



CLARK COUNTY FIRE DEPARTMENT
 Fire Hazard & Prevention Services
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105.e.1-1

TITLE: BLASTING PERMITS

SCOPE: Explosives & Blasting Agent storage and use shall be permitted in accordance with this guide and the requirements contained in the 2005 Clark County Fire Code.

PURPOSE: To standardize Fire Department requirements relating to the storage and use of Explosives & Blasting Agents.

Note: In addition to a Blasting Permit, other applicable Plan/Permit applications may be required. For example: Hazardous Materials Systems Permit, Above Ground Flammable or Combustible Liquids Storage Tank, and Certain other Permits.

SPECIFICATIONS AND REQUIREMENTS

A Permit shall be obtained prior to the commencement of any activities involving the storage and/or use of Explosives and Blasting Agents.

Exception: The Fire Department may during an emergency (flooding, bomb squad, or other natural or man-made hazard occurrence) authorize a Blasting Permit without completing the permit approval process outlined in this guideline prior to the use of Explosives and Blasting Agents.

Will your business store or use any of the following types of materials? (Check all the boxes that apply). The following Checklist provides some Examples of Explosives and Blasting Agents regulated under the Fire Code. The Examples are **not** intended to provide a complete list.

Types of Materials:	Examples
<input type="checkbox"/> Explosives	Packaged Dynamites, Detonators, Detonating Cord, Black Powder,
<input type="checkbox"/> Blasting Agents	ANFO (Fuel & Oxidizer Mixtures), and Packaged Fuel & Oxidizers Kits used for Blasting (Phosphoric Components).
<input type="checkbox"/> Fireworks	Fireworks 1.3G, Special Effects, Propellants.

This guideline is not intended to be a reprint of every Clark County Fire Code section addressing Explosive and Blasting Agent requirements and regulations.

All Explosives and Blasting Agents storage and use located or relocated in unincorporated Clark County are required to obtain plans review, and all required permits from the Clark County Fire Department.

The Fire Department may require the Applicant to provide sufficient information demonstrating the contractor's knowledge, expertise and capability of performing the blasting activities in a professional and safe manner.

Clark County Fire Code Rules & Regulations:

Section 7701.7 Prohibited and Limited Acts

7701.7.1 – Manufacturing: ... Explosive Materials shall not be manufactured within the County of Clark for **wholesale** or **retail sales**.

7701.7.2 – Limits Established by Law: ... Explosive materials shall be stored only in areas approved by the Fire Prevention Bureau.

7701.7.3 – Limits Based Upon Location: The Chief is authorized to limit the quantity of Explosive materials allowed at any location.

However, limits based upon location are generally in accordance with the Department of Justice, Bureau of Alcohol, Tobacco, Firearms, and Explosives regulations and/or requirements.

Section 105 – Permits

105.3 – Application for Permit: Applications for permits shall be made to the Fire Prevention Bureau in such form and detail as prescribed by the bureau. Applications for permits shall be accompanied by such plans as required by the Fire Prevention Bureau.

At the time of Plan/Permit application, three sets of legible documents must be submitted for review and approval. A \$75.00 Permit Fee will be collected upon submittal of the Plan/Permit Application. Plan/Permits may be expedited for an additional fee of \$85 per Hour (minimum fee of \$85.00). Additional Permit Fees may be assessed based on quantity, type, and storage configuration of hazardous materials (Ref: CCFD Permit and Service Fee Schedule). Following approval, a copy of the approved Plan/Permit application package and the approved Permit shall be available for review at all times.

Plan/Permit Applications must include the following:

A completed **State of Nevada Fire Marshal's Combined Agency Hazardous Materials Report**. A copy of this Guideline's Checklist must accompany your Combined Plan/Permit Application. A detailed and legible site plan is required and shall show manufacturing, storage, and use locations where hazardous materials are present

at your business site. As applicable, indicate the presence of hazardous materials storage cabinets, flammable liquid storage cabinets and automatic fire extinguishing systems in buildings.

Site Plan - Provide a legible Site Plan (or map(s)):

On a map, or legible sketch, show the physical location of Explosives & Blasting Agent storage magazine(s). Provide the separation distances between Magazines when necessary. Specify if the Magazines are barricaded or un-barricaded. Describe what materials the barricade is made out of.

Include the Assessor's Parcel Number (APN), major cross-streets, roads, or U.S. Highways as applicable. If necessary, provide a written set of directions to accompany the Site Plan. Provide the separation distance between the Magazine(s) and the streets, roads, or Highway.

Show location of Occupied Structures or Buildings. Provide the separation distance between the Magazine(s) and the Occupied Structures or Buildings. The site plan shall be scaled or the actual dimensions shall be provided with a note that the sketch is not drawn to scale.

Hazardous Materials Information Sheet (HMIS):

When the Blasting Permit includes Explosives, and Blasting Agent storage on site a Hazardous Materials Information Sheet (HMIS) is required. An example of an HMIS is located on Page 11 of 11. If the Blasting Contractor does not store Explosives and Blasting Agents on site the HMIS is not required.

When necessary the Chief shall determine what additional information is required for a submittal. For example, the vendor supplied MSDS sheets for certain chemicals or hazardous materials may be required.

