



# United States Department of the Interior

NATIONAL PARK SERVICE  
1849 C Street, N.W.  
Washington, D.C. 20240



IN REPLY REFER TO:

## DIRECTOR'S ORDER #65: EXPLOSIVES USE AND BLASTING SAFETY

Approved:

  
For Director, National Park Service

Effective Date: MAY 25 1999

Sunset Date: MAY 25 2003

NPS Guideline 65 is superseded and replaced by this Director's Order.

### I. Purpose and Scope

This Director's Order sets forth the policy and required procedures governing blasting operations within the National Park Service (NPS) to ensure a safe workplace and safe work practices.

As used herein, "blasting operations" includes the purchase, transportation, storage, handling, use and disposal of commercial explosive materials, blasting equipment and avalanche ammunition (artillery and recoilless rifle); it does not refer to military ordnance, historic black-powder weapons firing, or fireworks displays.

This Director's Order applies to all blasting operations conducted within the boundaries of the NPS, whether conducted by NPS or other Federal personnel, commercial contractors, or others (including utility companies).

### II. Authorities

Authority to issue this Director's Order is contained in the NPS Organic Act (16 USC 1 through 4) and Part 245 of the Department of the Interior Manual (DM). NPS blasting operations are subject to the provisions of 18 USC 841 through 848 (Importation, Manufacture, Distribution and Storage of Explosive Materials), 29 USC 668 (Occupational Safety and Health Act, Federal Agency Safety Programs), and 410 DM 114-60 and 485 DM 1.

### **III. Instructions/Requirements/Responsibilities**

#### **1. Explosives Use and Blasting Safety Requirements**

1.1 All blasting operations will comply with this Director's Order, the NPS Handbook for the Storage, Transportation, and Use of Explosives (the Explosives Handbook), and all other applicable Federal, state and local laws and regulations.

1.2 NPS employees involved in blasting operations, including monitoring or inspecting, will be trained and certified prior to performance of such duties.

1.3 All blasters are required to have a state-issued commercial driver's license with hazardous materials endorsement, a Medical Examiner's Certificate issued by a licensed medical examiner, and carry a current standard first aid card.

1.4 Nitroglycerin materials, safety fuse and fuse caps will not be used. A material safety data sheet for each explosive material or avalanche ammunition must be available at the job site.

1.5 All blasting operations will be conducted by or under the direct supervision of a certified blaster.

1.6 A job safety analysis must be performed in the planning of all blasting operations.

1.7 When two or more blasters are working together, one will be designated as the blaster-in-charge by their supervisor(s) or, if need be, by the blasters themselves.

1.8 Any variance from the above requirements will be based solely on reasons of safety, and will be approved by the appropriate Regional or Denver Service Center (DSC) Blasting Officer on a case-by-case basis, for a specified duration and/or situation.

1.9 Blasters employed under NPS contract, concessioner contract or special use permit must possess a valid state blaster's license (or documented training and experience commensurate with an NPS blaster). Blasters will comply with the standard explosives contract specifications contained in the Explosives Handbook, which must be included in all such contracts, agreements and permits.

1.10 All avalanche control and ordnance use and certification programs will be under the direct control and supervision of U.S. Army personnel. NPS employees will not attempt to dispose of ordnance which fails to detonate; their responsibility is to identify the location(s) of non-detonated rounds and inform the nearest Department of Defense team for disposal purposes.

1.11 Upon discovery of old, deteriorated or unstable commercial explosive materials, a site must be immediately secured to prevent human entry until disposal is accomplished, and the Regional Blasting Officer notified to assist the park in the disposal operation. Persons not

licensed to perform the actual disposal will not attempt to handle or move deteriorated materials. Blasting caps and dynamite in particular can become extremely sensitive to any disturbance. Military ordnance disposal teams must be notified to dispose of military ordnance.

Disposal of old, deteriorated or unstable commercial explosive materials may be completed through the following sources (in priority order): (1) the explosives manufacturer, if known; (2) NPS personnel licensed for this specialty, a roster of whom will be maintained by the Service Blasting Officer; (3) military ordnance disposal teams; and (4) state, county or municipal bomb disposal teams. Ordnance and bomb-disposal personnel are seldom familiar with commercial explosives and detonators and should not be used without a written plan of disposal reviewed by an NPS employee licensed for disposal.

1.12 Accidents involving explosives will be immediately reported to the superintendent, park safety officer, chief park ranger and Chief Park Blaster. The Chief Park Blaster will promptly notify the Regional or DSC Blasting Officer, as appropriate, and regional safety manager. A Blasting Review Board hearing will be held within 3 working days of an accident with explosives.

Any theft or loss of explosives will be promptly reported to the superintendent, chief park ranger and Chief Park Blaster. Such theft or loss must also be reported within 24 hours to the local office of the Bureau of Alcohol, Tobacco and Firearms, the park safety officer, the Regional or DSC Blasting Officer, as appropriate, the regional safety manager or DSC safety engineer, as appropriate, and law enforcement specialist. A Blasting Review Board hearing will be held within 3 working days of any theft or loss of explosives. A Board of Survey must also be initiated within 30 days after discovering any loss or theft of explosives (see 410 DM 114-60).

