



2101 Wilson Boulevard, Suite 700, Arlington, VA 22201-3060 • (703) 522-1820 • (703) 522-1885 Fax • NDIA.org

June 20, 2024

U.S. Environmental Protection Agency
EPA Docket Center, OLEM Docket, Mail Code 28221T,
1200 Pennsylvania Avenue NW, Washington, DC 20460

Submitted as Requested to: Federal eRulemaking Portal: <https://www.regulations.gov>.
Docket ID No. EPA-HQ-OLEM-2021-0397

RE: Standards for the Open Burning/Open Detonation of Waste Explosives

As a 501(c)3 educational nonprofit, NDIA represents more than 1,700 corporate and over 65,000 individual members from small, medium, and large contractors. For more than 100 years, NDIA has provided a platform through which leaders in government, industry, and academia can collaborate and provide solutions to advance the national security and defense needs of the nation.

NDIA submits the following information for consideration by the Office of Land and Emergency Management (OLEM) at the Environmental Protection Agency (EPA) related to the Notice of Proposed Rulemaking (NPRM) for revisions to the Standards for the Open Burning/Open Detonation (OB/OD) of Waste Explosives.

Waste explosives and other energetic materials are unavoidable materials generated by the U.S. Government and contractors in the production of weapon systems, rockets, munitions, and similar platforms. These materials are critical for national security and the advancement of science. Waste explosives and other energetic materials are characterized as reactive (D003) hazardous waste pursuant to 40 CFR § 261.23 and may be generated as spent, damaged or off-specification materials, non-conforming feedstocks, and obsolete materials.

Support of OB/OD Technology:

NDIA appreciates EPA's proposal to continue to allow for the OB/OD of certain waste explosives. It is imperative that EPA recognize and permit adequate OB/OD treatment capacity of waste explosives and other energetic materials that are not amenable to existing and novel alternative treatment technologies, including those that deploy closed burning/detonation or chemical destruction techniques. Some energetic materials, such as rocket motors and warheads, are simply too large and dangerous to be destroyed in a closed detonation device, such as a static detonation or vacuum-integrated chamber. The energy released from the detonation and burning of these waste explosives and energetic materials would likely compromise, if not destroy, the alternative treatment equipment, including combustion (detonation) chambers and/or pollution abatement equipment. Such potential destruction of equipment and directed release of energy could also endanger the safety of on-site personnel as well as the safety of personnel in adjoining properties.

Neither the 2019 findings from the National Academy of Sciences, Engineering, and Medicine¹ (NASEM) nor the EPA's Alternative Treatment Technologies to Open Burning and Open Detonation of Energetic Hazardous Wastes² reports have concluded that safe alternatives to OB/OD are available for the treatment of problematic explosives and energetic waste. In fact, on June 7, 2022, the policy memorandum³ from Carolyn Hoskinson, Director, EPA's Office of Resource Conservation and Recovery to Regional Directors, acknowledged that OB/OD will still be needed to treat waste explosives that do not yet have other safe modes of treatment. NDIA agrees with EPA's assessment and supports the actions in the above-listed NPRM and policy memorandum.

In addition, NDIA strongly recommends to EPA that it is not appropriate to assume for purposes of the alternative technology evaluation that certain waste explosives or energetic materials can be cut, sliced, or otherwise reduced in size and/or rendered inert to make them amenable to treatment or destruction in a closed detonation device or other alternative treatment. The manipulation of a highly explosive or energetic waste such as a warhead or rocket motor is extremely dangerous and potentially life-threatening if not completed by a trained professional, which may not be available at a commercial or other permitted OB/OD facility. Pretreatment activities such as size reduction or rendering to inert needs to be considered on a case-by-case basis between the generator and the OB/OD facility and not be presumed as viable in the alternative technology evaluation.

De Minimis Exemption:

NDIA believes EPA should refocus the proposed *de minimis* exemption in 40 CFR § 264/265.704(e) on the volume of waste a facility treats using OB/OD rather than the net explosive weight of the waste a facility generates. Ultimately, the proposed rule is intended to address the environmental risks that arise from treating waste explosives with OB/OD. Indeed, the amount of waste a facility treats with OB/OD, if any, is what drives the environmental impacts EPA is seeking to address. If EPA were seeking to address the environmental impact of generating and storing explosive waste prior to treatment, then establishing varying levels of regulatory requirements based on the amount of waste a facility generates would be reasonable. Here, however, EPA's administrative record focuses on the environmental effects arising from the treatment activity. The relationship between the effects EPA seeks to address and the volume of waste explosives a facility generates is unclear.

NDIA also notes that in light of the concerns about the inevitable downtime alternative technology units will experience, refocusing the *de minimis* exemption on the amount of waste treated with OB/OD will provide facilities greater operational flexibility when that occurs. In that regard, NDIA believes EPA should broaden the *de minimis* exemption to allow treatment of wastes generated offsite as well. In creating a *de minimis* exemption, EPA appears to have made the judgment that the environmental impact of treating small quantities of explosive waste with OB/OD does not warrant regulation. If this is the case, then the point of generation for that waste should not make any difference.