Storage Magazines:

Provide a description of the Type of Magazine(s) on site. Provide the Magazine manufacturers specification sheet for each explosive storage Magazine on site.

For magazine(s) manufactured by the owner, provide additional information showing the construction techniques & materials used. Be advised, the construction techniques and materials used shall meet or exceed the Magazine Construction – Basic Requirements. Guidelines are available in ATF Publication 5400.7 (09/00) and IME Safety Library Publication No. 1.

State of Nevada - Blasters License:

Provide a copy of the State of Nevada issued Blasters License for the Blaster in Charge of the Blasting Operations. Typically, this is the owner(s) Blasters License.

A licensed blaster must be on site during all blasting operations and shall upon request of the Fire Department representative (Authority Having Jurisdiction (AHJ)) produce his/her license.

Certificate of Insurance (Bond):

Any company or individual that plans to store and/or use of Explosives and Blasting Agents in unincorporated Clark County shall possess a Certificate of Liability Insurance in the amount of \$1-Million minimum.

Clark County Fire Code, Section 106 – Certificate of Insurance, Section 106.2 - Certificate Information Required: The Certificate shall be issued by an insurance company authorized to transact business in the State of Nevada, or be named on the list of authorized insurers maintained by the Nevada Department of Business and Industry, Division of Insurance.

The contractors, or persons, Certificate of Liability Insurance shall list “Clark County, its agents, employees and volunteers” as additionally insured.

The insurance provider shall send originals of the Certificate of Liability Insurance document to:

Clark County Risk Management
500 So. Grand Central Parkway
Las Vegas, Nevada 89155,

And to:
Attn: Fire Prevention Bureau
Clark County Fire Department
575 E. Flamingo Road
Las Vegas, Nevada 89119.

Notice: Failure to maintain an approved Certificate of Liability Insurance coverage voids the Blasting Permit.

The applicant may be asked to attend a meeting with the Fire Department to address Certificate of Liability coverage questions and/or concerns prior to the issuance of any Blasting Permit.

Notice: A Fax of the Certificate of Liability insurance coverage is acceptable temporarily to allow some time for the insurance company to send original copies to Risk Management and the Fire Department through the U.S. Mail.

Utilities Notification:

Clark County Fire Code, Section 7703.1.6 - Utilities Notification: When blasting is being conducted within 300 feet of gas lines, electric power transmission lines or poles, water lines, fire alarm lines, telephone and telegraph lines, fiber optic communication lines, sewer pipes, or other utilities, the Blasting Company shall notify the appropriate representative of such utilities at least 24 hours in advance of blasting specifying the location and intended time of such blasting.

Exception: In an emergency, the requirement to provide advanced notification of nearby utilities may be waived by the Chief.

The Fire Department may request the Blasting Company provide written proof that the local utilities have been contacted and notified of the Blasting Contractors intent to conduct Blasting Operations. **The Utilities notifications requirement may be satisfied upon presenting a completed Underground Service Alert (USA) call-before-you-dig ticket number.**

Ground Vibrations Limited to 0.5 isp Maximum:

Blast induced ground vibrations shall be limited to a maximum particle velocity (single component in any direction) of 0.5 inches per second measured, or calculated, at the nearest occupied structure(s) or buildings.

3rd Party Blasting Safety Consultant - Monitoring

Per Article 1, Section 103.1.1 of the Clark County Fire Code (2000 UFC with Amendments) unless specifically exempted, geo-technical studies and ground vibration(s) and sound monitoring must be provided at the expense of the company for all blasting operations.

The blaster in charge shall insure that all aspects of the blasting operations provide for the safety of the surrounding exposures. For example: Apartments, Neighborhoods, Home(s), Businesses, Railroads, Public Rights-Of-Way, Highways, and Roadways). When blasting operations are within 1,000 feet of any occupied structure a 3rd Party Safety Consultant shall be hired by and at the expense of the Blasting Company or Applicant.

The Blasting Company or their 3rd Party Safety Consultant shall monitor blast-induced ground vibrations and sounds. The Blasting Contractor or their 3rd Party representative shall be trained and certified in the use of equipment used to monitor the ground vibrations and sound. The equipment shall be designed for the purpose of measuring blast induced ground vibrations and sound.

On at least an annual basis, the monitoring equipment shall be calibrated. Calibration shall be performed by the manufacturer of the equipment or by other qualified certification agency. Proof of a valid calibration must be kept with the equipment and shall be made available immediately upon request of the Fire Department or its representative.

Exception – The Clark County Fire Department or its representative(s) may modify the monitoring requirements when it is determined by the Fire Department that the blasting operations are being conducted in a remote location; therefore, monitoring of the ground vibration(s) and sound is not warranted.

Upon request of the Fire Department, the Blasting Contractor or their 3rd Party Safety Consultant shall prepare a preliminary report outlining all blasting ground vibrations and sound monitored at the blasting site. The preliminary report shall be made available within 24 hours of the Fire Departments request or, the next working day.

The Fire Department may request a full report of all ground vibration and sound monitoring for any phase of the blasting operations. When requested the full report shall be made available to the Fire Department within five working days.

