

Development and Infrastructure Services

Permitting Division

11000 N La Cañada Drive, Oro Valley, Arizona 85737 • 520-229-4815 • 520-742-1022 (Fax)



**TOWN OF ORO VALLEY
GOLDER RANCH FIRE DISTRICT**



2012 INTERNATIONAL FIRE CODE

BLASTING PERMIT CHECKLIST

Blasting operations shall be conducted only by approved, competent operators familiar with the required safety precautions and the hazards involved.

Date:	Site Location and Description:	
Section/Township/Range	TOV Case Number	OV Permit Number (Filled out by TOV)

BLASTING PERMIT APPLICATION SUBMITTAL REQUIREMENTS

Provide Four Copies of Each:

- A completed Blasting Permit Checklist. Check off and comply with each item on this checklist.
 - A completed Permit Application must be submitted to the Town of Oro Valley DIS Permitting Division with the Blasting Permit Checklist.
 - Any revisions to the permit shall be submitted to the Town of Oro Valley DIS Permitting Division for review and approval along with a completed Permit Application for the proposed revision.
 - Review of all applications will require 10 working days, please plan accordingly.
- Updated blasting plans which identify:
 - All property lines within ¾ mile of blasting locations.
 - All proposed blasting locations showing appropriate phasing of the blasting operation for the site.
 - All structures within a ¾ mile (3,960 feet), and a ¼ mile (1,320 feet), and 500 foot radius of the proposed blasting site and the street address of each structure as applicable. Greater distances may be required as determined by the Town.
 - Location of all above ground and underground utilities, such as natural gas piping and lines, electric lines, phone lines, water lines within 500 feet of blasting locations.
 - A narrative blasting plan detailing the proposed number of drill holes, type of explosive, explosive data sheets, delay pattern, anticipated peak particle velocity and scaled distance, the number of pounds of explosive per delay, and the total number of pounds brought to the blast site.
- Provide a narrative description of the area blasting is to occur, why blasting is required, the requested permit start date and end date, blasting company history and qualifications, and acknowledgement of all the blasting requirements contained herein.
- Provide a blasting schedule. Identify the site's phased location, proposed number of holes, date and time for the loading of shots and a time for the blast. Note: Blasting schedule cannot be changed without written approval from the Town of Oro Valley DIS Permitting Division.

- ❑ Copy of the Arizona Commercial Driver's License (CDL) with Hazardous Materials Endorsement for all persons transporting explosive materials to the site.
- ❑ Copy of each Blaster's current Arizona Driver's License. The Blaster and Possessor of Explosives shall be a minimum of twenty-one years of age.
- ❑ Copy of each Blaster's current International Society of Explosives Engineers (ISEE) membership card.
- ❑ Copy of each Blaster's qualifications to perform blasting operations. The Blaster and Possessor of Explosives shall have a minimum of two years experience in the conduct of blasting operations. Experience shall include the understanding of blasting designs, drilling of holes, loading of holes, decking, stemming, and detonating methods.
- ❑ Copy of the blasting company's current Federal Explosives License/Permit or Limited Intrastate Permit as issued by the Federal Bureau of Alcohol, Tobacco & Firearms (ATF).
- ❑ The Blaster shall be considered the Possessor of Explosives as defined by the Federal Bureau of Alcohol, Tobacco & Firearms. The above identifications shall be provided for all possessors of explosives expected to be working the blasting site.
- ❑ Copy of a current license issued by the State of Arizona Registrar of Contractors for the type of blasting operations proposed to be conducted by the contractor as follows:
 - A-**, General Engineering. Construction in connection with fixed works requiring specialized engineering knowledge and skill, including streets and roads, power and utilities plants, dams and hydroelectric plants, sewage and waste disposal plants, bridges, tunnels, and overpasses. Also included are the scopes of work allowed by all other engineering classifications; A-3 through A-21.
 - A-3**, Blasting. The use of explosive and explosive devices for the purposes of excavation, demolition, geological exploration, mining or any related blasting. Included is any drilling, boring or earthwork required for the placement of explosive charges, the erection of temporary shelters, barricades and associated protective devices, equipment and enclosures.
 - AE**, (as restricted by registrar.)
 - C-15**, Blasting. Use of explosives for movement of earthen materials or for demolition (Specialty Residential Contracting in accordance with Arizona Registrar of Contractor's definition.)
- ❑ Copy of a current Certificate of Liability Insurance from an insurance company or a Bond, providing for indemnification of any property damage and personal injury resulting from blasting activities performed at the permitted blasting site. Minimum amount of \$1,000,000.00.
- ❑ Hold Harmless Agreement in favor of the Town of Oro Valley.
- ❑ Copies of all previous seismic readings for this site.
- ❑ Documentation of notification to all structure or property owners, and utility companies within ¾ mile (3,960 feet) of the blast site. Provide a copy of the letter sent out.
- ❑ Historical summary of the blasting company including experience on other projects.

