

Emergency Permits for OB/OD and Thermal Treatment Units



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Day 1 Emergency Permit Issues

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Is it an Exempt Emergency? Ammunition



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Ammunition in good condition is not considered an emergency that is exempt due to a threat to human health or the environment. Used range ammunition may cause threats from lead accumulation.

Ammunition rounds may not meet the criteria for the characteristic of reactivity if less than 50 caliber, but the material could still be considered ignitable due to the ignition powder inside, and/or characteristic for lead. As of 2001, no studies were found on how many grains of lead it takes to fail the toxicity characteristic leaching procedure (TCLP) test method.

Lead should be treated in a unit that is RCRA permitted. You may see mobile thermal units and popping furnaces seeking permits. Lead emissions would be a concern at these units. Once the ammunition is treated for ignitability the molten metal may be handled as a scrap recyclable material and fall into the scrap metal exclusions. The handler must comply with applicable TC rules until the materials are recycled.

Is it an Exempt Emergency? Class 1.4g Consumer Fireworks



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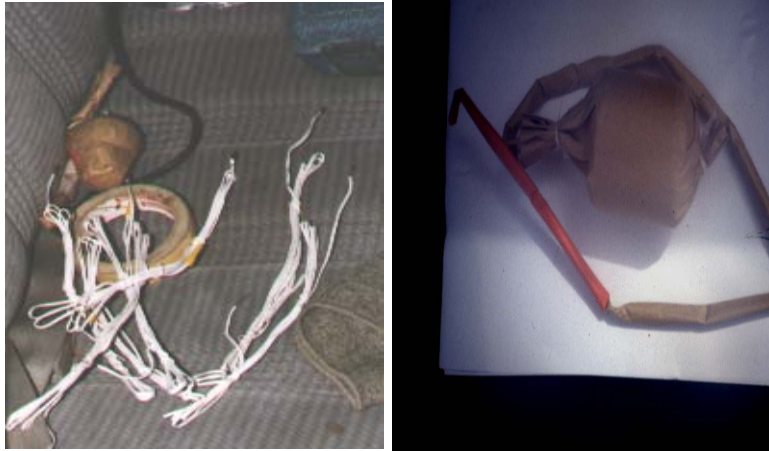
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Class 1.4g consumer fireworks that are in good condition are not considered a threat to human health or the environment.

Confiscated fireworks or previous evidence that is not reused as a product is considered a solid waste and hazardous due to ignitability or reactivity. The waste must be handled as a characteristic hazardous waste and treated in a RCRA regulated unit. Open burning or treatment in a thermal treatment unit are typical treatment methods. Incinerators may be able to handle small quantities of fireworks. This waste could possibly be used in place of other explosives for reduction of materials caked on incinerator kiln walls.

Safety precautions must be made when large quantities of these materials are stored.

Is it an Exempt Emergency? Display Fireworks



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Display fireworks when they become a waste and are managed for disposal are hazardous due to ignitability and reactivity. If the waste is generated at the original manufacturing plant and they know the contents of the waste, and the material is in good condition, an emergency permit or operating permit for treatment would be necessary.

When these materials are confiscated or left after commercial displays for local agencies to dispose of, the origination and management of these materials may be unknown. The material becomes a safety hazard. If an accident should occur in the vicinity of stored display fireworks the munitions specialist needs to make a determination of safety and threats of any exposure at the accident scene. These materials become a safety risk and should be managed under the exemption. Condition and generator knowledge are considered in decision making.

Is it an Exempt Emergency? Precursor Chemicals



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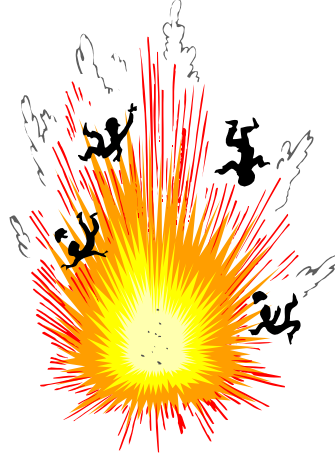
Precursor Chemicals in good condition, closed packaging, and labeled may be able to be recycled back to the original manufacture or used as a product. Good condition materials classified as a waste must be managed by applicable RCRA waste standards (40 CFR Part 261 classification).

If the packages/containers are open and can not be determined to be original materials, there may be a safety risk and generator characterization becomes difficult. When explosives are involved, the munitions specialist will probably side on the safer side and consider it a threat. If a threat exists the exemption would be applied.

The specialist would determine if the material is safe enough to store until an emergency permit could be obtained.

Is it an Exempt Emergency?

- Picric Acid
- Air Bags
- Signal Flares
- Other Munitions



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Picric Acid in good condition can be handled by waste treatment facilities. If it is in bad condition an emergency permit should be sought to treat the waste. Most cases of picric problems have been from schools and education can prevent the material from being used or removed and managed properly before it becomes a safety threat.

Air bags have explosive devices in them. The universe of treatment and disposal is not defined. The bags probably do not fall into the exempt category. Disposal should be under a RCRA permit.

