



Fireworks

NEWMOA

Sept 10, 2019

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Agenda

- ▶ Summary of EPA Memo: “Safe Handling, Storage, and Treatment of Waste Fireworks,” July 6, 2017
- ▶ Current Fireworks and Flares Issues
- ▶ Shipment of damaged fireworks from CT to UT

Summary of EPA Memo: “Safe Handling, Storage, and Treatment of Waste Fireworks,” July 6, 2017

▶ Genesis of Memo

- ▶ April 8, 2011 Waipahu, HI explosion while dismantling confiscated fireworks - 5 employee deaths [CSB report and video are cited in memo]
- ▶ Feb. 19, 2013 Recommendations to EPA

▶ Additional background

- ▶ Other waste accidents
 - ▶ July 29, 1980 Fort Rosecrans, San Diego, CA: while loading confiscated fireworks - 3 deaths, one injury, DOD EOD soldiers
 - ▶ July 4, 2012 Lansing, KS: while setting off commercial fireworks that had failed to function: one death to volunteer helper
- ▶ U.S. CPSC: 7.1 fireworks deaths/yr from 2001-2016; 11,100 hospital-treated injuries 2016.
- ▶ More than 300,000 lbs fireworks confiscated annually (police, ATF, Customs and Border Control)

Summary of EPA Memo: “Safe Handling, Storage, and Treatment of Waste Fireworks,” July 6, 2017

- ▶ Handling, Storage, and Treatment Concerns addressed in Memo:
 - ▶ Safety
 - ▶ Security
 - ▶ Environmental
 - ▶ RCRA Compliance
- ▶ Memo covers best management practices, standard operating procedures, and permit conditions
- ▶ Principles apply to fireworks; marine, roadside, and other signal flares; auto air bag explosives, hobby rocket propellants

Summary of EPA Memo: “Safe Handling, Storage, and Treatment of Waste Fireworks,” July 6, 2017

- ▶ Examples of Best Management Practices, Standard Operating Procedures, and permit conditions (RCRA, ATF, DOD, OSHA, DOT, CPSC, IME, APA, NFPA):
 - ▶ Remove explosive dust from floor
 - ▶ Do not allow spark-producing items in storage bunkers
 - ▶ No dismantling in bunkers, only storage
 - ▶ Access to bunkers controlled; locked (for security and safety)
 - ▶ No smoking or other sources of flame
 - ▶ Stored in covered, non-ferrous containers, in good condition
 - ▶ Proper employee training
 - ▶ Clear entry/exit, aisles

Summary of EPA Memo: “Safe Handling, Storage, and Treatment of Waste Fireworks,” July 6, 2017

- ▶ Other topics in the memo:
 - ▶ When fireworks become a waste
 - ▶ Treatment options
 - ▶ Repurposing
 - ▶ Non-thermal treatment in tanks or containers (e.g., soaking or cutting and soaking)
 - ▶ Treatment on-site in a permitted unit
 - ▶ Shipment to a commercial facility
 - ▶ Emergency permits

Current Fireworks and Flares Issues

- ▶ Confiscated fireworks and flares
 - ▶ Excessive long-term storage (because of limited treatment options); e.g., CA
 - ▶ Safety and security concerns
 - ▶ Transportation (DOT; safety concern)
 - ▶ Limited Treatment Options
 - ▶ Repurposing
 - ▶ Few commercial facilities
 - ▶ Cumbersome permit procedures (for on-site treatment); costs and time
 - ▶ Lack of MTUs
 - ▶ Costs
 - ▶ OB/OD treatment without a RCRA permit
- ▶ Household Hazardous Wastes
 - ▶ Treatment options

Current Fireworks and Flares Issues

- ▶ Collaboration:
 - ▶ E.g., EPA, NBSCAB, ATF, FBI, DHS, DOD, DOT, ICE, CPSC, USCG; APA, fireworks and flares manufacturing and display companies; NM Test Site; CA, NY, NYC, MN, AZ
 - ▶ Technology demonstrations
 - ▶ Test sites
 - ▶ Vendors
 - ▶ Wastes
 - ▶ Funding
 - ▶ Expertise
 - ▶ Interim measures, e.g.,
 - ▶ Repurposing
 - ▶ Treatment in containers

Questions?

Lantis Firework Disposal, UT

- ▶ Multiple times per year Lantis Fireworks provides a free fireworks display co-sponsored by the local municipality, made up of new fireworks.
- ▶ The finale for the show often includes the “repurposing” of damaged fireworks from various entities nationwide.
- ▶ In 2018 Lantis received ~20,000 lbs of damaged fireworks from a facility in CT.
- ▶ The fireworks were placed into a concrete pit, still inside packaging, and burned at different, but nearby, location to the main fireworks show.

Photo showing damaged fireworks from CT prior to being burned in show.







Fireworks in December



You are invited to Fairfield Town's Annual
**Christmas In The Night Sky
and Toy Donation**

Saturday, December 1, 2018
at Camp Floyd State Park

Food Trucks at 5:00 pm to 7:30 pm

Electric Christmas Parade begins at 5:30 pm

Santa arrives after the Parade

Fireworks Show at 6:15 pm

Lantis Pit Burn at 6:45 pm

Admission:

A New, Unwrapped Toy

per family for donation. All toy
donations go to local families.

**Fireworks
Sponsored By**

Lanti
Fireworks & Laser

Regulatory Stance

- ▶ Currently, UT deems the activities conducted by Lantis Fireworks to be legitimate “repurposing” of a commercial chemical product.
- ▶ EPA’s Explosive Disposal Alternatives Team (EDAT) is currently considering paths forward to help address the issues damaged and confiscated fireworks pose nationwide.
- ▶ Lantis’ “repurposing” has positive features and some concerns.
 - ▶ Positive:
 - ▶ Legitimate show performed, flyer posted for event, vendors, crowd.
 - ▶ Coordinates with local and state authorities.
 - ▶ Is a nationally respected fireworks expert.
 - ▶ Concerns:
 - ▶ Over 20,000 lbs of material was used in the finale of just a single show.
 - ▶ Bulk of material didn’t provide visual “show”
 - ▶ Fire burns/smolders for ~3 days and ash is land disposed in a Sub D landfill.
 - ▶ No RCRA permit to ensure corrective action in the future if needed.

Questions?

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