# Oil and Gas



### Requirements General

- All Oil and Gas explosives operations are covered by 25 PA Code Chapters 210 and 211
- 210
   http://www.pacode.com/secure/data/025/chapte r210/chap210toc.html
- 211

   http://www.pacode.com/secure/data/025/chapte
   r211/chap211toc.html

### Requirements General

 All permit/license applications ask for ATF permit or license #'s.

 We share information with ATF and avoid duplication of background checking.

# Requirements Wireline/Case Recovery

Explosive Storage Licenses

Purchase/Sales\*

Blaster's License for Blasters-in-charge

\* Purchase/sales permits are required if explosives are bought or sold in PA





### Requirements Seismic Exploration

Explosive Storage Licenses

Purchase/Sales\*

- Blaster's License for Blasters-in-charge
- Blasting Activity Permits

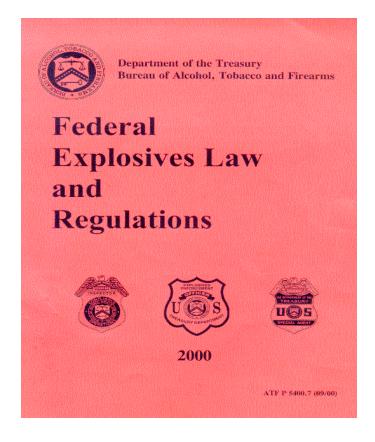
<sup>\*</sup> Purchase/sales permits are required if explosives are bought or sold in PA





# **Explosives Storage**

ATF regulations (by reference) are used to determine the amount and type of explosives that can be stored in which type magazines, and where magazines can be sited.



# PA Explosives Security Regulations

 Outer Perimeter Security (Keeps out unauthorized vehicles)

 Inner Perimeter Security (Keeps out unauthorized people)

Daily Inspections, enhanced notification, etc.







### **Purchase/Sales Permits**

• Sales and Purchase Permits are combined if you have both.

• Used as a tracking mechanism.

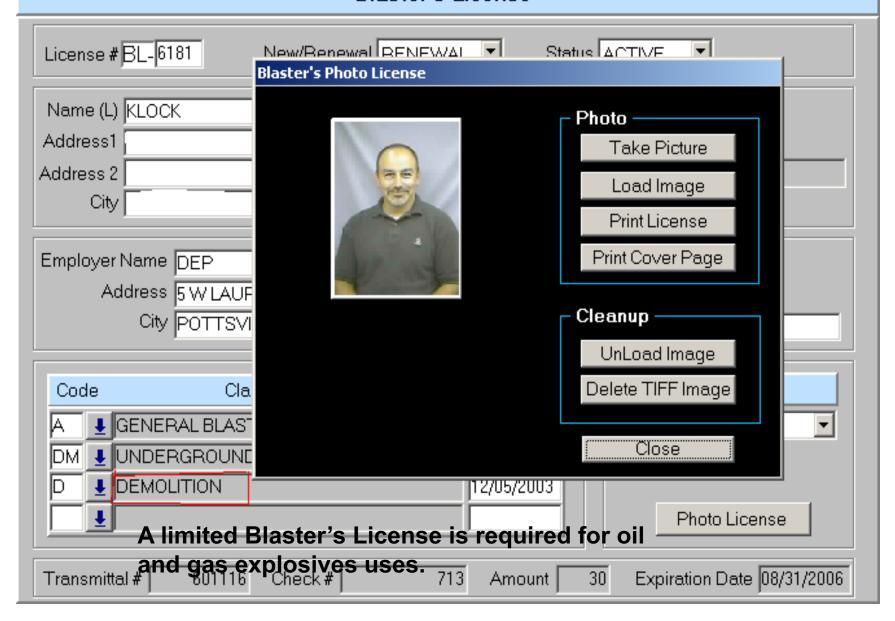
### **Blaster's License**

• Anyone detonating explosives in Pennsylvania must have a PA Blaster's License

• To obtain a PA Blaster's License you must attend the Departments 3 day training course. (Training first 2 days, exam the morning of the 3<sup>rd</sup>)

• The training focuses on regulations and regulatory compliance in PA.

#### Blaster's License



### **Blasting Activity Permits (BAP's)**

- Required for Seismic Exploration
- Unlike wireline/case recovery operations explosives charges on Seismic Exploration operations are detonated near the surface and can potentially affect structures and safety.

- The Department needs sufficient information (§211.124(a)(15) to determine if the proposed activity can be reasonably expected to meet the regulatory requirements and may contain conditions (§211.124(c)(6) that ensure that the activities will comply with regulations.
- 300 foot setbacks from wells and houses to ensure that the structures are not damaged and that the reg limits for ppv, dBL will not be exceeded. (§211.151(c))

- If the applicant proposes to go closer than 300 feet to a building we would require them to conduct seismograph monitoring according to the regulations and record ppv and dBL. If they have done their own ppv, dBL studies we would need to see that info.
- We need to know how are they going to prevent misfires. (Abandoning misfired explosives is abandoning explosives (§211.153(I))
- We will accept double capping. If one of the seismic companies comes up with anything better we all need to know.

- We need to know what the applicant plans to do to make the blast site safe if they have a misfire. (§211.157(d))
- The applicant will have to explain, for example, that they will remove the misfired charge or counter charge it. Entombing the charge or letting it degrade are unacceptable. The applicant needs a good misfire mitigation plan.
- We need to know that the applicant will ensure that no one can access or detonate the charges. Explosives must not be left unattended and the loaded blast be under observation of the blaster §§211.153(e), (f)

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- In these operations the blasting cap wire leads are usually buried so the applicant must explain how the holes will be found and they have to provide some sort of security while the charges are in the ground.
- We need to know where the holes are. (§211.133(1))
   This could be part of what the blaster-in-charge provides on a blast report with the blaster's name, BL number, misfire info, if needed, and any ppv,dBL info if needed
- The regulations state that the Department can specify stemming type and quantity (§211.154(f)(7)). The Department recommends that the applicant state that they will use crushed stone on all shallow holes, <30 feet. This could go in the comments section of the permit.

 We want them to notify us when they are loading and blasting. Otherwise we will not be able to "determine compliance with applicable laws and regulations." (§211.124(a)(15))

As for galvanometer use, how many drills each blaster is responsible for etc., we can look at that stuff when inspections are made. (§§211.159(a), 211.211.154(a)) Actually, most of the stuff in 211.141, 151, 153, 154, 155, 156, 157, and 159 appies to these operations.