¹ <https://nap.nationalacademies.org/catalog/25140/alternatives-for-the-demilitarization-of-conventional-munitions>

² https://www.epa.gov/sites/default/files/2019-12/documents/final_obod_alttechreport_for_publication_dec2019_508_v2.pdf

³ <https://rcrapublic.epa.gov/files/14946.pdf>

Alternative Technology Evaluations:

Proposed 40 CFR § 264/265.707(a) states, “Owners or operators that seek to use OB and/or OD...must demonstrate through an evaluation that there are no safe and available alternative treatment technologies....” Similarly, proposed 40 CFR § 264/265.704(b) states, “To be eligible to open burn or open detonate waste explosives, owners/operators must submit documentation of waste analysis... and an alternative technology evaluation....” If a facility has already determined it will use an alternative technology to treat its waste, commits to doing so, and does not “seek to use OB and/or OD” or seek “to be eligible to open burn or open detonate,” is it still required to perform an alternative technology evaluation, including a waste analysis? The words used in the two sections quoted above say no, but the preamble indicates yes.

NDIA requests that EPA clarify in the final rule that a facility that seeks to treat explosive waste with an alternative technology does not need to complete an alternative technology evaluation. At the very least, if an alternative technology evaluation is required, the requirements for a facility that has already committed to using alternative technology should be fewer. This is because the evaluation proposed by EPA is designed to make a facility prove it is eligible for OB/OD by demonstrating there is no alternative technology that is safe or available. There is no reason to make the facility attempt to prove its eligibility for OB/OD when it does not seek to use it.

An example of a requirement that should be changed is the requirement that all facilities must conduct a detailed physical and chemical waste analysis of each waste stream. Knowing the potential for smoke plumes, large amounts of particulate matter, and constituents in uncontrolled emissions to bioaccumulate may make sense if the facility proposes to conduct OB/OD, but wastes treated by alternative technology will be contained within the unit, there will not be uncontrolled emissions, and the unit will be subject to Subpart X and air emission requirements. Accordingly, the one-size-fits-all waste analysis proposed by EPA needs to be revised for those facilities that do not seek to use OB/OD.

Support of Waste Analysis Provisions:

Where OB/OD is necessary, NDIA supports the option of using pre-determined information or knowledge of a specific waste stream or constituent in lieu of conducting chemical and physical analysis at 40 CFR § 264.704(c) for final status and 40 CFR § 265.704(c) for interim status requirements. In many situations, the exact or near-exact chemical and physical composition of the waste explosive or energetic material/device will be communicated by the generator to the OB/OD facility utilizing process and/or generator knowledge, including manufacturer-published specifications and other information. Retaining the option of using existing information is key to avoiding unnecessary testing and analysis.

Wastes that May be Treated by Alternative Technology:

At present, EPA takes the position that only wastes that have the potential to detonate may be treated by OB/OD. Wastes that do not meet this threshold must be transported off-site for treatment and disposal. In the preamble to the proposed rule, there are indications that combustible wastes contaminated with explosive material that do not have the potential to detonate, such as contaminated PPE, may be treated by a facility’s alternative technology. EPA

should provide clarification in the rule itself on whether wastes contaminated with explosives that do not meet the definition of “waste explosives” (because, for example, they do not have the potential to detonate) may be treated in a facility’s alternative technology unit rather than be sent off-site for treatment and disposal. Facilities will invest significant sums in their alternative technology and should be allowed to use it to treat any combustible wastes on-site that are contaminated with explosives and are authorized by their Subpart X permit.

Moreover, EPA should make clear in the rule whether permitting authorities may authorize waste explosives generated off-site to be treated in a facility’s alternative technology. NDIA believes allowing such treatment under certain circumstances, such as when a company has multiple facilities generating waste explosives or in emergencies, could be beneficial.

Emergencies/Closure/Shakedown Period:

While NDIA supports EPA’s efforts to require safe and available alternatives to OB/OD, we believe the Agency needs to be realistic about the challenges the aerospace and defense sectors will face during implementation. The development of alternatives to OB/OD is in its infancy – particularly for larger and more complex wastes such as solid rocket boosters and advanced missile systems. Because of the size and complexities of these wastes, it is unlikely that standardized systems (such as mobile treatment units) will be available to treat them. Rather, alternative technologies for these wastes are likely to require designs that are specific to the waste a particular facility generates.

Uniquely designed treatment units will inevitably have operational difficulties and downtime. Sooner or later, an alternative technology failure will result in unsafe quantities of explosive wastes accumulating at a facility. Unlike publicly funded governmental entities, it is not feasible for the private sector to build “spare” treatment units to account for the possibility that alternative technology units will be inoperable for some period of time.

