

Potential Impacts of EPA Rule Changes on DoD's Treatment of Waste Explosives



**Association of State and Territorial Solid
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Bottom Line Up Front

- EPA will publish proposed rules later this year which will significantly amend the Resource Conservation and Recovery Act (RCRA) permitting regulations for open burning and open detonation (OB and OD) of hazardous waste military munitions requiring alternative technologies.
- Based on the information EPA has shared regarding these proposed rules, DoD is concerned that EPA's planned approach will adversely impact DoD's ability to safely destroy excess, obsolete, and unserviceable military munitions, resulting in increased risk to people, infrastructure, the environment, and national security.



Why is OB and OD Important?

- DoD requires permitted OB and OD units to safely demilitarize, treat, or destroy DoD military munitions generated in support of national defense that have become excess, obsolete, or unserviceable and designated as waste military munitions (WMM)
- DoD uses OB and OD to treat WMM at installations that:
 - Demilitarize;
 - Manufacture;
 - Perform Research, Development, Testing, and Evaluations (RDT&E); and
 - Self-generate WMM through training and other military readiness activities
- Due to its expertise, DoD often responds to unexploded ordnance (UXO) in the public domain (i.e., not on a military installation). Destroying UXO as part of an emergency response does not require a permit since permitting would delay the response time and likely increase risk to the public and those responding to the emergency



Who Governs OB and OD?

- EPA and States provide regulatory oversight where DoD has OB and OD units permitted under RCRA regulations.
- The Military installations apply for permits and operate each OB and OD facility in compliance with permitting requirements developed in discussions with regulators, such as limits on the amount of waste that can be treated and required environmental monitoring.
- The DoD Explosives Safety Board (DDESB) licenses the explosives safety aspect of destroying munitions at OB and OD units under its Title 10 authorities. Examples of conditions within a DDESB approved OB and OD site plan include quantity of munitions (Net Explosives Weight, or NEW), atmospheric conditions, destruction methods, types of munitions authorized, and safe separation distances.



DoD Viability Requirements for Alternative Technologies in Lieu of OB and OD



Viability requirements for alt tech in lieu of OB and OD include:

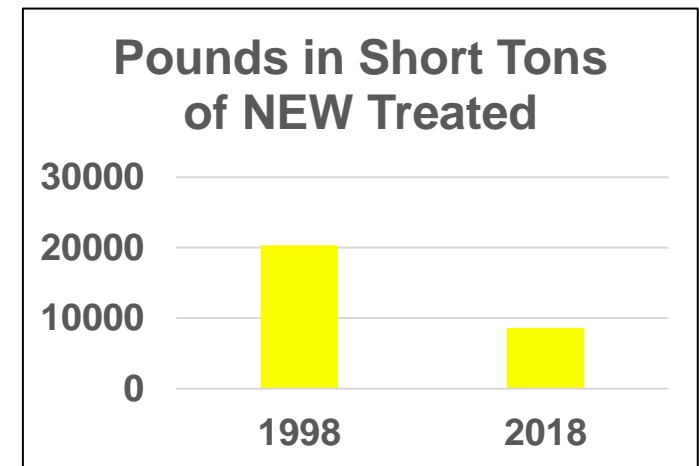
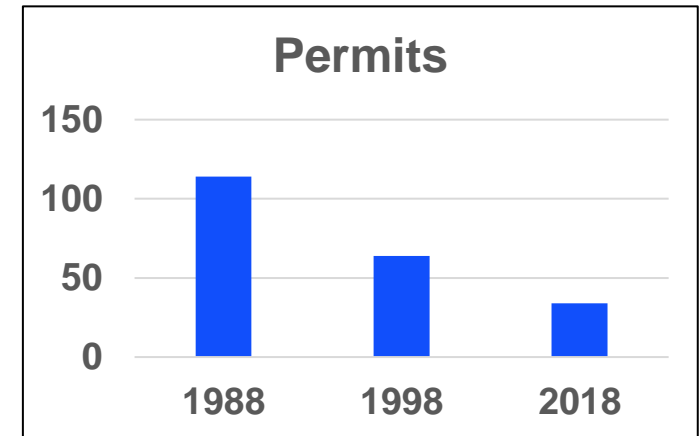
- Explosives safety requirements (e.g., operator safety, quantity distance requirements, explosives storage, transportation, etc.),
- Throughput and capacity of the system
- Required periodicity of system inspection and preventive maintenance due to the high stress and pressures of internal combustion and contained explosions,
- Demonstrated effectiveness and maturity of the alternative technology,
- System reliability
- Viability of the unit to treat all types of explosive waste streams that are managed at the location
- Expected life of the technology/unit and
- Fiscal reality of implementing an alt tech solution in relation to the quantity of waste treated and risk reduction at each specific permitted facility



DoD Commitment

DoD is committed to maintaining only essential permitted units, reducing munitions treated through OB and OD, and protecting the environment

- 1988 – DoD had OB and OD interim units at 114 locations
- 2023 - DoD maintains 34 ACTIVE OB and OD permits within the mission areas of demilitarization, manufacturing, RDT&E, and self-generation.
- DoD reduced permits by:
 - 70% since 1988 and
 - 44% since 2000
- DoD reduced quantities of net explosive weight (NEW) treated through use of OB and OD by 58% since 2000
- DoD only maintains essential OB and OD units and MUST retain OB and OD capability to protect people, infrastructure, and safely support the mission
- DoD has demonstrated its commitment for operating OB and OD units in a manner that is protective of nearby populations and the environment, and will continue to do so, while ensuring the highest necessary levels of safety and the ability to meet national security mission requirements.
- DoD monitors OB and OD units as required by permits to ensure no significant releases to the environment occur during the operations





Ramifications of Proposed Regulatory Changes



- Due to the volume of excess, aging, obsolete, unserviceable, and deteriorated munitions in the DoD stockpile, the DoD cannot readily replace the lost demil capacity and flexibility afforded by OB and OD.
- In most cases, use of alt tech increases transportation, handling, disassembly, and preparation of munitions prior to treatment which violates explosives **safety cardinal rule** and increases risk to the public and personnel transporting, handling, and preparing the munitions for treatment.
- Space is not always readily available and reconfiguring operating processes for alt tech facilities will require extensive planning and implementation. (5-10 years)



DoD Munitions Demil Current State of Affairs

- DoD has a critical need to maintain OB and OD permits to demilitarize the stockpile of excess, aging, obsolete, unserviceable and deteriorated munitions.
- The DoD has a Demil stockpile of over 7,400 munition types with a collective weight of approximately 340,000 short tons, which is incrementally growing as more items are removed from the active inventory and transferred to the Demil stockpile.
- In FY22, 32,402 Short Tons were demiled.
- Proven Closed Disposal thermal treatment technologies are applicable to 53% of the Demil stockpile.



DoD Position

- DoD remains committed to working with EPA to share information about OB and OD and the DoD's requirements and governance processes designed to protect human health and the environment, while minimizing risks and supporting the Nation's strategic interests
- DoD supports the use of alt tech where it is viable and supports the mission, and must maintain its ability to treat excess, aging, obsolete, unserviceable, and deteriorated munitions through OB and OD
- DoD must maintain the final determination of alternative technology viability for each permitted facility