



# ATF EXPLOSIVES Industry Newsletter

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## Carson W. Carroll, Assistant Director, Enforcement Programs and Services, Retires

**A**fter more than 22 years of Government service, Carson W. Carroll, the Assistant Director for Enforcement Programs and Services, retired on August 31, 2009. As Assistant Director, Mr. Carroll directed the development of policy guidance and oversaw programs supporting ATF's explosives related mission functions.

Mr. Carroll joined the Bureau as a Criminal Investigator in 1987. During his career with ATF, he served as a Special Response Team Leader in the Los Angeles Field Division, the Special Agent in Charge for the Tactical Response Branch and Critical Incident Management Branch, and the Special Agent in Charge for the Seattle Field Division. Mr. Carroll became Chief of the Arson and Explosives Programs Division in 2002 before his appointment as Deputy Assistant Director for the Office of Field Operations in 2005. In June 2008, Carson W. Carroll was appointed Assistant Director for the Office of Enforcement Programs and Services.

During his tenure with ATF, Carson worked hard to ensure that ATF fairly and consistently enforced the regulations, sought to increase public safety, and provided guidance to the industry whenever possible. Carson's knowledge and experience will be missed, and we thank him for his hard work and dedication to ATF.

## 2009 IME Spring Meeting

**A**rson and Explosives Programs Division (AEPD) Chief, Joe Riehl, EIPB Chief Deb Satkowiak, and Industry Liaison Bill O'Brien participated in the Institute of Makers of Explosives (IME) Spring Meeting held in LaJolla, CA in May 2009. IME meetings afford

ATF an opportunity to interact face-to-face with IME's individual industry members.

Chris Ronay, IME President, presents an award to Joe Riehl following his presentation to IME members. The award was presented in appreciation of ATF's continued partnership with IME.



## 2010 Explosives and Blasting Conference

The International Society of Explosives Engineers (ISEE) Explosives and Blasting Regulatory Conference will be co-sponsored by the Bureau of Alcohol, Tobacco, Firearms and Explosives in Washington, D.C. in July 2010. The ISEE conference is held to provide information to individuals responsible for enforcing or developing laws and regulations governing explosives and blasting. In addition to updating regulatory bodies on the use of commercial explosives, related industry technology, and safety and security, the conference provides a forum for regulators to interact with industry to discuss issues, concerns and common problems.

## Type-1 Igloo or "Army-type Structure" Explosives Magazines

The United States Department of Defense (DOD) has sold and/or leased "igloo" style magazines to numerous Federal explosives licensees and permittees. Many of these igloo style magazines are constructed using rebar reinforced concrete. The walls

and floors may be up to 12 inches thick, and the tops of these magazines are often covered with up to 2 feet of compacted earth. ATF regulations address this specific magazine construction and refer to it as an igloo or "Army-type structure" in sections 555.207, 555.210 and 555.211.

Igloo or Army-type structure magazines must meet all construction, locking, housekeeping and table of distance requirements found in 27 CFR Part 555. Although the DOD rates these magazines for a maximum capacity of 500,000 pounds of explosive materials, ATF regulations at 27 CFR 555.213 allow for a maximum capacity of only 300,000 pounds. Therefore, any licensee or permittee storing in excess of the 300,000 pounds must apply for a variance from the regulation.

Further, per section 555.207, masonry wall construction must be at least 6 inches thick and interior walls should be constructed of, or covered with, a nonsparking material. ATF has held in ATF Ruling 75-21 that smooth concrete in DOD magazines is nonsparking and therefore does not need to be painted over or covered with a nonsparking material. However, it is incumbent upon the licensee or permittee to ensure that the magazine meets all Federal construction requirements before storing explosive materials.

Licensees or permittees who purchase or lease an igloo or Army-type structure magazine should be aware that magazines built to older military standards may not meet the security requirements of the current Federal explosives regulations. If a particular Type-1 igloo or Army-type structure magazine does not meet Federal guidelines, licensees or permittees may request a variance from the Explosives Industry Programs Branch (EIPB), through the local ATF office.