EPA seeks to address this situation by allowing OB/OD (i) during an emergency response under 40 CFR § 264.715(a), (ii) pursuant to an emergency permit under 40 CFR § 264.715(b), or (iii) for facilities that still have permitted OB/OD units to treat some of their wastes, pursuant to a temporary authorization issued under 40 CFR § 270.42(e). The problem is that once an alternative technology is installed at a facility whose evaluation showed that all its wastes can be treated in it, then the proposed rule will require the facility’s OB/OD units to close within 180 days of their last use (the proposed rule’s exceptions to closure will not apply at most facilities). If OB/OD units must close, then facilities seeking to treat waste with OB/OD on an emergency basis will not have permitted OB/OD units in which to do so. EPA is, therefore, creating a situation in which using OB/OD in the event of an emergency looks achievable on paper but is not achievable in practice.

To address this, NDIA recommends that EPA develop regulations allowing generators of waste explosives to place their existing OB/OD units into “standby” status rather than requiring permanent closure. Many existing OB/OD units represent a significant capital expenditure, and permanently closing them when they may be needed during an emergency is difficult to justify. Because these OB/OD units could be used only in very limited circumstances and for a limited duration, they should be subject to minimal operating and monitoring requirements rather than all

Subpart Y standards. For example, stormwater, surface water, and monthly soil monitoring do not seem necessary during periods when the units are in “standby” status.

In addition, because the initial implementation of an alternative technology is unlikely to go perfectly, NDIA believes EPA should modify the proposed rule to explicitly allow a “shakedown period” for alternative technology units. No closure or “standby” status obligations should be applicable during this period. This will afford facilities the opportunity to gain operational experience with their alternative technology while still having the ability to use their existing OB/OD units in the event issues occur that prevent its use during the shakedown period.

Protection of Sensitive and Controlled/Classified Information:

NDIA is concerned with the extent of EPA oversight in the NPRM. The amount of EPA oversight is unprecedented in this NPRM, compared to similar rules, including those related to other treatment and disposal technologies. We disagree with the requirements at 40 CFR § 264.704(e) for final status and 40 CFR § 265.704(e) for interim status facilities that the owners or operators of the OB/OD must electronically submit all components of the waste analysis to the Director. While we appreciate the proposed concessions for classifying sensitive information within 40 CFR § 264/265.704(e), the OB/OD facility may not own this information, particularly if the OB/OD facility is a commercial operation. The waste analysis data likely to be retained by continuing OB/OD facilities is often sensitive and/or controlled/classified information which is often protected by a non-disclosure agreement (NDA) between the generator or other parties, including but not limited to DoD and NASA. Furthermore, the transfer of sensitive/classified data to the Director using unspecified electronic means may violate data security requirements for national security and/or International Traffic in Arms Regulations (ITAR). We recommend that all sensitive/classified data, including other information specified in the waste analysis plan, be explicitly excluded from the requirements at 40 CFR § 264/265.704(e), as well as any other part of the OB/OD operating record, including but not limited to the operating requirements at 40 CFR § 264/265.708 (where applicable) and recordkeeping and reporting obligations at 40 CFR § 264/265.712. Furthermore, we advise EPA to exempt sensitive/classified information from other potentially publicly discoverable requirements, where applicable.

NDIA recommends that all sensitive/classified information retained by the OB/OD facility be managed in accordance with DTM-22-001 recordkeeping requirements or equivalent. All requests to view waste analysis data or operating records containing sensitive or classified information shall be made in person by the appropriate Agency or state-implemented program (SIP) representative. In-person data reviews of sensitive or classified information between EPA or SIP representatives shall be arranged with the generator or the generator’s customers (DoD, NASA, or others) present or otherwise acknowledged by all parties.

Alternative Technology Evaluation Approval:

The process of Director approval of an alternative technology evaluation in 40 CFR § 264/265.707 is unclear. While 40 CFR § 264/265.707(b)(3) outlines completeness and 40 CFR § 264/265.707(b)(4) provide the rationale for Director’s approval, there is no process for the regulated industry, including the generator, to discuss and dispute (if necessary) any final determinations made by the Director.



2101 Wilson Boulevard, Suite 700, Arlington, VA 22201-3060 • (703) 522-1820 • (703) 522-1885 Fax • NDIA.org

NDIA recommends that EPA include a dispute resolution process to address any negative alternative technology evaluation determinations made by the Director(s). An alternative dispute resolution (ADR) process shall include all relevant parties to the decision, including the EPA Director, OB/OD owner/operator, generators, and/or generators' customers, including but not limited to the DoD and NASA. The ADR process shall follow procedures, or a combination of procedures, used to resolve issues in controversy as defined in FAR Clause 33.2 (48 CFR 33.2) or equivalent.

NDIA appreciates the opportunity to comment on this matter and stands ready to assist. If you have any questions related to these comments, please reach out to Chris Sax at csax@ndia.org or (703) 247-2571.

Sincerely,

The National Defense Industrial Association