BLASTING OPERATIONS REQUIREMENTS:

- Per Section 104.7.2 of the Fire Code, if the blasting plan identifies structures within ¼ mile (1,320 feet) of the blasting site, the blasting contractor shall retain for the purpose of independent technical review of the blasting plan and operations, an approved qualified specialist (special inspector). The special inspector must have expertise in blasting operations and be approved by the Town of Oro Valley Building Official or designated representative.
- Periodic observation shall be required to be performed by the approved special inspector. All costs of required independent review, inspection and observation of blasting operations shall be the responsibility of the property owner. The first scheduled blast shall have a special inspector present. All blasts performed within 500 feet of structures shall also have a special inspector present. Other periodic observations by a special inspector shall be performed as requested by the Town of Oro Valley DIS Permitting and Inspection Division.
- When blasting is performed in a congested area or in close proximity to a structure, or roadway, precautions shall be taken to minimize earth vibrations and air blast effects. Blasting mats shall be used to prevent fragments from being thrown and to control dust when blasting operations occur within 500 feet of any structures or roadways. Earthen cover shall be used when blasting operations occur between 501 feet and ¼ mile (1,320 feet). The type and amount of earthen cover shall be approved by the special inspector.
- No material that can become a projectile shall be used in packing loads.
- All earthen cover material shall be watered as a dust control measure.
- If inclement weather is approaching, drill holes shall not be loaded with explosive materials and the day's blast shall be canceled.
- An approved special inspector shall take seismographic readings for all blasting activities. The special inspector shall place monitors in locations where the most reliable, accurate data will be collected. A copy of all reports shall be maintained in the blasting log. The reports shall provide seismic information; company used, inspector taking readings, type of units used and how the monitors are placed as well as distances they are placed from existing buildings. The seismograph monitors shall be placed no farther than 300 feet from the blast site in the direction of the home closest to the site. The maximum allowable peak particle velocity for ground vibration shall not exceed 0.625 inches/second. Additional seismographic readings shall be performed in congested areas where multiple structures are present within 500 feet. The location of additional seismographic equipment shall be determined by the approved special inspector.
- Blasting log: An accurate blasting log shall be maintained by the blasting contractor. The log shall contain the following information:
 - A copy of the approved permit and blasting plan.
 - The location of the blasting operation.
 - The date and time of each blasting occurrence.
 - The name of the blaster and possessor of explosives.
 - Whether blasting mats were used.
 - Whether earthen cover was used.
 - Special inspection reports.
 - The seismic readings received.
 - The name of the individual who conducted the seismic monitoring.

- The type of explosive, pounds of explosive per delay, drill hole layout, depths and diameters of drill holes, timing and delay pattern, anticipated peak particle velocities, and scaled distance.
 - Any and all known damage or injury that occurred as a result of the blast. If no known damage or injury occurred, the log shall so state.
 - Post blast survey. After a blast, all wires and or non-electric leads shall be carefully traced and a search made for any unexploded explosive materials. All misfires shall be investigated by the blasting contractor who shall determine a safe method of disposal.
- A current copy of the blasting log shall be available at the blast site. A copy of the blasting log shall also be kept at the blasting contractor's local office. If the contractor does not have a local office, the blasting log shall be kept at the office of the general contractor for the project.
- Blasting Log Submittal to Town of Oro Valley
The following conditions shall require a copy of the days blasting log to be submitted to the Oro Valley DIS Permitting Division within 24 hours and in person; a fax copy shall not be allowed:
- Each blast within 500 feet of structures.
 - Each blast exceeding the maximum allowable peak particle velocity for ground vibration of 0.625 inches/second.
 - Each Blast causing fly rock or large dust plumes.

Failure to submit the daily blasting log is cause for the revocation of the blasting permit.

