



**Open Burning and Open Detonation of
Waste Military Munitions**



**The Military's Primitive Disposal
Methods**

The Pentagon, known for its high tech weaponry and communication systems, is relying on the most antiquated methods for ridding itself of waste munitions. This isn't only backward; it's dangerous to military and civilian communities.



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)
Deseret 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

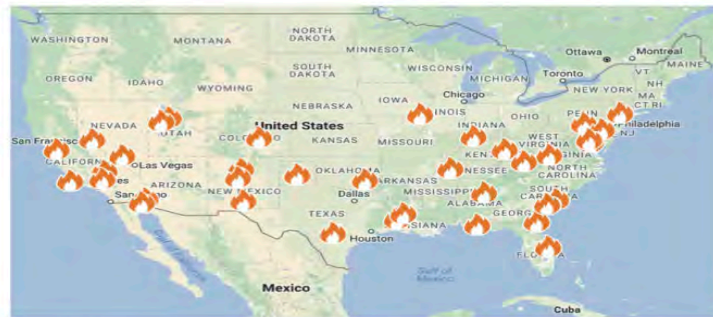


Controlled Detonation Chamber



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



In addition to burning, open detonation is routinely used to treat explosives-contaminated wastes. This detonation is in Vieques, Puerto Rico.

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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:

Installation/Facility <i>(Partial list)</i>	Annual Open Air Burning/Detonation Threshold <i>(pounds as Net Explosive Weight)</i>
Alliant Techsystems Proving Ground, MN	400,000
Anniston Army Ammunition Plant, AL	13,227,600
Blue Grass Army Depot, KY	7,665,000
China Lake Naval Air Weapons Station, CA	5,475,000
Clean Harbors Colfax, LA	480,000
Crane Naval Surface Warfare Center, IN	109,364,800
Edwards Air Force Base, CA	150,000
Eglin Air Force Base, FL	8,760,000
	<i>technically unlimited per FL DEP</i>
Fort Polk, LA	3,200
Hawthorne Army Depot, NV	2,600,000
Holston Army Ammunition Plant, TN	1,250,000
Letterkenny Army Depot, PA	5,611,875
	<i>plus unlimited in burn cages</i>
McAlester Army Ammunition Plant, OK	9,960,000
Radford Army Ammunition Plant, VA	2,920,000
Red River Army Depot, TX	5,700,000
Redstone Arsenal (U.S. Army Garrison), AL	137,500
Tooele Army Depot, UT	1,397,400

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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/>
- Join the League of Women Voters Pensacola Bay Area Natural Resources Committee <http://www.lwvpba.org/>
- Write a letter to the editor of your local paper <http://static.pnj.com/submitletter/>
- Post on social media
- Request a presentation to your group
- Urge your group to join the Cease Fire Coalition



Last word:

<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
CSWAB.org