Signal flare recommendations are becoming more common. On October 11, 2001, EPA wrote a letter addressing the disposal of expired marine visual safety distress signal (VDS) flares. Coast guard regulations consider VDS flares to be expired after 42 months from date of manufacture. The State of Florida has issued a document which addresses the management of expired VDS flares. The document is titled "Waste Visual Distress Signal Flares generated by Recreational Boaters" (July 2000).

Determining Good and Bad Condition

- Rely on the Munition Specialist.
- Don't second guess safety issues, you don't want the Agency liable if there is an accident.
- Stay on the cautious side if there is any question.



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Bad conditions show deterioration, crystallization, sweating, discoloration, moisture marks on boxes, or other conditions that show the material has been exposed environmentally or by humans in an improper manner.

What is Required in an Emergency Permit?

- Temporary EPA ID Number
- Verification of a threat to human health or the environment
- Type of waste(s) and amount
- Method of treatment
- Location and restrictions, isolation distances
- Time Limit: up to 90 days
- Notification of initiation and completion
- General permit conditions applicable to any permit
- Special conditions related to the permitted activity
 - Compliance with DOT
 - Rate of treatment
 - Treatment unit design
 - Discharges or emission compliance with other laws (CWA, CAA)
 - Preparedness and prevention
 - Inspection and disposal of treatment residues

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Emergency permits may be oral or written. If oral, it must be followed in five days by a written emergency permit. Emergency permits must be accompanied by a public notice per 40 CFR §270.61.

These are listings of conditions in actual emergency permits. Corrective action provisions can also be applied as a standard condition.

To Sample or Not to Sample? That is the Question



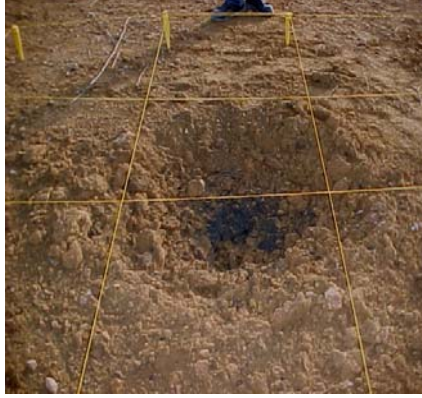
- Is it necessary?
- What are the data quality objectives?
 - Determining clean
 - Establishing contamination
 - Liability of what is left in place

Some states requiring sampling in emergency permits. Data quality objectives (DQOs) need to be considered in requiring sampling. What is the value of the sampling. Does a before and after sample really show anything? Does a single sample? EPA guidance on this topic is available in a document titled “Field Sampling and Selecting On-site Analytical Methods for Explosives in Soils” (EPA/540-R-97/501), November 1996.

Conditions requiring removal and management of all visibly affected soil and any popout, may be sufficient in some emergency permits. This provision would reduce risk from materials left on-site, which was common in emergency situations. Removal would also reduce future land use risk at the location of treatment.

For thermal treatment of metal bearing wastes, air sampling may be required if pollution controls are not installed on the unit.

Sampling (cont'd)



- How much is necessary?
 - Background
 - Number of samples
- Can the permittee afford the sampling?

Follow up on Performance?

- Notifications
 - Phone
 - Written
 - Upon initiation
 - Upon completion



Some states require notification prior to and/or after the emergency permit action is completed. Conditions in the permit should describe the type of communication necessary.

A public notice by the permitting agency is required in the regulations (40 CFR §270.61). California is proposing more notification to the public for these permits than the current rules.

Exemption and Emergency Permit Abuse

- Generators not understanding the system.
- When emergency permits become routine to the same location, then operating permits become necessary.
- What is routine?
- When training is not documented or abused as sham training, operating permits may become necessary.

Military training ranges have opened the issues of sham training and regulation at training ranges. The preamble to the Military Munitions Rule provides information on documentation U.S. EPA prefers to see to justify training events.

Generators need to document waste generation and characterization. If materials are reused as a product documentation of use in training needs to be kept.

Emergency permits issued to the same facility or the same owner/operator on a routine basis may show a need for an operating permit. Routine is not defined, but over 3-5 times a year may show repetition. Agencies need to consider administrative processing, permitting fees, etc. in determining how many emergency permits should be issued to the same owner/operator. Emergency permits are meant for threats. If threats are becoming a problem may be safety and other RCRA authorities need to assess the facility and operations.

Solutions: More Education



- BATF training courses added environmental compliance sections.
- Reaching out to communities affected
 - Law enforcement (Federal, State, local, tribal)
 - Customs/airports
 - Schools with chemistry and geophysics labs
 - Shooting ranges
 - Household hazardous waste collection points

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Munition issues have become more prevalent in the last 5 years. Concentration has been on military facilities. Other agencies and locations that manage munitions are slowly being looked at. BATF, Consumers Products, OSHA, and DOT have rules concerning munitions but are limited in environmental compliance.

End of Emergency Permit Issues

