non-conductive tip with nylon rope, for use in electrical applications only. These cranes are also referred to as digger derricks. A certificate of competence for Class F allows the holder to operate Class F cranes only.
- (b) *Certificate of competence required.* No individual shall operate a crane unless such individual is either a certified crane operator or a public operator working within the scope of the individual’s certified classification, or is an apprentice or mechanic working under the direct supervision of such certified operator or public operator.

**Section 61-3.4 Qualifications.** The general provisions set forth at 61-1.4 shall apply under this Subpart except as follows:

- (a) *Age.* The minimum age of each applicant for a certificate of competence shall be 21 years of age.
- (b) *Experience.* The minimum necessary experience for each applicant shall be three years practical experience in the operation of cranes and, in addition, practical knowledge of crane maintenance.

**Section 61-3.5 Certification Procedures.** The general provisions set forth at Section 61-1.5 shall apply under this Subpart except as follows:

- (a) *Investigations.* For certification under this Subpart, each of the items set forth at Section 61-1.5(a)(3) will be part of the Commissioner’s investigation of applicants.
- (b) *Examination.* (1) Written examination. Each applicant for a certificate of competence will, and each applicant for a renewal thereof may, be required by the Commissioner to take an appropriate written examination.
- (2) Practical examination. An applicant who passes the written examination will also be required to take a practical examination in crane operation, except that the Commissioner may waive this requirement with respect to an applicant for a renewal of a certificate of competence.
  - (i) Conduct of practical examination. The Commissioner shall designate one member of the examining board to conduct the practical examination for Class F line trucks. For all other practical examinations (for Classes A, B, C, D, and E), the Commissioner shall designate a minimum of three members of the examining board to administer the practical examination, of which two members must be present at the practical examination and score the applicant and the other member(s) may review the video of the practical examination and score the

applicant. When a practical examination is conducted by a single member of the examining board, the applicant must achieve a passing score from the member to receive a certificate of competence. When the practical examination is administered by three or more members of the examining board, the applicant must achieve a passing score, which shall be calculated as an average of all scores received from the three or more members that administered the practical examination. The procedures used regarding the conduct of the practical examination, the establishment of the passing score and the assignment of the board members to conduct individual examinations shall be set forth in a guidance document approved by the examining board, which shall be made publically available.

- (c) *Issuance of certificates without examination.* The Commissioner may issue a certificate of competence without examination to the holder of a license or certificate issued by another state or government entity that allows such holder to operate cranes when, in the opinion of the Commissioner, the standards used by such entity for the certification or licensing of crane operators are comparable to this Subpart.
- (d) *Renewals.* An application for renewal of a crane operator's certificate of competence shall be made within one year from the expiration date of the certificate sought to be renewed, except that the Commissioner may extend the time to make such application.

**Section 61-3.6 Crane Operators Examining Board.** The Commissioner may appoint an examining board which shall consist of at least three members, at least one of whom shall be a crane operator who holds a valid certificate of competence issued by the Commissioner, and at least one of whom shall be a representative of crane owners. The members of the examining board shall serve at the pleasure of the Commissioner.

**Section 61-3.7 Reporting and Recordkeeping.** The reporting requirements of section 61-1.7 shall apply under this Subpart and shall include the name of the owner of the crane.

#### **SUBPART 61-4 Special Provisions for Blasters**

**Section 61-4.1 Application.** (a) This Subpart applies to every individual who acts as a blaster on a blasting operation, as those terms are defined below.

**Section 61-4.2 Definitions.**

- (a) *Authorized Blasting assistant* -- An individual who has been authorized by the certified blaster-in-charge to work on a blasting operation after such blaster-in-charge has confirmed that the individual is either a certified blaster, or otherwise meets the following qualifications:

- (1) is at least eighteen years old;
  - (2) has been properly trained in the performance of the tasks to be assigned; and
  - (3) has been made aware of and understands the blasting hazards and risks.
- (b) *Blast area* -- An area near any blasting operation in which concussion, flying material or debris, or gases resulting from a detonation of explosives can reasonably be expected to cause injury or property damage.
  - (c) *Blaster* -- An individual who performs any task on a blasting operation.
  - (d) *Blaster-in-charge* -- The individual who has overall responsibility for the conduct and safety of a detonation of explosives within a blast area.
  - (e) *Blasting operation* -- The planning, preparation, detonation, and post detonation inspection of a blast. Where explosives are being used for purposes such as, but not limited to, rock and earth excavation, steel and concrete demolition, bonding metals, testing, ice breaking, industrial boiler cleaning, and seismic prospecting.
  - (f) *Blasting site* -- The specific place defined by the blaster-in-charge where explosives are used in blasting operations and where only the blaster-in-charge and authorized blasting assistants are permitted to work. A blast site is part of the blast area.
  - (g) *Certified blaster* -- An individual who holds a valid certificate of competence to act as a blaster issued by the Commissioner of Labor pursuant to this Subpart.
  - (h) *Explosives*. The term explosives as defined in subdivision 1 of section 451 of the Labor Law and 12 NYCRR Part 39
  - (i) *Flyrock* -- Any material propelled from the blast area by the force of the blast.
  - (j) *Government Agency* -- The Federal Government, the State Government, or a political subdivision, agency or authority of the State.

**Section 61-4.3 Certification.** (a) *Classifications of certificates of competence.* There shall be six classifications of certificates of competence issued to blasters, as follows:

- (1) Class A (Above\Below Ground) – The holder of a class A certificate of competence may act as a blaster-in-charge conducting and taking charge of any blasting operation except for those types of work performed by a Class D, Class E and Class F Certificate holder. Individuals wishing to be certified as Class A and Class D or Class E or Class F must apply separately for each certification.
- (2) Class B (Aboveground) – The holder of a class B certificate of competence may act as a blaster-in-charge conducting and taking charge of any aboveground blasting operation except for those types of work performed by a Class D, Class E and Class F Certificate

holder. Individuals wishing to be certified as Class B and Class D or Class E or Class F must apply separately for each certification.

- (3) Class C (Belowground) – The holder of a class C certificate of competence may act as a blaster-in-charge conducting and taking charge of any underground blasting operation except for those types of work performed by a Class D, Class E and Class F Certificate holder. Individuals wishing to be certified as Class C and Class D or Class E or Class F must apply separately for each certification.
  - (4) Class D (Demolition) – The holder of a class D certificate of competence is restricted to acting as a blaster-in-charge conducting and taking charge of blasting operations associated with the demolition of buildings or other structures.
  - (5) Class E (Seismic) – The holder of a class E certificate of competence is restricted to acting as a blaster-in-charge conducting and taking charge of blasting operations associated with seismic prospecting.
  - (6) Class F (Special Uses) – The holder of a class F certificate of competence is restricted to acting as a blaster-in-charge conducting and taking charge of blasting operations associated with special uses where the total weight of explosive material detonated does not exceed 50 pounds. Special uses include, but are not limited to, boiler cleaning, testing, bonding metals and cable splicing.
  - (7) Other blasting operations. Blaster certification for any blasting for any purpose not specifically defined in this Subpart shall be requested in writing defining purpose for which the explosives will be used.
- (b) *Certificate of competence required.* (1) No individual shall act as a blaster unless such individual possesses a current certificate of competence issued by the Commissioner and is acting within the scope of the classification for which he or she is certified. Authorized blasting assistants may work as blasters under the supervision of a certified blaster.
- (2) No employer, contractor, or agent, including a sponsor or supplier, shall knowingly permit any individual to act as a blaster unless such individual is either a certified blaster working within the scope of the individual's certified classification or an authorized blasting assistant.
- (c) *Responsibilities of blaster-in-charge.* Each blaster-in-charge of a blasting operation shall be responsible for complying with the reporting and recordkeeping requirements and the standards of conduct of this Subpart at sections 61-4.7 and 61-4.8 below. Such responsibilities include, but are not limited to, confirming that each blaster on the blasting operation is an authorized blasting assistant.
- (d) *Responsibilities of certified blasters.* Certified blasters who are not designated as the blaster-in-charge are responsible for complying with reporting requirements of section 61-4.7(c) and for ensuring that their own activities, and those of any authorized blasting assistants that they have been

assigned by the blaster-in-charge to supervise, comply with the standards of conduct of this Subpart at section 61-4.8.

**Section 61-4.4 Qualifications.** The general provisions set forth at 61-1.4 shall apply under this Subpart except as follows:

- (a) *Age.* The minimum age of each applicant for a certificate of competence shall be 21 years of age.
- (b) *Experience.* The minimum necessary experience for each applicant shall be three years practical experience in the handling and use of explosives. Such experience shall include knowledge of explosive safety precautions, three years of actual experience as a blaster outside of New York State or authorized blasting assistant on the types of blasting operations that are covered by the particular classification being sought and successful completion of at least two training courses recognized by the Blaster's Examining Board totaling 16 hours.
- (c) *Renewals.* Applicants for renewal shall have successfully completed during the certification period at least two blasting-related training courses that have been recognized by the Blaster's Examining Board totaling 16 hours.

**Section 61-4.5 Certification Procedures.** The general provisions set forth at Section 61-1.5 shall apply under this Subpart except as follows:

- (a) *Investigations.* For certification under this Subpart, each of the items set forth at Section 61-1.5(a)(3) may be part of the Commissioner's investigation of applicants.
- (b) *Examination.* (1) Written examination. Each applicant for a certificate of competence shall, and each applicant for a renewal of such certificate may, be required by the Commissioner to take an appropriate written examination.
  - (2) Practical examination. An applicant who passes the written examination may also be required to take a practical examination in the use of explosives.
- (c) *Issuance of certificates without examination.* The Commissioner may issue a certificate of competence without such examination to:
  - (1) The holder of a license or certificate issued by another state or government agency which allows such holder to engage in blasting operations when, in the opinion of the Commissioner, the standards used by the other state or government agency for the certification of blasters are comparable to this Subpart.
  - (2) Any individual who files an application prior to the Commissioner's determination of a schedule for conducting written examinations for Class D, E or F Certificates of Competence under this Subpart must provide evidence of at least three years of actual experience as a blaster-in-charge performing the duties defined by the certificate classification. Such individuals may be required to take and

successfully pass an appropriate written examination before such renewal will be issued.

**Section 61-4.6 Blaster's Examining Board.** The Commissioner shall appoint an examining board, which shall consist of at least three members. In addition to the requirements of Subpart 61-1.6, at least one member of such board shall be a certified blaster and at least one other member of such board shall be a representative of explosive manufacturers.

**Section 61-4.7 Reporting and recordkeeping.** (a) *Recordkeeping.* The blaster-in-charge shall complete a shot report within twenty four hours of the blast. The report shall be available for review by the Commissioner and be maintained for at least 5 years after the blast. The report may be maintained in an electronic format. At a minimum the report shall contain the following information:

- (1) The name of the blasting company or contractor;
- (2) name of the company or person for whom the blast was performed;
- (3) physical location of where that blast took place;
- (4) name and certificate number of the blaster-in-charge;
- (5) type of material blasted;
- (6) maximum amount of explosives per delay period of 8 milliseconds or greater;
- (7) exact number and type of detonators used;
- (8) quantity and type of explosives used;
  - (i) exact number and type of packaged products used, and
  - (ii) quantity of bulk explosive used in pounds;
- (9) method of firing and type of circuit;
- (10) the delay timings used;
- (11) direction and distance in feet to the nearest structure not owned or leased by the person for whom the blasting is being performed;
- (12) local time of the blast accurate to the minute;
- (13) weather conditions at the time of the firing of the blast;
- (14) where seismographs are used:
  - (i) readings of ground vibrations to include three component readings with frequency,
  - (ii) frequency readings of air blasts,
  - (iii) location of the seismograph,
  - (iv) distance from the blast,
  - (v) name and signature of the person monitoring the seismograph;

- (15) for blasts using drilled holes:
    - (i) the burden and spacing of holes,
    - (ii) the number and diameter of holes,
    - (iii) the height or length of stemming,
    - (iv) the drilling logs,
    - (v) description of the shot pattern, including number of holes per delay period of 8 milliseconds or greater;
  - (16) a list of names of all individuals present at the blast site during the loading operation including visitors; and
  - (17) notation of any unusual or suspicious activity.
- (b) *Inventory reconciliation.* The blaster-in-charge shall ensure that the amount(s) of explosive(s) reported used in the shot report plus the amount of explosive(s) returned to the magazine equals the amount of explosives taken from the magazine. Any inventory discrepancies shall be reported as required by 12 NYCRR Part 39.
- (c) *Duty to report.* Each certified blaster shall report any unusual incident or event that occurs during the blasting operation as required by Subpart 61-1.7. In addition to those requirements reporting is required for instances of premature detonation, damage from air blast, damage from excessive ground vibration or instances of fly rock.

**Section 61-4.8 Standards of Conduct for Blasting Operations.** (a) *Handling, placing and detonating explosives.* (1) All blasting operations shall be performed under the supervision of a blaster-in-charge.