Blasts more than 500 feet from structures, and not as described above, shall be submitted weekly in person; a fax copy shall not be allowed.

Failure to submit the daily blasting log is cause for the revocation of the blasting permit.

- During the time that holes are being loaded or are loaded with explosive materials, blasting agents or detonators, only authorized persons engaged in drilling and loading operations or otherwise authorized to enter the site shall be allowed at the blast site. The blast site shall be guarded or barricaded and posted. Blast site security shall be maintained until after the post-blast inspection has been completed.
- Blasting operations shall be conducted during weekdays, between sunrise and sunset. At no time shall such activities occur before 6:00 AM or sunrise, which ever is later as determined by the police department. No blasting operations shall be conducted at any time on Saturday, Sunday or any legal holiday.
- Precautions shall be taken to prevent accidental discharge of electric blasting caps from currents induced by radar and radio transmitters, lighting, adjacent power lines, dust and snow storms, or other sources of extraneous electricity. These precautions shall include, among others, the posting of signs warning against the use of mobile radio transmitters on all roads within 1,000 feet of blasting operations.
- Only a one-day supply of explosive materials shall be permitted on-site. One-day supply of explosive materials means: the quantity required to conduct one-day blasting operations only. No explosive materials, including blasting wires and caps, shall be permitted to be stored overnight within the Town of Oro Valley. On-site storage of explosive materials shall be stored in type 3 magazine(s) also known as a "day-box" as required under federal explosives storage requirements. Detonators shall not be stored with high explosives. At no time shall the explosive materials be left unattended. The blaster or possessor of explosives shall have, at all times, an unobstructed view of the on-site explosive material storage, and shall ensure that the

storage magazine is locked and not accessible to unauthorized persons.

- The contractor shall notify all homeowners within 3/4 mile (3,960 feet) radius of the proposed blasting site blast site for all impending blast activities a minimum of 48 hours prior to each blast. An established schedule can be provided, but all variances from the schedule shall require homeowner notification a minimum of 48 hours prior.
- Notification to Golder Ranch Fire District (818-1017), Town of Oro Valley DIS Permitting Division (229-4800) and Town of Oro Valley Police Department (229-4900) shall be made for the following:
 - Any blasts that do not occur on a scheduled date.
 - Have a change in time due to unforeseeable circumstances.
 - Blasts resulting in cutoff shots.
 - Blasts resulting in property damage or injury shall be immediately reported.

The person making the notification shall state the blasting site location and include the area of the blast as indicated on the blasting site location plan provided with the permit.

Blasts resulting in property damage or injury shall be immediately reported to the Fire Marshal (Cell 954-9649) and the Development Infrastructures Services Director (Cell 288-2880) then to all parties listed above.

- A “**possessor of explosives**” is someone who has actual physical possession or constructive possession, which means the person has dominion or control over explosives. For example, persons who are physically handling explosive materials would be considered to be possessors of explosives. This would include employees who handle explosive materials as part of the production process; employees who handle explosive materials in order to ship, transport, or sell them; and employees, such as blasters, who actually use explosive materials. Other examples of possessors include a supervisor at a construction site who keeps keys for magazines in which explosives are stored, or who directs the use of explosive materials by other employees; and, an employee of a licensee or permittee transporting explosive materials from a licensed distributor to a purchaser. *Definition established by the Federal Bureau of Alcohol, Tobacco & Firearms.*
- The following issues shall result in the temporary or permanent suspension/revocation of the blasting permit: Unauthorized deviation from the approved schedule; failure to submit the required blasting log reports; blasting resulting fly rock, dust, property damage, or injury; blasting resulting in ground vibrations exceeding the maximum velocities; unsafe practices; other conditions effecting public safety as determined by the Town of Oro Valley DIS Permitting Division.

Owner of Property Blasting Will Be Conducted Upon: Contact Information:
Company Conducting Blasting: Contact Information:
Person/Persons Conducting the Blasting and Possessor of Explosives: Contact Information:

I hereby certify that I have read and examined this checklist and know the same to be true and correct. I am the owner of the property or the owner's authorized representative, and if not the owner, I have obtained the owner's permission to perform stated work. All provisions of laws and ordinances governing this type of work will be complied with whether specified herein or not. The granting of a permit does not does not presume to give authority to violate or cancel the provisions of any other state or local law regulating construction or the performance of construction.

Signature:

Printed Name: