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EXPLOSIVES >>**

Chapter 13 EXPLOSIVES ^[1]

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Sec. 13-1. Application of provisions; to whom permit application made.

This chapter shall apply to both the incorporated and unincorporated areas of Miami-Dade County, Florida. This chapter shall apply, at blasting sites, to the use and storage of explosives and blasting agents. Application for county licenses and/or user permits required herein shall be made to the Director of the Miami-Dade County Public Works Department.

(Ord. No. 96-45, § 1, 3-19-96)

Sec. 13-2. Exceptions.

Nothing in this chapter shall be construed as applying to:

- (a) The armed forces of the United States or the State militia.
- (b) Explosives in forms prescribed by the official United States Pharmacopoeia.
- (c)

The sale or use of fireworks as defined in Article 29 of the South Florida Fire Prevention Code, as may be amended from time to time, hereinafter referred to as the "County Fire Code."

- (d) The possession, transportation and use of small arms, ammunition or special industrial explosive devices.
- (e) The use of explosives or blasting agents by the United States Bureau of Mines, the Federal Bureau of Investigation, the United States Secret Service, or police and fire departments acting in their official capacity.
- (f) The manufacture, sale or transportation of explosives and blasting agents, or their storage as regulated by Article 28 of the South Florida Fire Prevention Code, as may be amended from time to time, hereinafter referred to as the "County Fire Code," except that storage of explosives and blasting agents on blasting sites is herein regulated.
- (g) The following three situations, but only with respect to the application of amendments in Sections 13-7, 13-15, 13-18, and 13-22 to those three specific situations, on the effective date of the amendments: (1) there is an existing unexpired county user permit for the use of explosives on a specific site, (2) a property has had a final plat approval by the Board of County Commissioners within the past year, or (3) a plat has been recorded within the past five (5) years. The properties covered by this exception shall be governed by the Code as it existed prior to the adoption of the above enumerated amendments.

(Ord. No. 96-45, § 1, 3-19-96)

Sec. 13-3. Definitions.

For the purpose of this chapter, the following terms, phrases, words and their derivations shall have the meaning given herein. The word "shall" is always mandatory and not merely directory.

- (a) *Blast area*: The area in which concussion (shock wave), flying material, or gases from an explosion may cause injury to persons. In determining the blast area, the following factors shall be considered:
 - (1) Geology or material to be blasted.
 - (2) Blast pattern.
 - (3) Burden, depth, diameter, and angle of the holes.
 - (4) Blasting experience of the operation.
 - (5) Delay system, powder factor, and pounds per delay.
 - (6) Type and amount of explosive material.
 - (7) Type and amount of stemming.
- (b) *Blaster*: An individual who must be employed by a user and properly licensed, who detonates or otherwise effects the explosion of an explosive or who is in immediate personal charge and supervision of one (1) or more other persons engaged in such activity.
- (c) *Blasting agent*: Any material or mixture, consisting of a fuel and oxidizer, intended for blasting, not otherwise classified as an explosive, in which none of the ingredients is classified as an explosive, provided that the finished product, as mixed and packaged for use or shipment, cannot be detonated by means of a No. 8 test blasting cap when

unconfined. Materials or mixtures classified as nitro carbo nitrates by the Department of Transportation regulations shall be included in this definition.

- (d) *Blast site*: The area where explosive material is handled during loading including the perimeter formed by the blastholes and fifty (50) feet in all directions from loaded holes. The fifty-foot requirement also applies in all directions along the full depth of the hole.
- (e) *Carrier*: Person who engages in the transportation of particles or materials by rail, highway, water or air. (Regulated by [Article 28](#) of the County Fire Code).
- (f) *Dealer*: A person engaged in the wholesale or retail business of buying and selling explosives; provided that should a manufacturer-distributor make sales to users, such manufacturer shall not be required to obtain an additional license as a dealer. (Regulated by [Article 28](#) of the County Fire Code).
- (g) *Detonator*: Any device containing a detonating charge that is used for initiating detonation in an explosive. The term includes, but is not limited to, electric blasting caps of instantaneous and delay types, blasting caps for use with safety fuses, detonating cord delay connectors, and nonelectric instantaneous and delay blasting caps.
- (h) *Director*: The Director of the Miami-Dade County Public Works Department.
- (i) *Explosive*: Any mixture, compound or material capable of producing an explosion, including but not limited to dynamite, nitroglycerin, trinitrotoluene, blasting caps and detonators; but not including cartridges for firearms, and not including fireworks as defined in (the) County Fire Code.
- (j) *Helper*: An individual who assists the user or blaster and who is licensed to handle but not to purchase, possess or detonate explosives.
- (k) *Magazine*: Any building or structure approved for the storage of explosives.
- (l) *Manufacturer-distributor*: A person engaged in the manufacture, production and distribution of explosives to others for resale or use. (Regulated by [Article 28](#) of the County Fire Code).
- (m) *Person*: Any natural person, partnership, association, corporation, or legal entity.
- (n) *Purchase*: As used herein shall include acquisition of any explosive by a person with or without consideration.
- (o) *Small arms ammunition*: Any shotgun, rifle, or handgun ammunition.
- (p) *Special industrial explosive device*: Any explosive power-pak containing an explosive charge in the form of a cartridge or construction device. The term includes but is not limited to explosive rivets, explosive bolts, explosive charges for driving pins or studs, cartridges for explosive-actuated power tools and charges of explosives used in pet tapping of open hearth furnaces and jet perforation of oil well casings.
- (q) *Special industrial high explosive material*: Sheets, extrusions, pellets and packages of high explosives, containing dynamite, trinitrotoluene, pentaerythritoltetrate, cyclotrimethylene-trinitramine, or other similar compounds used for high-energy-rate forming, expanding and shaping metal fabrication, and for dismemberment and quick reduction of scrap metal.
- (r) *Terminal*: Those facilities used by carriers for the receipt, transfer, temporary storage or delivery of articles or materials. (Regulated by [Article 28](#) of the County Fire Code.)
- (s) *Test blasting cap No. 8*: One (1) containing two (2) grams of mixture of eighty (80) percent mercury fulminate and twenty (20) percent potassium chlorate, or a cap of equivalent strength.

- (t) *Two pound user*: Same as user as described in [Section 13-3\(u\)](#) except with the following limitation: that the amount of explosives to be used at any one (1) time whether fired or detonated as a single charge or delay series does not exceed the total explosive power or capacity of two (2) pounds of forty (40) percent dynamite.
- (u) *User*: The person who conducts an operation that requires the use of explosives or blasting agents, purchases same from a dealer or manufacturer-distributor, or acquires the possession of any explosive by any other means. A user shall be responsible for the consequences of all its blasting activity involving explosives or blasting agents and shall ensure that all its personnel handling or using same are properly licensed by the County. A user shall possess a county user permit in the name of one (1) or more individuals who shall obtain this County user permit in accordance with the procedures outlined in [Section 13-5](#) and/or [section 13-7](#) as applicable.
- (v) *Recognized standards and references* shall mean the most restrictive applicable blasting standard or reference on the particular issue (i.e., air blast, vibration, scaled distance factor, etc.) among, but not limited to, the following: United States Bureau of Mines' Reports of Investigations, Information Circulars, papers, and presentations; International Society of Explosives Engineers' conference proceedings, relevant blasting reports, information circulars, and presentations; the American National Standards Institute's standards and reports on explosives, blasting and related subjects; and United States or State Agencies' regulations and reports.

(Ord. No. 96-45, § 1, 3-19-96)

Sec. 13-4. County licenses and/or user permits required; types.

- (a) It shall be unlawful for any person to conduct an operation that requires the use of explosives or blasting agents, acquire, possess, purchase, handle, dispose of, store or use same on any site without first obtaining a county license and/or user permit issued under and pursuant to the provisions of this chapter. The requirements of this chapter shall not relieve any person from compliance with the provisions of Chapter 552 of the Florida Statutes and all rules and regulations promulgated by the State Fire Marshal and [Article 28](#) of the County Fire Code.
- (b) It shall be unlawful for any person to purchase or store explosives or blasting agents, to conduct an operation that requires the use of explosives or blasting agents, to drill boreholes for the purpose of blasting or to engage in blasting at any site without first obtaining a County user permit. This restriction shall not include the drilling of exploratory test borings at a minimum distance of fifty (50) feet apart.
- (c) It shall be unlawful for any individual to perform or supervise the handling or detonation of explosives or blasting agents at any site without first obtaining a County blaster license.
- (d) It shall be unlawful for any individual to handle explosives while assisting a blaster without first obtaining a helper's license. A person possessing a helper's license may only handle explosives at an approved site under the direct supervision of an individual possessing a County blaster license.
- (e) County licenses and/or user permits required by [Section 13-4\(a\)](#) shall not be issued for:
 - (1) Liquid nitroglycerin.
 - (2) Nitrocellulose in a dry and uncompressed condition in quantity greater than ten (10) pounds net weight in one (1) package.
 - (3) Fulminate of mercury in a dry condition and fulminate of all other metals in any condition except as a component of manufactured articles not hereinafter forbidden.

- (4) Explosive compositions that ignite spontaneously or undergo marked decomposition, rendering the products or their use more hazardous, when subjected for forty-eight (48) consecutive hours or less to a temperature of one hundred sixty-seven (167) degrees Fahrenheit (seventy-five (75) degrees Celsius).
- (5) New explosives until approved by the United States Department of Transportation, except that County licenses and/or user permits may be issued to educational, governmental or industrial laboratories for instructional or research purposes.
- (6) Explosives condemned by the United States Department of Transportation.
- (7) Explosives not packed or marked in accordance with the "Hazardous Materials Regulations of the United States Department of Transportation."
- (8) Explosives containing an ammonium salt and a chlorate.

(Ord. No. 96-45, § 1, 3-19-96)

Sec. 13-5. Applications for County licenses and/or user permits; issuance.

All applications for County user permits and County blaster licenses or helper licenses required under this chapter shall be filed with the Director of the Public Works Department or his designee and shall set forth in detail the purpose for which the County license and/or user permit is sought in relation to explosives, the full name and address of the applicant, his or her physical description, his or her fingerprints, and such other information as may be prescribed by the Director, and shall be accompanied by an accurate photograph of the applicant. Such application shall be signed and sworn to by the applicant. The Director shall prescribe the form of applications and furnish such application forms to applicants upon request. County blaster and helper licenses are not transferable. A County user permit shall be transferable so long as the transferee meets all the requirements of this chapter. No County license and/or user permit shall be issued to any person under the age of eighteen (18) years, or who is addicted to the excessive use of alcohol, narcotics, drugs, stimulants, or depressants, or who, as a result of a physical or mental deficiency, cannot reasonably be expected to safely handle or utilize explosives or blasting agents, or who has been convicted of a felony. An applicant for a County user permit or County blaster's license must prove himself or herself thoroughly competent and familiar with explosives to be used and with the operation to be performed and with applicable regulations by an examination prepared and administered by the Director or his designee. The burden shall rest upon the applicant to establish his or her qualifications for the issuance of a County license or user permit. The County user permit issued hereunder shall show the purpose for which it is to be used, the location and the period of time for which it is valid. The County license issued hereunder shall show the purpose for which is to be used, and the period of the time for which it is valid.

(Ord. No. 96-45, § 1, 3-19-96)

Sec. 13-6. Appeals from refusal to issue a County license or user permit and from revocation of a County license or user permit; public hearing; waiver of prior conviction.

Any individual who is denied or refused a County license or any person who is denied or refused a County user permit for reasons other than as provided in [Section 13-7](#) or whose County license or user permit has been revoked by the Director of the Public Works Department for reasons other than as provided in [Section 13-7](#), may appeal to the Construction Trades Qualifying Board Division A, by filing a written petition of review setting forth the reasons why his application for a County license or user permit should have been granted, provided, however, that the

Construction Trades Qualifying Board shall have no jurisdiction to entertain any such appeal unless a written petition or request for review is filed with the Secretary of the Construction Trades Qualifying Board within thirty (30) days after the date upon which the applicant receives notice that his application for a County license or user permit has been denied or refused or revoked. When an appeal has been filed, the Construction Trades Qualifying Board shall conduct a public hearing to determine whether the applicant qualifies for a County license or user permit. The Construction Trades Qualifying Board shall not authorize the granting of a County license or user permit unless it finds and determines that the applicant is qualified under the provisions of [Section 13-5](#). The prohibition against issuance of a County license or user permit to any person who has been convicted of a felony may be waived by the Construction Trades Qualifying Board, provided that such conviction occurred more than ten (10) years prior to the date of filing the application, and that the applicant has rehabilitated himself or herself completely.

(Ord. No. 96-45, § 1, 3-19-96)

Sec. 13-7. Application for County user permit for lake excavation within the urban development boundary; public hearing before the Board of County Commissioners.

- (a) Except in the case of a two (2) pound County user permit all County user permit applications for lake excavations that lie within the urban development boundary (UDB) as shown on the adopted comprehensive master plan as authorized by [Section 2-114](#) of the Code of Miami-Dade County, Florida, must be approved by the Board of County Commissioners. A County user permit application for a lake excavation that lies within the UDB shall be verified by the owner or the lessee of the property upon which the work is proposed. If the application for a County user permit for a lake excavation that lies within the UDB is verified by a lessee, an affidavit from the owner of the property indicating that the owner has no objection to the work proposed shall be submitted with the application.
- (b) In addition to the application requirements of [Section 13-5](#), a County user permit application for a lake excavation within the UDB which is filed with the Director of the Public Works Department shall include, as a minimum, the following:
 - (1) Evidence of ownership or a lease of the property upon which the lake excavation is proposed. Said evidence of ownership or lease may include, at the discretion of the Public Works Department, an affidavit of ownership or lease executed by the owner and/or lessee of the property.
 - (2) Three (3) copies of a plan or sketch of the proposed lake excavation(s) to include location, size and depth.
 - (3) A written statement signed by the County user permit applicant or the applicant's authorized agent stating that, if approval is granted for the proposed work by the Board of County Commissioners, complete and detailed plans and calculations of the proposed work shall be prepared by an engineer licensed in the State of Florida in accordance with the Miami-Dade County Public Works Manual. Said plans and calculations shall be subject to the review and approval of the Public Works Department.
 - (4) Certification by an engineer licensed in the State of Florida, who is qualified by education and experience in the area of construction that, to the best of the engineer's knowledge and belief, the proposed work does not violate any laws, rules or regulations of the State of Florida or any provisions of the Code of Miami-Dade County which may be applicable.

- (5) A geotechnical report prepared and signed by an engineer licensed in the State of Florida having expertise in the geotechnical field. This geotechnical report shall provide a concise soil and rock strata description of the area proposed to be excavated, supported by the appropriate soil boring results of the site.
The geotechnical report must give full consideration for excavating the lakes without the use of explosives. If explosives are recommended, impact to nearby residential, commercial or industrial areas must be addressed. The report should state how the requirements of this chapter will be met.
 - (6) Names and addresses from the latest County tax rolls of all owners of property within one (1) mile of the perimeter of the proposed lake excavation.
 - (7) If the proposed work is within an incorporated area of the County, a letter from the zoning department of that incorporated area, stating that the proposed usage of the property upon which the proposed work would occur does not violate any zoning law applicable to the area of the proposed work.
 - (8) The applicant, at his or her discretion, may provide evidence of public interest relating to the proposed work.
- (c) Obtaining approval from the Board of County Commissioners:
- (1) The Director of the Public Works Department shall review the County user permit application for the proposed lake excavation that lies within the UDB and shall make a recommendation to the Board of County Commissioners of approval, denial, or approval subject to conditions, limitations or restrictions for the proposed work. The Director's recommendation shall be based upon the applicable evaluation factors set forth in [Section 13-7](#)(d) of this Code. The Board of County Commissioners shall hold a public hearing concerning the proposed lake excavation that lies within the UDB. A notice of the time and place of said public hearing shall be published by the applicant in a newspaper of general circulation in Miami-Dade County a minimum of fourteen (14) days prior to the public hearing. Said notice shall include a brief description of the proposed work and the location of the proposed work. A courtesy notice containing substantially the same information set forth in said published notice shall be mailed by the County to those parties whose names appear on the application as the owners of property within one (1) mile of the perimeter of the proposed lake excavation. Failure to mail or receive said courtesy notice shall not affect any action or proceeding taken hereunder. The Board of County Commissioners shall, after holding the public hearing, approve, deny, or approve subject to conditions, limitations or restrictions, the lake excavation proposed under the permit application based upon the applicable evaluation factors set forth in [Section 13-7](#)(d) of this Code.
 - (2) If the Board of County Commissioners approves a permit application, the Public Works Department shall issue the County user permit subject to the conditions, limitations or restrictions required by the Board of County Commissioners. The Director of the Public Works Department is authorized from time to time to change, amend or modify the imposed conditions and limitations regarding any County user permit in order to meet the purpose for which they were imposed if changing conditions or circumstances so dictate and after first considering recognized standards and references, any relevant historical data, studies, and results obtained during the regulation of blasting operations in Miami-Dade County, the adverse effects under [Section 13-14](#), and the guidelines enumerated under [Section 13-18](#). The Director of the Public Works Department is further authorized to revoke a County user permit for failure of the permittee to comply with any conditions, restrictions, or limitations placed on such County user permit.

- (d) Factors for evaluation of County user permit applications within the UDB: Miami-Dade County Public Works Department shall base its recommendation for approval, denial or approval subject to conditions, limitations, or restrictions, and the Board of County Commissioners shall make its decision for approval, denial, or approval subject to conditions, limitations or restrictions, for any of the permits provided for under this article, upon the following evaluation factors, when applicable:
- (1) Potential adverse effects of the proposed blasting project as prescribed by Section 13-14 with respect to preventing damage to property, preventing personal injury or loss of life, protecting the public health, welfare and safety and the reduction of nuisance.
 - (2) Conformance with all applicable federal, state and local laws and regulations.
 - (3) The recommendation to the Board of County Commissioners as to approval or denial from the municipality within which the proposed work is located.
 - (4) All materials submitted with the application as required by this section.
- (e) Appeals:
- (1) Any individual or person appearing of record at any hearing held pursuant to this section may, within thirty (30) days, appeal the decision of the Board of County Commissioners to the Circuit Court.
 - (2) Any person whose County user permit, which has been authorized by the Board of County Commissioners pursuant to this section, is subsequently revoked by the Director of the Public Works Department may, within thirty (30) days, appeal such revocation to the Board of County Commissioners.
- (f) Time of completion of blasting work; extension of completion time; timely application for extension of time.
- (1) All blasting work authorized by a County user permit for a lake excavation within the UDB issued pursuant to this article shall begin no later than three (3) months after Board of County Commission approval and shall be completed within eighteen (18) months from the date of the issuance of the first County user permit for said lake excavation or any extension thereof, unless another period of time is provided by the Board of County Commissioners as set forth in the resolution authorizing approval for the issuance of a County user permit.
 - (2) Extensions of time for completion of work being performed pursuant to a County user permit issued pursuant to this article may be granted by the Director of the Public Works Department or his designee provided that:
 - a. The application form for the extension of time is filed at least thirty (30) days prior to the expiration of the County user permit.
 - b. The application form for the extension of time is filed at least thirty (30) days prior to the expiration of the County user permit.
 - c. The Director has determined that the applicant for the extension of time has affirmatively established by competent factual data and information in the application that:
 1. There have been no substantial changes in the surrounding area that may be affected by the permitted work.
 2. Neither an adverse impact nor cumulative adverse impact will occur if the extension of time is granted.
 3. The work authorized by the County user permit has been performed, to date, in accordance with the County user permit and its restrictions, limitations or conditions.

4. The applicant for the extension of time has agreed to any additional conditions, limitations or restrictions if required by the Director.
- (3) Applications for extensions of time which are not timely filed pursuant to [Section 13-7\(f\)\(2\)](#) hereinabove shall be returned to the applicant. The applicant shall be required to file an application for a new County user permit pursuant to the provisions of this article.

(Ord. No. 96-45, § 1, 3-19-96)

Sec. 13-8. Violations of State laws deemed violation of this chapter, revocation of County license and/or user permit.

Any person who violates any of the provisions of Chapter 552, Florida Statutes, or any of the regulations of the State Fire Marshal promulgated thereunder, shall be deemed to have violated the provisions of this chapter and may be prosecuted in the proper court. County licenses and/or user permits issued hereunder shall be revoked for any violation of this chapter or of the State law or of regulations of the State Fire Marshal.

(Ord. No. 96-45, § 1, 3-19-96)

Sec. 13-9. General requirements.

- (a) *Stolen explosives, reporting.* In the event that any explosive is stolen, misplaced, or lost, such occurrence shall be reported immediately to the directors of public works, Miami-Dade Police Department, Miami-Dade Fire and Rescue Departments, and the Federal Bureau of Alcohol, Tobacco, and Firearms. The area in which the incident occurs shall be secured until investigation has been made and the scene released by the proper authority.
- (b) *Sale to person without County user permit.* It shall be unlawful for any person to sell or otherwise dispose of any explosive to any person who does not have a valid County user permit issued hereunder or under the provisions of [Article 28](#) of the County Fire Code.
- (c) *Inventory, reporting.* Every user having any explosive in his possession, dominion or control shall file with the Director on the fifteenth day of each and every month, a schedule or inventory accurately setting forth the quantity and description of such explosives on a form prescribed by the Director.

(Ord. No. 96-45, § 1, 3-19-96)

Sec. 13-10. Storage of explosives and blasting agents at blasting sites.

- (a) Blasting agents and explosives, including special industrial high explosive materials, shall be stored in accordance with the requirements of Article 28 of the South Florida Fire Prevention Code (adopted as part of Chapter 14 of the Miami-Dade County Code), Florida Statutes Chapter 552, or any of the regulations of the State Fire Marshal promulgated thereunder, and [Title 27](#), Code of Federal Regulations Part 55, Commerce in Explosives, Sub Part K-Storage. In case of conflict between codes and regulations, the more stringent shall apply.
- (b) Every person in possession of any explosive shall cause the same to be stored in a safe place and shall maintain such security measures as shall be reasonably necessary to prevent all unauthorized persons from gaining access to such explosives. Any person who shall fail to use reasonable precautions for the security and safety of explosives in his or her possession shall be deemed guilty of violating this chapter, and subject to the penalties provided for herein, and in addition thereto, shall be subject to revocation of his or her County license and/or user permit.

- (c) Magazine operations.
- (1) Smoking, matches, open flames and spark producing devices shall be prohibited inside or within fifty (50) feet of magazines. Combustible materials shall not be stored within fifty (50) feet of magazines.
 - (2) The land surrounding magazines shall be kept clear of brush, dried grass, leaves, trash and debris for a distance of at least fifty (50) feet.
 - (3) Magazines shall be kept locked except when being inspected or when explosives are being placed therein or being moved therefrom.
 - (4) Packages of explosives shall not be unpacked or repacked in a magazine nor within fifty (50) feet of a magazine nor in close proximity to other explosives.
 - (5) Magazines shall be kept clean, dry, and free of grit, paper, empty packages and rubbish. Floors shall be regularly swept. Brooms and other cleaning utensils shall have no spark producing metal parts. Floors stained by leakage from explosive material shall be cleaned according to instructions of the manufacturer.
 - (6) When an explosive has deteriorated to an extent that it is in an unstable or dangerous condition, or if nitroglycerin leaks from any explosive, then the person in possession of such explosive shall immediately report the fact to the Director of the Public Works Department and upon his authorization shall proceed to destroy such explosives and magazines in accordance with the instruction of the manufacturer. Only experienced persons shall do the work of destroying explosives.
 - (7) The user or blaster shall be in charge of the magazine and shall be held responsible for the enforcement of all safety precautions. All magazines shall be furnished with locking devices that conform to the provisions of Title 27, Code of Federal Regulations Part 55, Commerce in Explosives, Sub Part K-Storage. At any time that a magazine does not have such locks in an operating condition then a twenty-four-hour security guard must be furnished.

(Ord. No. 96-45, § 1, 3-19-96)

Sec. 13-11. Use and handling of explosives.

- (a) Blasting operations shall be conducted during the hours of 8:00 a.m. to 5:00 p.m. except that the Director of the Public Works Department may extend the blasting time to all daylight hours for sites remote from residential development. Blasting shall not be done on Sundays or legal holidays except in emergencies involving the health, safety and welfare of the public.
- (b) The handling and firing of explosives shall be performed by the person possessing a County blaster license or by County helper license holders under his or her direct supervision who are at least eighteen (18) years old. When two (2) or more blasters are working together, one (1) shall be the blaster-in-charge designated by the user or the blasters themselves.
- (c) No person shall handle explosives while under the influence of intoxicants, or narcotics.
- (d) No person shall smoke or carry matches while handling explosives or while in the vicinity thereof.
- (e) No open flame light shall be used in the vicinity of explosives.
- (f) Whenever blasting is being conducted in the vicinity of gas, electric, water, fire alarm, telephone, telegraph or steam utilities which may be affected by adverse effects as prescribed by Section 13-14(a), (b), and (c), the user shall notify the appropriate representative of such utilities at least forty-eight (48) hours, excluding days other than business days, in advance of blasting, specifying the location and intended time of such blasting. Verbal notice shall be confirmed with written notice. In an emergency this time limit

may be waived by the Director. The user shall comply with all applicable notification provisions of Chapter 556 of Florida Statutes, "Underground Facility Damage Prevention and Safety Act," as amended from time to time.

- (g) Blasting operations shall be conducted in accordance with nationally recognized good practice.
- (h) Before a blast is fired, the person in charge shall make certain that all surplus explosives are in a safe place, all persons and vehicles are at a safe distance or under sufficient cover, and a loud warning signal has been sounded.
- (i) Firing with cap and fuse will not be approved for use unless specifically approved for job site by the Director.
- (j) Due precautions shall be taken to prevent accidental discharge of electric blasting caps from current induced by radio or radar transmitters, lighting, adjacent power lines, dust storms or other sources of extraneous electricity. These precautions shall include:
 - (1) The suspension of all blasting operations and removal of persons from the blast area during the approach and progress of an electric storm.
 - (2) The posting of signs warning against the use of mobile radio transmitters on all roads within three hundred fifty (350) feet of the blasting operations.
 - (3) Compliance with nationally recognized good practice when blasting in the vicinity of radio transmitters or power lines.
- (k) When blasting is done in congested areas or in close proximity to a building, structure, railway, highway or any other installation that may be damaged, the blast shall be covered before firing, with a mat constructed so that it is capable of preventing rock from being thrown into the air.
- (l) Tools used for opening packages of explosives shall be constructed of nonsparking materials.
- (m) Empty boxes and paper and fiber packing materials which have previously contained high explosives shall not be used again for any purpose, but shall be destroyed by burning at an approved isolated location out of doors, and no person shall be nearer than one hundred (100) feet after the burning has started.
- (n) Explosives shall not be abandoned.
- (o) Personal vehicles shall not be stopped or parked within five hundred (500) feet of a magazine or blast site. The Director may waive this provision for certain vehicles as requested by the user in written application. This section is not intended to exclude vehicles used in the blasting or quarrying operation.