- (2) No individuals other than the blaster-in-charge, certified blasters and other authorized blasting assistants shall be allowed in the blasting site after the loading of explosives has begun until such time as the all clear is given by the blaster-in-charge after the detonation.
- (3) The work of handling and placing explosives in preparation for a blast shall be performed only by;
  - (i) the blaster-in-charge, or
  - (ii) a certified blaster acting within the scope of the classification for which they are certified, or
  - (iii) authorized blasting assistants under the direct supervision of the certified blaster or the blaster-in-charge.
- (4) The detonation of explosives shall be under the control of the blaster-in-charge. The detonation of explosives may be performed by a designated authorized blasting assistant under the direction of the blaster-in-charge.

- (b) *Charging.* In charging holes for blasting, only non sparking material shall be used for tamping and loading.
- (c) *Fuse requirements.* Any fuse which varies more than 10 percent from an average speed when burned unconfined in the open at sea level in three-foot lengths shall not be used. Any fuse that burns faster than 90 seconds per three-foot length with more than an allowable variation of 10 percent, when burned unconfined in the open at sea level, shall not be used. Any 40 second/foot fuse length less than 36 inches shall not be used. This shall not apply to log-splitting wedges, the fuses for which may be not less than 12 inches in length. Fuses shall be cut and capped in safe, dry locations posted with "NO SMOKING" signs.
- (d) *Notice of blast.* The blaster-in-charge shall be responsible for making sure that timely audible notice of every blast is given to every person in danger thereof, and shall not allow any blast to be detonated until all persons have been removed to safe locations.
- (e) *Maximum A.C. voltage of electric blast.* The A.C. voltage used to detonate any blast shall not exceed 440 volts.
- (f) *Blasting operations during electrical storms.* All blasting operations and any handling of explosives shall be stopped immediately upon the approach of an electrical storm, and all persons shall immediately retire to a place of safety.
- (g) *Blasting near radio frequency energy sources.* All blasting operations conducted in areas that could be affected by radio frequency radiation hazards from either permanent or mobile sources shall be conducted in compliance with IME No.20.
- (h) *Assembly of blasting caps.* Blasting caps shall be crimped to fuses only with implements designed for that specific purpose.
- (i) *Permanent electric blasting lines.* Permanent electric blasting lines shall be properly supported, insulated and kept in good repair.
- (j) *Branch circuits.* If branch circuits are used when blasts are fired from power circuits, safety switches located at safe distances from the blast areas shall be provided in addition to the main blasting switch.
- (k) *Blasting switches.* Blasting switches shall be locked in the open position except when closed to fire and blast. Lead wires shall not be connected to the blasting switch until the shot is ready to be fired, except for permanent electric blasting lines.
- (l) *Electric circuits.* Electric circuits from blasting switches to the blast area shall not be grounded.
- (m) *Detonating-cord knots.* All detonating-cord knots shall be tight and all connections shall be kept at right angles to the trunk lines.
- (n) *Monitoring blasts.* Blasts shall be monitored for ground vibration and airblast as required by Article 8 of IME No. 3. When seismographs are used they

shall be properly calibrated as recommended by the manufacturer and monitored by a qualified operator trained by the manufacturer of the device or individuals certified by the manufacturer.

- (o) *Blasting Mat.* Wherever any person may be endangered from the material being blasted, such material shall be covered on all exposed sides with a strong woven matting of wire rope not less than one-half inch in diameter, or other equivalent covering which will be effective in preventing particles from being projected into the air by the blast.
- (p) *Public Utilities.* Explosives shall not be detonated in violation of the requirements of subdivisions 1 and 2 of section 322-a of the General Business Law of New York State relating to operations carried out in the vicinity of public utility facilities.

## **SUBPART 61-5**

### **Special Provisions for Mobile Laser Operators**

**Section 61-5.1 Application.** This Subpart applies to every individual who operates a mobile laser, except for mobile lasers that:

- (a) are subject to the regulatory powers and jurisdiction of the New York State Department of Health or the New York City Department of Health,
- (b) are used in the healing of humans when done by or under the supervision of an individual licensed to practice medicine in the State of New York,
- (c) are used in the healing of animals when done by or under the supervision of an individual licensed to practice veterinary medicine in the State of New York;
- (d) are used exclusively in research and development;
- (e) are used by professional engineers and land surveyors licensed to practice in the State of New York; or
- (f) by reason of their design and construction cannot emit radiation that exceeds  $1 \times 10^{-7}$  joules/cm<sup>2</sup> or  $1 \times 10^{-5}$  watts /cm<sup>2</sup> when measured 10 centimeters from the exterior surfaces of such mobile lasers.