## Day Boxes

ATF conducts an annual review of all explosive materials thefts that have occurred throughout the nation. Through ATF's evaluation, explosives licensees and permittees who were victims of such thefts have indicated that many of these crimes, and their accompanying financial loss, could have been avoided by ensuring their adherence to Federal explosives storage regulations. For example, in 2007, 16 detonators were stolen from a day box left unattended overnight in a vehicle. Federal explosives regulations at 27 CFR 555.203 allow for the temporary, **attended** storage of high explosives in a type 3 magazine, also known as a "day-box". These magazines must be fire-resistant, weather-resistant, and

theft-resistant. However, while 27 CFR 555.209 provides details concerning construction and locking requirements, using a proper lock may only protect a day-box from unwanted entry. A proper lock will not prevent theft of the day-box itself. During inspections, ATF has discovered explosives that were left in unattended day-boxes for days or weeks at a time. Explosive materials may not be stored unattended in type 3 magazines but must be removed to type 1 or type 2 magazines for unattended storage. The practice of storing explosives in an unattended day-box is not only a violation of Federal explosives regulations, but it also exposes the day-box and the explosives stored therein to theft and illegal use.

## Tables of Distances and Barricades

**T**he Federal explosive regulations require explosives storage magazines to be located certain minimum distances from other magazines, inhabited buildings, passenger railways, and public highways based on the quantity of explosive materials stored in each magazine. These tables of distances were adopted to protect the public in the event of a magazine explosion. Individuals have expressed confusion whether the edge or center of the highway should be used to determine compliance with the table of distances at 27 CFR 555.218.

When determining the lawful distance between a magazine containing high explosives and a highway, an individual should measure from the nearest edge of the magazine to the nearest edge of the highway. However, this should not be confused with the means to ensure proper barricading of a magazine. When evaluating whether a magazine is properly barricaded from a highway; an individual must determine that a straight line, from the top of any sidewall of the magazine to a point 12 feet above the center of a highway, will pass through the barricade.

Additionally, ATF frequently receives questions regarding whether earthen-covered magazines are considered barricaded (as receptors) for table of distance purposes. The regulation at 27 CFR 555.11 defines artificial barricade as: "An artificial mound or revetted wall of earth of a minimum thickness of three feet, or any other approved barricade that offers equivalent protection." ATF does not consider earth covering a magazine to meet the definition of a barricade. Whether a mound covering a receptor magazine offers a level of protection equivalent to that of a free-standing barricade likely depends upon several factors discussed below. ATF is not satisfied that a mound covering a magazine would in all

cases offer the same level of protection as a separate barricade. However, Explosives Industry Programs Branch (EIPB) will evaluate variance requests to evaluate earthen-covered magazines as barricaded based on specific criteria, to include: (1) overall magazine construction, (2) amount and type of earth covering, (3) class, type, and maximum weight of explosives stored; and (4) actual distances from inhabited buildings, highways, passenger railways, and other magazine.

ATF also receives inquiries about what constitutes "any other approved" artificial barricade in the definition at 27 CFR 555.11. To obtain a determination whether your current or proposed artificial barricade meets the requirements of the regulations, please forward your specific request and construction of such barricade to EIPB to seek guidance or approval. EIPB may be contacted at (202) 648-7120, or you may contact your local ATF Field office. Telephone numbers to each ATF Field Office can be found at <http://www.atf.gov/contact/field.htm>.

## Recording Explosive Materials "Used"

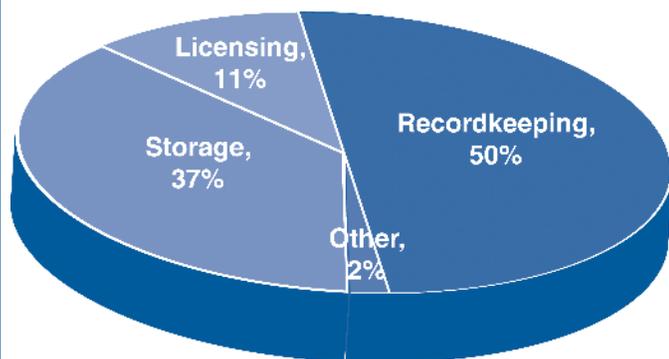
**F**ederal regulations at 27 CFR 555.123(d) require licensed manufacturers who manufacture explosive materials for their own use to enter in a separate record, not later than the close of the next business day following the date of use: (1) the date of use; (2) the quantity (in applicable quantity units); and (3) a description of the explosive materials used. This record is separate and distinct from the disposition record requirements for explosive materials under 555.123(c). However, licensed manufacturers are exempt from the 555.123(d) recordkeeping requirement if the explosive materials are manufactured for the licensee's own use and are used within a 24 hour period at the same site.

Similarly, regulations at 27 CFR 555.124(c) require licensed dealers to record in a separate record any explosive materials used by the dealer, not later than the close of the next business day following the date of use by the dealer. This record must include: (1) the date of use; (2) the name or brand name of the manufacturer and name of importer (if any); (3) the manufacturer's marks of identification; (4) the quantity (in applicable quantity units); and (5) a description of the explosive materials used. Licensees with questions about their particular recordkeeping requirements should contact their local ATF office.

## Inspection Violations

The explosives industry's increased emphasis on improving explosive materials security through regulatory compliance and improved internal controls has resulted in a decrease in the number of explosive materials thefts over the past 5 years. However, explosive materials thefts still occur and a cooperative effort is required on the part of ATF and the explosives industry to track and recover the explosive materials to prevent their illegal use. While ATF strives to work and consult with the explosives industry and its associations to ensure the safety and security of the public, secure explosive materials storage and accurate recordkeeping are responsibilities of every Federal explosives licensee and permittee. An analysis of violations disclosed during inspections for the 2009 fiscal year revealed that 50 percent of the violations cited were for failure to comply with recordkeeping requirements. Over half of these recordkeeping violations were cited for failure to properly maintain the Daily Summary of Magazine Transaction (DSMT) record. Storage violations accounted for 37 percent of the violations cited. Nearly 40 percent of these storage violations were cited for improper magazine construction, and an additional 17 percent were cited for failure to meet housekeeping requirements under 27 CFR 555.215. Please objectively examine your storage premises and recordkeeping process to ensure you are in compliance with all Federal explosives regulations, and to aid the law enforcement community with tracing explosive materials recovered after a theft.

## Explosives Violations During 2009



## Black Powder Blanks

Recently, ATF received inquiries regarding whether black powder blanks, and transactions involving black powder used in manufacturing black powder blanks, are regulated under Federal explosives laws. Black powder “blanks”—such as blanks used in cowboy reenactments—are made with black powder instead of smokeless powder to create more realistic smoke effects. The Federal explosives laws at 18 U.S.C. § 845(a)(5) and the regulations at 27 CFR 555.141(b) state that commercially manufactured black powder (1) in quantities that do not exceed fifty pounds, and (2) that is used solely for sporting, recreational, or cultural purposes in antique firearms, is exempt from the regulations. Black powder blanks are designed for use in modern firearms, typically .45 caliber cartridges, and therefore do not qualify for this exemption.

Under 18 U.S.C. § 845(a)(4), small arms ammunition and components thereof are exempt from the Chapter 40. While black powder alone does not constitute ammunition, black powder blanks used in small arms are considered small arms ammunition under the Federal explosives laws. Therefore, an ATF license or permit is not required to purchase black powder blanks.

This exemption, however, does not pertain to the purchase of black powder for the purpose of manufacturing black powder blanks. Therefore, the receipt of black powder for the manufacture of black powder ammunition, including the manufacture of black powder blanks, is subject to the regulations of 27 CFR Part 555. Individuals or companies that wish to acquire black powder to assemble black powder blank cartridges must possess an ATF explosives license or permit. Any black powder acquired must be stored in accordance with 27 CFR 555 Subpart K.

## Deteriorated Explosives

The regulations at 27 CFR 555.215 require that, “when any explosive material has deteriorated it is to be destroyed in accordance with the advice or instructions of the manufacturer.” The term “deteriorated” in this regulation refers to explosive materials that have become dangerous or unstable by virtue of the deterioration of the explosive materials or the immediate bag, cartridge, shell, or whatever is used to contain the explosive materials. Examples of deteriorated explosive materials include:

- Dynamite that is leaking nitroglycerin or forming salt crystals;
- The interior components of a fireworks shell or device rendered unstable by moisture or the formation of salt crystals; and
- A pyrotechnic item whose outer casing has deteriorated due to moisture or age and no longer has the physical characteristics necessary for proper functioning.

In contrast, a shell or device whose outer casing or lift package is leaking pyrotechnic material due to damage or a manufacturing defect is not considered dangerous if properly stored for timely repair in a closed container and in such a manner that pyrotechnic material does not leak from that container.

Explosive material that has failed to ignite or detonate, and is placed in a secure container in a magazine for storage until it can be destroyed, repaired, or refurbished, generally is not considered deteriorated unless it is also in a dangerous or unstable state. Therefore, a proprietor may place a broken stick of emulsion (or other stable product) in a closed, non-spark producing container in a magazine until he or she can safely destroy and dispose of it.

Similarly, a “dud,” defective, or damaged fireworks article that poses no danger, may be stored in a closed container while awaiting destruction, repair, or refurbishing. In contrast, a detonator that fails to function generally requires expeditious destruction or return to the manufacturer, and should be stored in a closed, non-spark producing container only as long as necessary before destroying or returning the detonator to the manufacturer.

The Federal regulations do not provide specific time requirements for the destruction of deteriorated explosive materials. In general, a proprietor may take a reasonable amount of time to make arrangements for either the destruction of deteriorated explosive materials or retrieval of deteriorated explosive materials by a Federal explosives licensee or permittee contracted to dispose of deteriorated explosive materials. Please note that some deteriorated explosive materials—such as the dynamite described above—may present an extreme safety hazard and should be destroyed as soon as possible. Such hazardous deteriorated explosive materials should only be moved or handled by qualified persons specifically trained to handle such materials. When storing deteriorated explosive materials, the licensee or permittee proprietor should be prepared to demonstrate to ATF that they are taking the appropriate steps to safely remove and destroy the materials. For example, the proprietor should be able to show that he or she has contacted a contractor to properly destroy the deteriorated explosive materials, or specify when the deteriorated explosive materials will be destroyed at a blast site, if appropriate.

Proprietors must properly account for all stored explosive materials, including those in a deteriorated condition and awaiting destruction, in the records of acquisition and disposition and the daily summary of magazine transactions. ATF recommends that any proprietor storing deteriorated explosive materials package them in cartons or boxes, as appropriate, and note on the container the explosive materials contained therein and the date on which they were placed in the container.

Keep in mind that the housekeeping regulations at 27 CFR 555.215 and this interpretation pertain to explosive materials in storage under ATF’s jurisdiction. State and local agencies and other Federal agencies—such as the U.S. Department of Transportation and the Environmental Protection Agency—may have separate requirements governing the transportation, storage, and destruction of deteriorated explosive materials.

Finally, if the manufacturer of the deteriorated explosive materials is no longer in business, or if a licensee or permittee cannot determine the origins of the deteriorated explosive materials, contact ATF or other local authorities. Under no circumstances should a licensee or permittee attempt to destroy deteriorated explosive materials without first contacting the manufacturer or other knowledgeable authorities. ATF also encourages proprietors dealing with deteriorated explosive materials to contact their industry associations for further guidance.

## **U.S. Department of Defense Exemption Application to Contracts**

**A**TF often receives inquiries regarding the application of the Federal explosives regulations to operations involving the U.S. Department of Defense (DOD). Typically, the questions pertain to contracts at current or former DOD sites, e.g., demilitarization of DOD munitions.

The regulations at 27 CFR 555.141(a)(3) and 555.141(a)(6) contain exemptions for certain explosives operations as they pertain to U.S. Government agencies, including DOD components. ATF generally interprets the exemptions to extend to work performed under the scope of DOD contracts, with some exceptions depending upon the nature and scope of the operations. This article will explore some examples of activities that may or may not be exempt under ATF regulations.

The U.S. Army Corps of Engineers (USACE) frequently provides oversight of the remediation or clean-up of sites previously used for the manufacture, storage and testing of military explosive materials. The USACE often contracts with private companies to perform much of the explosives-oriented work in these efforts, e.g., soil remediation, location and destruction of munitions from a test range, or removal and destruction of explosive materials from processing buildings. Generally, work performed pursuant to such a contract is exempt from ATF regulation provided that all work performed is on behalf of the USACE or another DOD component. However, the company performing the work on behalf of the USACE or DOD component may still need a Federal explosives license or permit for activities performed outside of the U.S. Government contract.

DOD often contracts with companies to perform “demilitarization” operations on certain military munitions, e.g., disassembling a certain type of exploding missile projectile. The contract may require that the company remove the high explosive materials from each projectile. The contract may also stipulate that the explosive materials must be destroyed or stored for further use by DOD. Since all work in this scenario is performed on behalf of DOD, and ownership of the materials is retained by DOD, the work performed pursuant to the contract would be exempt from ATF regulation.

In contrast, some contracts may allow the contractor to retain the extracted explosive materials for their own use, for use in further manufacture, or for sale in commerce. In such a case, ownership of the explosive materials typically passes from DOD to the private company. ATF generally considers this acquisition and any further activities involving the explosive materials to be regulated by 27 CFR Part 555.

Similarly, companies contracting with DOD are regulated if they also perform separate commercial operations. For example, a company may contract with DOD to manufacture certain materials. Additionally, the company manufactures explosive materials for the commercial market. The regulations at 27 CFR Part 555 apply to the company’s commercial explosive materials activities. Moreover, storage of commercial explosive materials not for use in conjunction with a DOD contract is subject to ATF regulation and inspection, even if the explosive materials are stored in the same magazine as, and in close proximity to, DOD explosive materials that are not regulated by ATF. Explosive materials for use in conjunction with a DOD contract, when stored with ATF regulated explosive materials, are not included in the total explosive weight within the magazine when determining table of distance requirements under Subpart K.

To ensure that the tables of distances can be properly applied to ATF-regulated materials, regulated commercial use explosive materials should be segregated from unregulated DOD-owned or contracted explosive materials to the greatest extent possible, and the weights of the commercial explosive materials should be available for examination.

The USACE generally requires as a condition of a remediation or demilitarization contract that a company obtain a Federal explosives license or permit from ATF even if the contracted operations are exempt from the regulations at 27 CFR Part 555. It is common practice for ATF to issue such licenses or permits, provided the company qualifies under the provisions found at 27 CFR Part 555, Subpart D. The issuance of a Federal explosives license or permit in these contract situations does not necessarily affect the exemptions discussed above. Rather, the specific circumstances surrounding each contract situation determine whether a company’s activities related to DOD remediation or demilitarization fall under ATF regulation. Individuals with questions regarding their specific situations may contact ATF Explosives Industry Programs Branch at (202) 648-7120 or [EIPB@atf.gov](mailto:EIPB@atf.gov).

## Storage of Exempt Explosive Materials in Magazines

**A**TF recently received inquiries regarding the storage of exempted explosive materials in the same magazine where regulated explosive materials are stored.

Pursuant to 27 CFR 555.141, ATF exempts certain explosive materials that include but are not limited to: consumer fireworks, articles pyrotechnic, and other explosive materials under the control of the Federal, State and local government agencies, such as the Department of Defense. Each specific exemption listed at 27 CFR 555.141 identifies not only the exempted explosive materials, but also the related operations that are exempt from the Federal explosive regulations. For example, the importation, distribution, and storage of fireworks generally known as consumer fireworks and articles pyrotechnic are exempt from the ATF explosives regulations. The transportation, shipment, receipt, or importation of explosive materials for delivery to any agency of the United States or to any State or its political subdivision is exempt. However, State and local entities are still required to store their explosive materials in accordance with the Federal explosives regulations.

Generally, when regulated explosive materials are stored in the same magazine with exempt explosive materials, only the net explosive weight (NEW) of the regulated explosive materials is taken into account when determining compliance with the tables of distances specified in 27 CFR 555.206. For example, an individual storing display fireworks in the same magazine with exempted consumer fireworks is only required to determine the NEW of the regulated display fireworks.