(Ord. No. 96-45, § 1, 3-19-96)

Sec. 13-12. Drilling boreholes and loading explosive material.

- (a) All drill holes shall be checked prior to loading to determine depth and condition. Holes shall be cleared of any obstructions prior to loading.
- (b) Machines and all tools not used for loading explosives into boreholes shall be removed from immediate location of holes before explosives are delivered. Equipment shall not be operated within fifty (50) feet of loaded holes.
- (c) Loading shall not commence until all drilling is completed, unless this procedure is impracticable under conditions encountered. When conditions justify simultaneous loading and drilling in the same blast area, such operations shall be separated as widely as practicable and in no case less than the length of the deepest hole in the shot or fifty (50) feet whichever is greater.

- (d) No vehicular traffic shall be permitted over loaded holes.
 - (e) No loaded holes will be left unattended or unprotected.
- (Ord. No. 96-45, § 1, 3-19-96)

Sec. 13-13. Misfires.

- (a) The blaster shall inspect the entire blast site for misfires before allowing other personnel to return to the blast area.
- (b) If a misfire is found, the blaster shall provide the proper safeguards for excluding all personnel from the blast area.
- (c) No other work shall be done except that necessary to remove the hazard of the misfire. Only those personnel necessary to do the work shall remain at the blast site.
- (d) No attempt shall be made to extract explosive materials from a misfired hole. A new primer shall be inserted, and the hole shall be refired. If refiring presents a hazard, the explosive materials may be washed out with water, or, where the misfire is under water, blown out with air.
- (e) If there are any misfires using cap and fuse, all personnel shall stay out of the blast site for at least one (1) hour. If there are any misfires using other nonelectric detonators (i.e., other than cap and fuse) or using electric detonators, all personnel shall stay out of the blast site for at least thirty (30) minutes.
- (f) Misfires shall be handled under the direction of a qualified blaster.
- (g) If a misfire is suspected, all initiating circuits (electric or non-electric) shall be carefully traced and a search made for unexploded charges.
- (h) No drilling or digging, except as necessary to safely remedy a misfire problem, shall be allowed until all misfires have been detonated or until the authority having jurisdiction approves the resumption of work.
- (i) All misfires or premature detonations shall be reported in writing to the Director within three (3) days of such occurrence. The blaster shall provide information regarding the date and time of the occurrence, type of explosives and initiation system used, and the cause of the malfunction if it is known.

(Ord. No. 96-45, § 1, 3-19-96)

Sec. 13-14. Adverse effects.

- (a) Maximum allowable airblast measured at the nearest building or structure not owned by the user, or when measured at a distance of five thousand two hundred eighty (5,280) feet from the blast shall not exceed one hundred twenty-nine (129) decibels when measured by an instrument having a flat frequency response over a range of at least 6 to 200 hertz. If the airblast is measured with an instrument having a flat frequency measure over a range of at least 2 to 200 hertz, the corresponding limit is one hundred thirty-three (133) decibels.
- (b) Fly rock traveling in the air or along the ground:
 - (1) Shall remain within the controlled blast area and;
 - (2) Shall not be cast from the blast site more than one-half (½) the distance to the nearest inhabited building within or outside the controlled blast area.
- (c) Ground vibration shall be measured as particle velocity. The maximum allowable peak particle velocity shall not exceed 0.75 inch per second measured at the nearest building or structure not owned by the user or when measured at a distance of five thousand two hundred eighty (5,280) feet from the blast when the nearest structure not owned by the user

is more distant than one (1) mile from the blast. Particle velocity shall be recorded in three (3) mutually perpendicular directions. The maximum allowable peak particle velocity shall apply to each of the three (3) measurements.

- (d) Whenever blasting in the vicinity of a utility as set forth in [Section 13-11\(f\)](#) the user shall protect said utility from damage by establishment of a maximum allowable vibration level submitted by the user and agreed to in writing by the person from the utility who has authority to enter into said agreement. If there is a dispute between the user and the utility, the Director shall determine the maximum allowable vibration level.

(Ord. No. 96-45, § 1, 3-19-96)

Sec. 13-15. Preblast survey and notification.

In order to provide a baseline record of the condition of a structure against which the effects of blasting can be assessed, to help the user to maintain good community relations, and to provide possible protection against later legal claims of damage, the user shall offer, at his or her cost, the following preblast survey and notification for each new blast site:

- (a) All structures within a Scaled-Distance Factor of 150 of the proposed blast site shall be inspected by an independent, recognized seismologist, vibration engineer, structural engineer, or their representative. The Scaled-Distance Factor shall be determined by the following formula: $\text{Scaled-Distance Factor} = D/W$ where W is the charge weight, in pounds, of explosives per delay and D is the distance, in feet, from the blast site to the structure not owned by the user. If occupants of a structure refuse inspection or access is not possible, the user shall notify the Director in writing of the address of said structure.
- (b) The preblast survey inspection shall consist of complete documentation of all visible interior and exterior defects observed at the structures examined. A list of all preblast surveys shall be forwarded to the Director for approval no later than five (5) days prior to the planned commencement of blasting. A location map indicating the streets and structures involved shall be submitted together with this list.
- (c) An update survey of any additions, modifications or renovations requiring a building permit shall be performed on previously inspected structures if requested by a resident or owner.
- (d) The user shall provide written notification of pending blast operations to all residents within one (1) mile of the proposed blast site at least ten (10) but no more than thirty (30) days prior to the commencement of blasting. The written notification shall describe the blasting which will take place, its expected effects, and how to contact the user or his or her representative with any blast related complaints or claims.
- (e) If blasting is suspended in an area for a period of ninety (90) days or longer, renotification of all residents within one (1) mile shall be accomplished at least seven (7) days prior to the recommencement of blasting.

(Ord. No. 96-45, § 1, 3-19-96)

Sec. 13-16. Claims.

- (a) All claims of property damage arising out of the use of explosives shall be acknowledged by the user (or the user's agent) and notification given to the Director within seven (7) days of receipt. The notification to the Director shall include the following information:
 - (1) Date and time of the claim.