### **Section 61-5.2 Definitions.**

- (a) *Certified mobile laser operator* -- Any individual holding a valid certificate of competence issued by the Commissioner in accordance with the provisions of this Subpart.
- (b) *Laser* -- An acronym for light amplification by stimulated emission of radiation
- (c) *Laser installation* -- Any location where, for a period of more than 30 days, one or more lasers are used or operated. The confines of a laser installation shall be designated by the owner of such installation. An entire building or other structure, a part thereof or a plant may be designated as a laser

installation. For the purposes of this Subpart, a construction site shall not be considered a laser installation.

- (d) *Mobile laser* -- A laser which is used or operated outside a laser installation.
- (e) *Owner* -- Any person conducting the business or activities carried on within a laser installation or with a mobile laser and having by law the administrative control of a laser, whether as owner, lessee, contractor or otherwise.
- (f) *Research and development*.
  - (1) Theoretical analysis, exploration or experimentation; or
  - (2) The extension of investigative findings and theories of a scientific or technical nature into practical application for experimental, demonstrative and specialized purposes including the experimental or limited production and testing of models, devices, equipment, materials and processes involving the use of lasers.
- (g) *Trainee* -- An individual, at least 18 years of age, who is being trained in the proper and safe use and operation of lasers.

**Section 61-5.3 Certification.** (a) *Classifications of certificates of competence.* There shall be two classifications of certificates of competence issued to operators of mobile lasers, as follows:

- (1) Class A (Restricted). The holder of a Class A certificate of competence may operate any low-intensity mobile laser.
  - (2) Class B (Unrestricted). The holder of a Class B certificate of competence may operate any high-intensity or low-intensity mobile laser.
- (b) *Certification required.* No individual shall operate a mobile laser unless such individual is either a certified mobile laser operator working within the scope of the individual's certified classification or a trainee working under the direct supervision of a certified operator and within the scope of the operator's certified classification. No owner, employer, contractor, or agent, shall knowingly permit any individual to act as a laser operator unless such individual is either a certified mobile laser operator working within the scope of the individual's certified classification or a trainee working under the direct supervision of the certified operator and within the scope of the operator's certified classification.
  - (c) *Responsibilities of certified mobile laser operators.* Every certified mobile laser operator shall be responsible for complying with the reporting and recordkeeping requirements and the standards of conduct of this Subpart at sections 61-5.7 and 61-5.8 below.

**Section 61-5.4 Qualifications.** The general provisions set forth at section 61-1.4 shall apply under this Subpart except as follows:

- (a) *Experience.* Every applicant for a certificate of competence shall have at least one year of practical experience in the operation of a laser. Such required experience may be obtained by a trainee who is designated by and working under the direct supervision of a certified mobile laser operator. Such experience shall include knowledge of laser safety precautions and shall be acceptable to the Commissioner. The Commissioner may waive the one-year experience requirement if the applicant submits evidence of his successful completion of a laser operator training course acceptable to the Commissioner.

**Section 61-5.5 Certification procedures.** The general provisions set forth at section 61-1.5 shall apply under this Subpart except as follows:

- (a) *Investigations.* For certifications under this Subpart, all applicants shall pass an eye examination as specified by the Commissioner. The requirements of Subpart 61-1.5(a)(3) shall not be applicable to applicants for certification as Mobile Laser Operators.
- (b) *Examination.* Each applicant for a certificate of competence shall, and each applicant for a renewal of such certificate may, be required by the Commissioner to take an appropriate written examination.
- (c) *Issuance of certificates without examination.* The Commissioner may issue a certificate of competence or a renewal thereof without examination of any kind to any applicant who:
  - (1) has successfully completed a four-year course of study at a college or university which included a study of lasers and laser safety precautions and such course is acceptable to the Commissioner; or
  - (2) has filed an application for a certificate of competence prior to February 1, 1973 and has submitted along with such application evidence of adequate experience with lasers and with laser safety precautions and who, in the judgment of the Commissioner, meets all other qualifications required for certification as a competent mobile laser operator.

**Section 61-5.6 Laser Examining Board.** There shall be no examining board under this Subpart unless permitted by the legislature.

**Section 61-5.7 Reporting and Recordkeeping.** The reporting requirements of section 61-1.7 shall apply under this Subpart and shall include the name of the owner of the mobile laser.

**Section 61-5.8 Standards of Conduct for Operating Mobile Lasers.** Certified mobile laser operators shall operate mobile lasers in compliance with the requirements of 12 NYCRR Part 50.