Notification of Blasting Operations – Residents & Others

The Blasting Contractor shall notify in writing all residents or occupants of the occupied structures within 1,000 feet of the proposed blasting site that blasting operations are going to commence. The notice shall be delivered no later than 24 hours prior to the first blasting operation for each approved Blasting Permit number. The use of an approved Blasting Notification doorknob type flyer is authorized. Use blasting industry best practices when preparing your Blasting Notification doorknob type flyer.

Exception – The Clark County Fire Department or its representative(s) may modify the notification requirements when it is determined by the Fire Department that the blasting operations are being conducted in a remote location; therefore, notification of nearby residents is not warranted.

Approved Signage

The Blasting Contractor shall provide approved signage near the Blasting Site access road. The following information shall be present and legible on the signage:

- (1) Name of the Project
- (2) Address, or APN, for the Project
- (3) Business Name for the Blasting Contractor
- (4) Blasting Contractor Telephone Number
- (5) Approved Blasting Permit Number
- (6) Issue and Expiration Date on the Blasting Permit
- (7) Clark County Fire Department @ 455-7316

(8) Hours of Blasting Operations

Exception – The Clark County Fire Department or its representative(s) may modify the approved signage requirement when it is determined by the Fire Department that the blasting operations are being conducted in a remote location; therefore, posting an approved sign is not warranted.

These signs shall be weather resistant with a reflective surface and lettering at least 2 Inches high (50.9 mm).

Blasting Operations – Days & Hours Authorized

Blasting Operations shall be conducted Monday through Friday, between the hours of 8:00 a.m. to 4:00 p.m., unless prior written approval for other days and/or hours of operations was obtained from the Fire Department or its representative(s).

Exception: When the Blaster in Charge determines for safety reasons that the actual blast time cannot be conducted Monday through Friday, between the hours of 8:00 a.m. to 4:00 p.m., he/she shall contact the Fire Department and request a one-time alternate blasting dates and time authorization.

Exception: When the Blaster in Charge determines for safety reasons that a scheduled blast must be delayed overnight, the Blasting Company shall be responsible for securing the Blasting Site 24-hrs-a-day and 7-days-a-week until the Blaster in Charge determines that it is safe to proceed with planned Blasting Operations.

Blasting Operations Debris

The Blasting Contractor shall be responsible for the clean-up and proper disposal of debris that may be the result of blasting operations.

Each Blasting Operation – Notification Requirements

The Blasting Contractor shall notify the Fire Alarm Office at 229-0291 and the Fire Prevention Bureau at 455-7316 two hours prior to and at the completion of Blasting Operations.

A loud warning signal shall be given at 5 Minutes prior to a Blast, and again at 1 minute prior to a blast to warn persons in the area of the impending blast.

Building Implosions – Additional Requirements

At the time of Blasting Permit Application the Implosion Contractor shall prepare an Implosion/Demolition Plan. The Implosion/Demolition Plan shall be approved by the Fire Department prior to the receipt of the Explosives storage magazines. The location

of the Explosives storage magazines shall be approved by the Fire Department prior to the receipt of Explosives at the site of the Implosion/Demolition project.

The Fire Department will require the Applicant provide sufficient information demonstrating the contractor's knowledge, expertise and capability of performing the blasting activities in a professional and safe manner.

The Implosion/Demolition Plan shall address at a minimum the following:

- (1) Provide a Project Overview
- (2) Plan & Procedure
 - a. Intent
 - b. Explosives Demolition Preparation
 - c. Quantity & Type of Explosives
 - d. Explosives Transportation
 - e. Loading Procedure
 - f. Initiation System/Sequence
 - g. Explosives Safety
 - h. Seismograph Monitoring & 3rd Party Review
 - i. Adjacent Property Protection & Notification
 - j. Site Security/Command Post/ Countdown
 - k. Site Conditions after the Implosion
- (3) Owner/Demolition Contractor Profile
- (4) Time Line / Sequence of Events
- (5) Traffic Control Plan (Approved by Metro)
- (6) Fencing Plan
- (7) Crowd Control Plan
- (8) Weather Guidelines
- (9) Quality Control / Safety Guidelines
- (10) Contractor Qualifications
- (11) 3rd Party Safety Consultants
- (12) Site Map
- (13) Licensing
- (14) Permitting
- (15) Adjacent Property Notifications
- (16) Certificates of Insurance
- (17) Local Utility Advisory.

Blasting Permit Revocation

The issuance of a Blasting Permit shall not preclude the Fire Department from subsequently revoking the permit whenever, in the opinion of the Chief, later information or newly discovered conditions justify such actions. Reference the Clark County Fire Code, Section 103.4.1.3 Stopping uses, evacuation; and, Section 105.7 Revocation of Permits.

Blasting Permit – Application of Additional Requirements

The issuance of a Blasting Permit shall not preclude the Fire Department from subsequently imposing additional requirements on the contractor, or supplementing any existing requirement whenever, in the opinion of the Chief, later information or newly discovered conditions justify such actions. Clark County Fire Code, Section 101.4: Supplemental Rules and Regulations.