- (2) Name, address, and telephone number of the claimant.
 - (3) Nature of the claim.
 - (b) The user shall promptly process any and all property damage claims. The user is responsible to ensure that the claimed damage will be inspected within a reasonable time not to exceed thirty (30) calendar days of initial receipt of the claim and shall estimate the total amount of the damages claimed and provide the claimant and the Director with a copy of the estimate. Based on the estimated amount of damages, any claim that falls within the jurisdiction of the County Court shall be honored, denied or compromised within six (6) months of the date of inspection. All other claims shall, after the initial inspection and estimate, be promptly and diligently processed to a conclusion.
- (Ord. No. 96-45, § 1, 3-19-96)

Sec. 13-17. Director of the Public Works Department to issue County licenses and/or user permits.

- (a) The Director of the Public Works Department is hereby authorized to:
 - (1) Issue County user permits and County blaster licenses only to persons who hold state licenses or permits required by Florida law and who meet the requirements of this chapter.
 - (2) Issue County helper licenses in accord with and pursuant to the provisions of this chapter.
- (b) Such County licenses and/or user permits shall be issued only after:
 - (1) Payment of a fee established by administrative order which shall not become effective until approved by resolution of the Board of County Commissioners.
 - (2) The filing of an application on a form prescribed by the Director signed and sworn to be the applicant showing the applicant's name, address, that he or she holds a valid State License and/or permit, the location or locations where the blasting is to be performed, that blasting at such location is authorized or permitted pursuant to County or municipal zoning regulations, and the distance between the location of the proposed blasting and any improved property.
 - (3) The issuance of a County user's permit shall not authorize blasting in any area or location where the same is prohibited by any zoning regulations or other law, and shall be limited to the location designated in the application; provided, however, that if the amount of explosives to be used at any one (1) time whether fired or detonated as a single charge or by delay series does not exceed the total explosive power or capacity of two (2) pounds of forty (40) percent dynamite, the Director is authorized to issue a two-pound County user permit for the use of such amount of explosives without the same being limited to a particular location, provided, further, that the firing, detonating or exploding of any quantity of explosives on or against a boulder, rock strata, stump, tree or other object, or on the ground surface or in the open air and not confined in a bore, hole or any blasting commonly referred to as mudcapping or adobe blasting, is prohibited unless upon application and the payment of the required fee a user is granted a special user's permit for each and every location where such blasting is to be performed.
- (c) The Public Works Director is hereby authorized to revoke and/or to suspend County licenses and/or user permits for the following reasons:
 - (1) Noncompliance with any order of the issuing authority within the time specified in such order.

- (2) In the event that the County license or user permit applicant or holder is under indictment for, or has been convicted of a crime punishable by imprisonment for a term exceeding one (1) year.
 - (3) In the event the applicant is a fugitive from justice.
 - (4) In the event the applicant is an unlawful user of, or is addicted to narcotics or dangerous drugs.
 - (5) In the event the applicant has been adjudicated as mentally incompetent.
 - (6) In the event that the County license or user permit applicant or holder suffers from a mental or physical defect that would reasonably interfere with the applicant's safe handling of explosives.
 - (7) Violation by the County license or user permit applicant or holder of any provision of any explosives law or regulation; or in the event that false information was given or a misrepresentation was made to obtain the County license or user permit.
- (d) Appeal from revocation and/or suspension may be made in accordance with the provisions of [Section 13-6](#) or [Section 13-7](#)(e) as applicable.

(Ord. No. 96-45, § 1, 3-19-96)

Sec. 13-18. Limitations and conditions.

- (a) The Director of the Public Works Department shall impose in each County user permit issued by him or her such limitations and conditions as to:
- (1) Days and hours when blasting may be performed.
 - (2) The period of time for which it is valid.
 - (3) The amount and type of explosive which may be employed at any one (1) time, whether fired or detonated instantaneously as a single charge or by a delay series charge, as may be deemed by him or her reasonable under the conditions existing in the locale for which the County user permit is issued. The Director may impose conditions concerning borehole stemming.
 - (4) Vibration limits within the urban development boundary (UDB). Vibration limits measured within the UDB may be reduced to a peak particle velocity as low as 0.1 inch per second, after first considering recognized standards and references, and any relevant historical data, studies, and results obtained during the regulation of blasting operations in Miami-Dade County. The Director may conduct a series of tests witnessed by neighborhood property owners to determine acceptable limits of vibration, after first considering recognized standards and references, and any relevant historical data, studies, and results obtained during the regulation of blasting operations in Miami-Dade County.
- (b) In determining and imposing such reasonable conditions and limitations the Director, with the assistance of the Fire Chief, shall be governed by preventing damage to property, preventing personal injury or loss of life, protecting the public health, welfare and safety and the reduction of nuisance.
- (c) The Director is authorized from time to time to change, amend or modify the imposed conditions and limitations regarding any County user permit in order to meet the purpose for which they were imposed if changing conditions or circumstances so dictate. It is intended here that the Director may impose more restrictive conditions and limitations if circumstances and conditions in the area concerned so warrant or prove to be necessary in order to carry out the purpose for which the conditions and limitations were imposed. If such conditions and limitations are found by the Director to be too restrictive, he or she may modify them

accordingly within the bounds of the purposes for which they were imposed. However, the imposed limitations and conditions as to the amount of explosives authorized in any County user permit shall not be increased by the Director until and unless the user shall first demonstrate to the Director by good and sufficient evidence that the desired increase would not in any event provoke or result in adverse effects as prescribed by Section 13-14 hereof. The Director will require, in order to protect the public health, welfare or safety, the user to submit a recognized instrument test for any blasting operations to ascertain that the above described limits are not exceeded at the nearest building, or structure not owned by the user. In the event that the Director determines that measurements from more than one (1) location are necessary, the user shall be responsible for supplying any and all additional instrument testing. The Director may specify the location at which measurements are taken and the degree of detail necessary in the measurement. Any actions taken by the Director under authority granted by this subsection shall only be taken after the Director has first considered recognized standards and references, the guidelines enumerated above in subsections (a) and (b), and any relevant historical data, studies, and results obtained during the regulation of blasting operations in Miami-Dade County.

- (d) The blaster shall provide, at his or her cost, a seismic instrument at each site. Such instrument may be removed from a site, after written notice has been given to the Director of Public Works, when the blasting at the site has been completed or indefinitely suspended.
- (e) The Director shall be notified of any scheduled blast. The user shall call the Director at least two (2) hours prior to scheduled blasting to indicate the location, pattern, quantities of explosives being used, and the time of detonation as can best be determined. Should any blast be more than thirty (30) minutes from the proposed time set, renotification to the Director will be required. The user shall call and notify the Director immediately after each blast to give the exact time of detonation in order for the Director to identify a particular blast with any complaints which may be received.
- (f) Any user who exceeds in a single blasting event the maximum peak particle velocity (PPV) limit established by the user permit by .05 inch per second as measured at any occupied residential unit located within the adopted (2005) UDB and within two (2) miles of a specific blasting site shall be subject to a civil fine of five hundred dollars (\$500.00) to one thousand dollars (\$1,000.00). Any subsequent blast at the same blast site within a calendar year of the first violation which exceeds the PPV limit as provided herein shall be subject to a civil penalty of three thousand dollars (\$3,000.00) to ten thousand dollars (\$10,000.00). A third violation at the same site during the same calendar year of the second violation shall result in a fine of ten thousand dollars (\$10,000.00) and blasting at that site will be suspended pending an expedited hearing before the Construction Trades Qualifying Board. A finding by that Board that a violation has occurred shall result in a revocation of the permit or non-issuance of any subsequent permit for the remainder of that calendar year or a period of six (6) months, whichever period of time is greater. After revocation or non-issuance, a permit for the remainder of the calendar year can only be reinstated or issued by action of the Board of County Commissioners at a public hearing. All fines collected hereunder shall be placed in a separate fund and expended solely for the purposes of offsetting the costs of regulation under this chapter.

