Open Burning and Open Detonation of Waste Military Munitions

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The Military's Primitive Disposal Methods

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When our federal hazardous waste rules were written in the 1980s, a special exemption was created for waste military explosives.

The military exemption is only for waste explosives “which cannot be safely disposed of through other modes of treatment.”

Now safer and more effective disposal methods have been put in use by civilian entities and even a few military facilities.

Examples of Sites where Alternatives to Open Burning/Open Detonation have been Approved and/or Deployed

- Supercritical Water Oxidation
  - Blue Grass Arsenal (KY), Dugway Proving Ground (UT), Newport Chemical Depot (IN)

- Controlled Detonation Chamber (Blast Chamber)
  - Pueblo Chemical Depot (CO), Santa Susana Field Laboratory (CA), Blue Grass Arsenal (KY), Edgewood Chemical Biological Center on Aberdeen Proving Ground (MD), Massachusetts Military Reservation (MA), Port of Seattle Pier 90-91 Formerly Used Defense Site (WA)

- Supercritical Water Oxidation Detonation in a Vacuum Assisted Chamber
Examples of Sites where Alternatives to Open Burning/Open Detonation have been Approved and/or Deployed

Dynasafe (Static Detonation Chamber) Blue Grass Chemical Agent-Destruction Pilot Plant (KY), Tooele Chemical Agent Disposal Facility (UT)

DAVINCH (Detonation in a Vacuum Assisted Chamber)
Desert Chemical Depot (UT), Bluegrass Arsenal (KY), Poekapelle Belgium, 4 sites in Mainland China, 4 sites in Japan

Contained Burn Chamber
Camp Minden (LA)

Hydrolysis
Aberdeen Proving Ground (MD), Newport Chemical Depot (IN), Pueblo Chemical Depot (CO)

Gas Phase Chemical Reduction Aberdeen Proving Ground (MD), Slovakia, Japan, Canada and Australia

Gas Phase Chemical Reduction  Controlled Detonation Chamber

UP IN FLAMES

Decades after open burning of hazardous waste was all but eliminated in favor of more environmentally sound disposal methods, the U.S. military continues to use open burning and open detonation to destroy munitions at dozens of sites across the country and in U.S. territories. Several Department of Energy sites involved in nuclear weapons production also use open burning.

Sources: U.S. Department of Defense and the Department of Energy’s National Nuclear Security Administration
Active Open Burning/Open Detonation Hazardous Waste Sites
United States and Territories

Anniston Army Depot, Alabama - Fort Polk, Louisiana - U.S. Army Garrison, Alabama - Yuma Proving Grounds, Arizona to name a few

Utah Naval Air Weapons Station China Lake, California - Naval Submarine Base – Kings Bay, Georgia - Maryland Naval Surface Warfare Center Indian Head, Maryland

Cape Canaveral Air Force Base, Florida - Texas Edwards Air Force Base, California - Eglin Air Force Base, Florida - Vandenberg Air Force Base, California

U.S. MARINE CORPS Marine Corps Air Station Beaufort, South Carolina Marine Corps Air Station Yuma, Arizona

U.S. DEPARTMENT OF ENERGY Pantex Plant, Texas - Lawrence Livermore National Laboratory, California - Los Alamos National Laboratory, New Mexico - Nevada National Security Site, Nevada - Sandia National Laboratory, New Mexico

NASA Goddard Space Flight Center - Wallops Flight Facility, Virginia - Marpi Point Explosives Demolition Site, Northern Mariana Islands

Numerous private facilities in cities across the country, including St. Marks Powder in Crawfordville, Florida, and Chemring Ordnance in Perry, Florida.
Up in Smoke and Flames

At more than 60 sites across the United States, millions of pounds of waste explosives are burned and exploded in the open air:
- bombs
- artillery shells
- propellants
- tactical missiles
- rockets
- pyrotechnics
- igniters
- cartridges
- rounds
- incendiaries such as napalm
- land mines
- flares and smoke canisters

Down as Air and Water Pollution

OB/OD spews poisonous contaminants that often spread far beyond the point of release, washing into creeks, rivers, and bays and leaching into groundwater.
- heavy metals, including extremely fine particles of easily breathable lead, cadmium, barium and other heavy metals
- energetic compounds such as RDX
- perchlorate
- dioxins and other organic compounds
Some Numbers:

<table>
<thead>
<tr>
<th>Installation/Facility</th>
<th>Annual Open Air Burning/Detonation Threshold (pounds as Nit Explosive Weight)</th>
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<tbody>
<tr>
<td>Alliant Techsystems Proving Ground, MN</td>
<td>400,000</td>
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<tr>
<td>Anniston Army Ammunition Plant, AL</td>
<td>13,227,600</td>
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<td>Blue Grass Army Depot, KY</td>
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<td>China Lake Naval Air Weapons Station, CA</td>
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<td>Crane Naval Surface Warfare Center, IN</td>
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<td>Edwards Air Force Base, CA</td>
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<td>Eglin Air Force Base, FL</td>
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<td>Fort Polk, LA</td>
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<td>Hawthorne Army Depot, NV</td>
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<td>Holston Army Ammunition Plant, TN</td>
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<td>Letterkenny Army Depot, PA</td>
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<td>McAlester Army Ammunition Plant, OK</td>
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<td>Red River Army Depot, TX</td>
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<td>Redstone Arsenal (U.S. Army Garrison), AL</td>
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<td>Tooele Army Depot, UT</td>
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Working Draft by CSW8.org and the Cease Fire Campaign
August 2010

Vieques to Eglin

After a citizen campaign of nonviolent civil disobedience forced the Navy to close its facility on the Puerto Rican island of Vieques, most of its mission – bombing practice, war games, and dumping of old munitions – was moved to Eglin.
Now Eglin has a state permit for open burning and open detonation of nearly 9 million pounds of waste explosives from its own operations, as well as Hurlburt Field, Tyndall AFB, Pensacola NAS, and Navy Support Activity Panama City.

While sites in other states are prohibited from OB/OD of certain wastes such as depleted uranium, red and white phosphorus, incendiaries, riot control agents, and 50 mm rounds, there are no such prohibitions at Eglin.

Clear and present danger to service members, their families and nearby communities

- cancer
- birth defects, including mental impairment
- cardiac dysfunction
- immune system disruption
- severe brain deterioration
- respiratory illness
You can help! Here’s how:

- Sign the petition on the Cease Fire Campaign website [https://cswab.org/cease-fire-campaign/cease-fire-petition/](https://cswab.org/cease-fire-campaign/cease-fire-petition/)

- Join the League of Women Voters Pensacola Bay Area Natural Resources Committee [http://www.lwvpba.org/](http://www.lwvpba.org/)

- Write a letter to the editor of your local paper [http://static.pnj.com/submitletter/](http://static.pnj.com/submitletter/)

- Post on social media

- Request a presentation to your group

- Urge your group to join the Cease Fire Coalition

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Last word:
[https://www.youtube.com/watch?v=hkl3sq5GnZU](https://www.youtube.com/watch?v=hkl3sq5GnZU)
The True Cost of Burning Munitions
Created by Citizens for Safe Water Around Badger as part of the Cease Fire Campaign
Badger Army Ammunition Plant in Baraboo, Wisconsin
CWSWAB.org