## 2. Training and Certification Requirements

2.1 NPS personnel seeking certification must be at least 21 years old, nominated by the Chief Park Blaster, and selected by the park superintendent. A written "Application for Blasting and Explosives Certification" detailing previous experience (type, quantity, complexity) will be submitted to the Chief Park Blaster, who will then forward a request for a background check to the appropriate law enforcement official in the park. Certification will be based on final exam scores and field performance evaluation in required training courses. Proof of certification is an NPS Blasting and Explosives Certificate showing the level of certification and specialties, if any.

2.2 Certification may be denied, suspended or revoked for any of the following:

2.2.1 Any criminal conviction involving violence, drunkenness, or controlled substances, and any felony conviction.

2.2.2 Any violation of state or local explosives laws or regulations.

2.2.3 Poor physical and/or mental condition.

2.2.4 Addiction to or dependence on alcohol, controlled substances, and/or any other stimulants or depressants.

2.2.5 Unsafe practices or lax security.

2.2.6 Lack of proficiency, as demonstrated by involvement in an accident, theft or loss of materials or equipment, unsatisfactory performance, or failure to execute at least three blasts in any year.

2.3 Instructor certification can be granted to knowledgeable and experienced NPS blasters with the proven ability to effectively teach technical courses and examine persons for technical competency. Instructors are recommended by the Regional or DSC Blasting Officer and certified by the Service Blasting Officer. Only an instructor certified for specialty courses may instruct and recommend licensing for those specialties.

2.4 All NPS personnel will have met the certification and training requirements specified in the Explosives Handbook prior to engaging in blasting operations.

### 3. Explosives Use and Blasting Safety General Standards

All blasting and explosives operations and activities will be conducted in accordance with:

3.1 27 CFR 55, 29 CFR 1910.109, 29 CFR 1926.900-914, 30 CFR 56-57, 33 CFR 125-126, 40 CFR 264, 46 CFR 146-149, and 49 CFR 172-177 and 390-397, as applicable, and state and local laws, rules and regulations.

3.2 The Explosives Handbook.

3.3 Warnings and instructions adopted by the Institute of Makers of Explosives (IME) contained in every box of explosives and blasting caps.

### 4. Responsibilities

4.1 Washington Office

The Washington Office will:

1) Select a Service Blasting Office, recommended by the NPS Safety Manager, approved by the Associate Director, Park Operations and Education, and appointed by the

Director.

2) Select a DSC DSC Blasting Officer, recommended by the DSC Safety Engineer, approved by the Associate Director, Professional Services and appointed by the Director.

The Service Blasting Officer will:

1) Serve as coordinator of the NPS blasting program and technical advisor for blasting operations and training.

2) Supervise all NPS explosives instructor training and has responsibility for the issuance, suspension or revocation of instructor certifications.

3) Serve as the officer of final appeal in cases of denial, suspension or revocation of certification, and denials of requests for variance.

The DSC Blasting Officer will:

1) Serve as technical advisor for all DSC-administered contracts and Federal Highway Administration (FHWA) contracts within NPS boundaries; review contractor blasting plans.

2) Supervise all DSC explosives training and has responsibility for issuance, suspension or revocation of certificates for blasting inspectors.

3) Establish Blasting Review Board, with the DSC Safety Engineer, to investigate blasting accidents and theft or loss of explosives.

4) Ensure that DSC contractual requirements for explosives safety are enforced. Assist in establishing and enforcing blasting safety programs; advise Contracting Officers Representatives (CORs) and inspectors on project related blasting safety.

#### 4.2 Regional Offices

The Regional Director will:

1) Appoint a Regional Blasting Officer, recommended by the Regional Safety Manager, and approved by the Associate Regional Director, Operations.

The Regional Blasting Officer will:

1) Serve as coordinator of the regional blasting program and as technical liaison to the field.

2) Supervise all regional explosives training and has responsibility for issuance,

suspension or revocation of blaster certifications.

3) Review and approve/reject requests for variance from the requirements of the Explosives Handbook.

4) Review contractor blasting plans on regional and park level contracts.

5) Establish Blasting Review Board, with the Regional Safety Manager, to investigate blasting accidents and theft or loss of explosives.

#### 4.3 Parks

Superintendents of parks in which blasting operations will be conducted will appoint a Chief Park Blaster recommended by the Regional Blasting Officer.

The Chief Park Blaster will:

1) Supervise park blasting operations.

2) Ensure compliance with the Explosives Handbook and coordinate with the Regional Blasting Officer, as necessary, on program implementation.

3) Maintain files on each blaster within the park, including, copy of application from last certification class attended, list of specialties for which individual is currently certified, including date obtained, and copy of blast record for each shot made.

4) Secure and keep up to date any necessary state and local licenses or certifications required for blasting operations.

5) Annually inspect park explosives storage facilities, records and blasting equipment.

6) Serve as adviser to the DSC Blasting Officer, as required, on contractor blasting operations on DSC and Federal Lands Highway Program projects within the park.