(Ord. No. 98-15, § 1, 2-3-98)

Sec. 13-19. Notice to purchasers of residential property of rock mining operations where blasting is permitted.

- (a)

Any person constructing a residential structure located within two (2) miles of a permitted rock mining operation where blasting is permitted shall, prior to the issuance of the first development permit, record in the public records a notice that the proposed development is located within two (2) miles of a blasting site. The notice shall provide the location of the blasting site and that such blasting is regulated by [Chapter 13](#) of the Code of Miami-Dade County. Notice shall be given to and signed by buyers contemporaneous with signing purchase contracts within said developments.

- (b) The Director of the Miami-Dade County Public Works Department and the Director of the Miami-Dade County Department of Planning and Zoning shall maintain detailed maps of all permitted rock mining operations where blasting is permitted within Miami-Dade County. Any developer may request a written opinion from the Director of Public Works as to whether his or her development is located within the two-mile area.
- (c) The Directors of the Miami-Dade County Public Works Department and Miami-Dade County Department of Planning and Zoning shall provide adequate notice of this section with the official application forms for development permits.

(Ord. No. 96-45, § 1, 3-19-96; Ord. No. 98-125, § 8, 9-3-98)

Sec. 13-20. Blasting records.

- (a) All users of explosives shall keep daily records for a period of three (3) years of all blasting performed on a form or forms prescribed by the Director of the Public Works Department which shall be made available at reasonable times and hours at a location approved by the Director for inspection by him or her or his or her designee and signed copies of such records shall be furnished to the Director within seven (7) days from the date of the actual blast.
- (b) The minimum data to be shown on such record shall be:
 - (1) Name and location of blasting site.
 - (2) Date and time of firing.
 - (3) Arrangements and spacing of charges.
 - (4) The amount of explosive for each blast or delay series.
 - (5) Delay interval.
 - (6) Name of person in charge of loading and firing.
 - (7) County user permit number, and signature and title of person making report.
- (c)
 - (1) Records of instrument readings taken as required by [Section 13-18](#) shall be analyzed by an independent recognized seismologist or vibration engineer and shall be reported by him or her to the Director of Public Works with full and complete details within thirty (30) days from the date of the actual blast or upon demand. This seismologist or vibration engineer shall be qualified in blast monitoring and shall have documented prior experience within this field.
 - (2) All original records will be the property of the blasting company with a copy certified by a seismologist or vibration engineer furnished to the Director of Public Works.
- (d) Unless otherwise authorized by the Director, all instruments used for compliance with this chapter shall meet the following minimum specifications:
 - (1) Seismic frequency range: 2 to 200HZ (3HZ)
 - (2) Acoustic frequency range: 2 to 200HZ (1db)
 - (3) Velocity range: 0.02 to 4.0 inches/second

- (4) Sound range: 110 to 140 db linear
- (5) Transducers: Three mutually perpendicular axis
- (6) Recording: Provide time history of waveform.
- (7) Each instrument shall be calibrated annually, preferably on a shake table, and such calibration certified except for instruments which are certified as self-calibrating.
- (e) A copy of preblast inspection documentation as required by Section 13-15(b) and (c) shall be forwarded, in its entirety, to the Director upon demand.

(Ord. No. 96-45, § 1, 3-19-96)

Sec. 13-21. Waterway blasting operations.

When blasting operations involve drill boats or barges operating on or near, navigable waterways, the following shall be required in addition to all applicable federal, state, and local regulations including those set forth in this chapter.

- (a) *Drill boat or barge safety.*
 - (1) All onboard magazines shall be permanently secured to the deck as required by the Coast Guard.
 - (2) No explosives shall be stored on the boat or barge deck in the open except for the one (1) case that is to be loaded immediately into the bore holes. Any explosives remaining on deck shall be returned to the day magazine prior to the firing of any blast.
 - (3) The firing line reel or spool shall be mounted on the rig in a manner that it cannot be lost overboard.
 - (4) The amount of explosives allowed aboard the drill boat at any one (1) time will be subject to the approval of the Director, but in no case shall such amount exceed that amount allowed by appropriate codes and regulations.
 - (5) The user shall make necessary arrangements, as may be required by the Director, to prevent damage to any vessel, moored or underway, building or structure, and preserve the crew or occupants thereon from exposure to injury as a result of the users operations.
 - (6) The user shall have a certified marine survey of all floating plant proposed for underwater blasting work performed prior to starting any work, and shall provide the results to the Director.
 - (7) Lightning: The user shall furnish, maintain, and operate lightning-detection equipment during the entire period of blasting operations and/or during the periods that explosives are stored at the site. The equipment shall be installed in a location approved by the Director. A lightning detector shall be operated at all times to detect lightning within a ten (10) mile radius. When the lightning-detection device indicates a blasting hazard potential, the user shall perform the following:
 - a. Shall notify the Director of the potential hazard.
 - b. Shall clear the buoyed blast area of all vessels and personnel.
 - c. Terminate all loading of holes and return unused explosive to the day storage area.
 - d. After sounding the All Clear Signal, shall notify the Director that the potential hazard has passed.
 - e. Resume operations only after all potential of hazard has passed.