Explosive materials exempt from ATF storage regulations are not required to be stored in an ATF approved magazine. However, ATF encourages individuals and companies in possession of exempt explosive materials to secure them inside an ATF approved magazine to better ensure their safety and security.

Further, although there are no regulatory requirements to separate regulated and exempted explosive materials stored in the same magazine, ATF strongly recommends that exempted explosive materials be segregated and/or clearly marked to ensure no impediment during an ATF inspection and to provide the best accountability of regulated explosive materials. Explosive materials that are not exempt from Federal explosives regulations will be factored into the total NEW for a storage magazine. Finally, industry members shall continue to comply with the housekeeping requirements specified at 27 CFR 555.215 and ensure that magazines are kept clean, dry, free of grit, paper, empty packages and containers, and rubbish.

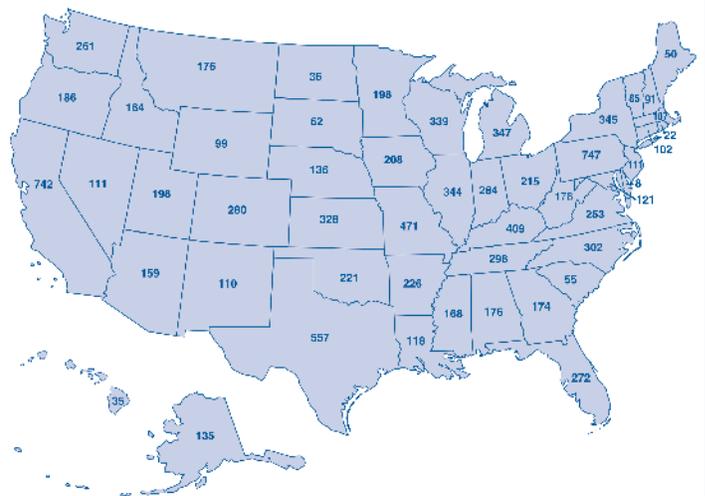
## Notice of Errata

The Explosives Industry Newsletter, June 2009 edition, contained an error in the Change of Control article on page 7. The article stated that “renewal applications must contain an originally signed EPQ for all current employee possessors and responsible persons, otherwise they will be ‘deactivated’ by the Federal Explosives Licensing Center.” This statement is incorrect because responsible persons do not submit EPQs (Employee Possessor Questionnaires). An EPQ must be submitted for all employee possessors at each renewal. In addition, all responsible persons must be appropriately listed under item number 11–Responsible Person List on the renewal application because those responsible persons who are not listed—and those employee possessors for whom documents are not submitted with the renewal—will be deactivated by the Federal Explosives Licensing Center.

## Orange Book Errata

The July 2009 printing of ATF Publication 5400.7, ATF Federal Explosives Law and Regulations (the “Orange Book”), contained several misprints concerning the locking requirements found in 27 CFR, Subpart K, on pages 49 through 52. The misprints affect the locking requirements found at 27 CFR 555.207(a)(9), 555.208(a)(4) and (b)(4), 555.209, 555.210(a)(4) and (b)(4), and 555.211(a)(4) and (b)(4). In all instances, the “ $\frac{3}{8}$  inch” shackle diameter requirement was erroneously printed as “a-inch.” Padlocks must have a case-hardened shackle of at least  $\frac{3}{8}$ ” diameter. We will correct the publication for future distributions. Anyone who has the misprinted edition should be aware of this error and make corrections accordingly.

## Licensee/Permittee Population



# Newsletter Distribution

The Explosives Industry Newsletter is now available online and is no longer distributed to licensees and permittees in "hard copy" format unless specifically requested. Current and previous issues of the newsletter are available on-line at <http://www.atf.gov/publications/newsletters/>. Licensees and permittees are encouraged to use ATF's new email update subscription service to receive notice whenever a new newsletter is posted to the ATF site at [www.atf.gov](http://www.atf.gov).

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## U.S. Department of Justice

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