- f. The lightning detector shall be taken off the drill barge with the last evacuation vessel and continuously monitored until danger has passed.
 - g. The user shall monitor the blast area to prevent any boat or vessels from inadvertently entering the blast area during the lightning hazard.
- (b) *Navigation control during drilling, loading, and blasting operations.*
 - (1) The user shall buoy the blast area with warning signs. The warning signs shall be legible from a distance of two hundred (200) feet and shall contain the message "DANGER — EXPLOSIVES IN USE." The user may be required by the Director to operate two (2) or more patrol boats during blasting operations whose sole function shall be to monitor and maintain security in the blast area. Patrol boats shall be stationed at the drill barge and remain in the blast area during all blasting operations. Land oriented access control and visual observation locations should be determined and approved by the Director. The user shall inspect and insure that no boat traffic exists within the buoyed blast area prior to the detonation of the blast and until such time as the blaster in charge has sounded the "All Clear Signal." The user shall equip and maintain his or her floating plant with radio equipment capable of communications with the Coast Guard. The user shall inspect the blast area after each blast and immediately notify the Coast Guard and the Director if an all clear or misfire is noted.
 - (2) Coordination with the U.S. Coast Guard: The user shall notify the Coast Guard twenty-four (24) hours prior to a scheduled shot and two (2) hours prior to the actual shot. The waterway must be kept open to vessel traffic at all times except as authorized by the Coast Guard.
 - (3) No blast shall be fired while any vessel under way is closer than one thousand five hundred (1,500) feet to the blast area. Those on board vessels or craft moored or anchored within one thousand five hundred (1,500) feet shall be notified before a blast is fired. No blast shall be fired while any swimming or diving operations are in progress in the vicinity of the blast area. If such operations are in progress, signals and arrangements shall be agreed upon to assure that no blast shall be fired while any person is in the water. Blasting flags shall be displayed.
- (c) *Contingency plan in case of misfire, inadvertent initiator extraction, or accidental loss of down lines.*
 - (1) All loading of blast holes shall be done early enough each day to allow time, in case of a misfire, inadvertent initiator extraction, or accidental loss of down lines, to implement a contingency plan for removing or detonating the explosives before dark.
 - (2) The user shall submit a contingency plan to the Coast Guard and the Director prior to the commencement of any blasting and shall notify both parties in the event of a misfire, inadvertent initiator extraction, or accidental loss, of down lines. All undetonated explosives due to misfire, inadvertent initiator extraction, or accidental loss of down lines must be detonated.
 - (3) The user shall immediately notify the Coast Guard upon giving the "All Clear Signal" after correcting the misfire, inadvertent initiator extraction, or accidental loss of down lines.
 - (4)

When more than one (1) charge is placed under water, a float device shall be attached to an element of each charge in such manner that it will be released by the firing.

(d) *Bulk product specifications.*

- (1) Bulk blasting agents or explosives delivered to the blast site shall be weighed by a certified weigh master at the transfer location nearest the blast site to determine the actual quantity of explosives delivered each day.
- (2) Bulk product storage tanks or vessels on barges shall be permanently attached to the barge and electrically grounded. A containment dike shall be erected to contain the maximum rated capacity of the storage vessel and all associated pumps and hoses.
- (3) All bulk product storage tank or vessel access ports, valves, vents, pumps, hoses, and drains shall be secured to prevent vandalism or theft of the explosive product.
- (4) A flow metering device capable of measuring the quantity of explosives to within five (5) percent of the actual quantity in pounds shall be utilized for all bulk transfers to or from the bulk storage vessel.
- (5) The delivery system to load holes on each drill frame shall be designed to load each hole to within five (5) percent of the design quantity required for each drill hole.
- (6) Each drill frame shall measure the quantity of explosives loaded in all holes with weigh scales or flow metering devices to within five (5) percent of the design quantity for each hole. The total of all loaded holes shall be checked with the total quantity delivered prior to subsequent bulk deliveries. Should the bulk quantity delivered vary from the recorded quantity loaded and detonated all measuring devices and or meters shall be recalibrated to within the specified accuracy.
- (7) Each hole loaded with emulsions or slurries shall be initiated with two (2) separate downlines, caps, and boosters. At least one (1) booster shall be secured in the hole with a mechanical lock in system or spider to prevent extraction of the booster or priming charge.
- (8) As a minimum the top elevation of the emulsion or slurry product shall be measured to check for voids and actual quantity loaded.

(e) *Surface blasting.* Doby or surface blasting will not be allowed for the fragmentation of bedrock. Doby blasting is an option for fragmenting boulders or large blast rubble when water depths are at least thirty (30) feet.

(f) *Water wave propagation.* The user is responsible to ensure that water wave propagation resulting from blasting activity will not cause damage to shoreline structures.

(Ord. No. 96-45, § 1, 3-19-96)

Sec. 13-22. Insurance requirements.

- (a) No County user permit shall be issued without the user having first obtained and filed with the Public Works Department a certificate of insurance with limits of liability no less than one million dollars (\$1,000,000.00) per occurrence for bodily injury and one million dollars (\$1,000,000.00) per occurrence for property damage against any liability arising from any activity or operation incidental to blasting, mining or quarrying operations. Failure to provide

current certificates of insurance or to maintain appropriate insurance coverage shall be grounds for revocation of the County user permit. In the event the required insurance is terminated, all blasting operations must cease immediately until full coverage is restored. Blasting insurance shall not be terminated without having obtained another insurance policy that will provide the required insurance without any gap in coverage.

- (b) The insurance required by this section will be written by an insurance company authorized to do business in the State of Florida.
- (c) Each insurance policy shall be endorsed to provide for thirty (30) days notice by registered mail to the Director, Public Works Department of any material change, cancellation or expiration. No policy will be accepted for a shorter period than six (6) months.

(Ord. No. 96-45, § 1, 3-19-96)

Sec. 13-23. Penalty for violation.

In addition to the penalty provided by [Section 1-5](#) or any other penalty, any person who violates the provisions hereof or the conditions and limitations imposed in a County license and/or user permit shall be deemed to have violated this chapter, and the County license and/or user permit may be revoked by the Director of the Public Works Department; provided an appeal may be filed pursuant to [Section 13-6](#) or [Section 13-7\(e\)](#) hereof as applicable.

(Ord. No. 96-45, § 1, 3-19-96)

FOOTNOTE(S):

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Editor's note—Ord. No. 96-45, § 1, adopted March 19, 1996, amended Ch. 13, relative to explosives, in its entirety to read as herein set out. Prior to amendment by said Ord. No. 96-45, Ch. 13 derived from Ord. No. 73-44, § 1, adopted April 16, 1973; Ord. No. 77-21, adopted April 19, 1977; Ord. No. 80-90, adopted Sept. 2, 1980; Ord. No. 80-113, adopted Oct. 7, 1980; and Ord. No. 95-215, § 1, adopted Dec. 5, 1995. Prior to the adoption of Ord. No. 73-44, Ch. 13 derived from Ord. No. 58-24, §§ 2—7, 9, 11, adopted June 24, 1958; Ord. No. 59-10, § 1, adopted May 12, 1959; and Ord. No. 60-34, § 1, adopted Oct. 25, 1960. ([Back](#))

Note—The County fire prevention and safety code is not included herein, but is on file with the County. ([Back](#))

Cross reference—Water supply for fire suppression, § 2-103.20 et seq.; South Florida Fire Prevention Code, § 14-40 et seq.; wilful or malicious bombing or threats of bombing, § 21-1 et seq. ([Back](#))

State Law reference—Explosives, F.S. ch. 552. ([Back](#))