



June 19, 2024

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Attn: Docket ID No. EPA–HQ–OLEM–2021–0397

The Coalition for Responsible Waste Incineration (CRWI) appreciates the opportunity to submit comments on the *Revisions to Standards for Open Burning/Open Detonation of Waste Explosives*; Proposed rule. 89 FR 19,952 (March 20, 2024). CRWI is a trade association comprised of 29 members representing companies that own and operate hazardous waste combustors and companies that provide equipment and services to the combustion industry.

Attached are our comments on specific sections of the proposed rule.

Thank you for the opportunity to submit comment. If you have any questions, please contact me at (703-431-7343 or [mel@crwi.org](mailto:mel@crwi.org)).

Sincerely yours,

Melvin E. Keener, Ph.D.  
Executive Director

cc: S. Lucas-Gerhard, EPA

## Specific comments

### Waste analysis plan requirements

CRWI has two concerns about the proposed waste analysis plan requirements.

The first concerns waste analysis requirements for making an alternative treatment technology evaluation. The waste analysis needed to make an alternative treatment technology evaluation is not the same as needed for waste analysis plans for destruction. The choices for an alternative treatment technology primarily revolves around how to control the energetic nature of the waste. There is no need to determine the metals content of the waste when selecting the front part of the alternative treatment technology. All alternative treatment technologies will have gas cleaning equipment. That is irrelevant to the viability of safe treatment. Gas cleaning methods are established via industry standards to meet required emission standards. Their presence in the system does not have any impact on whether items can be treated safely in the enclosed treatment chamber. Therefore, the presence or lack thereof of metals in the feed is irrelevant to the safe and viable determination. The preamble<sup>1</sup> appears to address this issue.

Should there be any safety concerns with acquiring the data, the permitting authority may allow some sections to be submitted as incomplete if they would not compromise the evaluation of alternative technologies or development of protective permit conditions described in sections G and H.

However, preamble language does not have the weight of regulatory language. CRWI encourages the Agency to make a clear distinction between the waste analysis required for an alternative treatment technology evaluation and what is needed during normal operations.

The second point is that the Agency needs to make it clear that certain requirements in 264.706 and 265.706 are not needed in all cases. For example, paragraph 264.706(b)(4) requires that “At a minimum, the properties must include insensitivity (to impact, friction, and electrostatic discharge), flash point, pH, and free liquid determination.” Not all energetic wastes need all of these properties evaluated. For example, it is not possible to determine the pH from solids or non-aqueous liquids. Nor is it possible to determine the free liquid content of a solid rocket propellant.

Paragraph (f) of this section allows the permitting authority to accept waste analysis without all the prescribed analysis. However, this paragraph is restricted to safety concerns and lack of generator knowledge. It does not address the fact that certain of these analyses are not needed for all materials. CRWI suggests the following modifications to paragraph (f) where the owner/operator can show that a particular

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<sup>1</sup> 89 FR 19,962

analysis is not needed for the materials in question. This would allow owner/operators to provide a reason to the permitting authority why certain analyses are not needed and this decision can be made at a local level.

CRWI suggested regulatory language.

(f) The Director may accept a waste analysis without all prescribed analysis as described in this section if there are safety concerns that cannot be mitigated/prevented in conducting the analysis, if there is no process or generator knowledge applicable, or if there is no reason to include certain analysis for a particular waste stream. ~~and the~~ The owners/operators must provide information describing the se safety concerns related to testing.

#### Flexibility in using Subpart X and Subpart O/EEE

EPA cites<sup>2</sup> an example where it might be more appropriate to permit a flashing furnace as a subpart X unit instead of an O/EEE unit even though the unit uses a controlled flame. While RCRA Parts 264 Subparts O and X regulations have some flexibility, it is not clear whether Part 63 Subpart EEE does. In 63.1201, the regulations refer to the definition of a hazardous waste incinerator in 260.10 which defines an incinerator as “any enclosed device that: (1) Uses controlled flame combustion and neither meets the criteria for classification as a boiler, sludge dryer, or carbon regeneration unit, nor is listed as an industrial furnace; or (2) Meets the definition of infrared incinerator or plasma arc incinerator.”

The alternate technologies document describes a flashing furnace as

“A flashing furnace uses a direct flame to heat contaminated scrap to 316° C (600° F) for typically 45-90 minutes, depending on load size and type. Off gases are treated with a cyclone dust collector and baghouse. Flashing furnaces thermally decontaminate materials to MDAS. Portable units that can be brought to the site are available. According to DoD’s demil enterprise, flashing furnaces have been successfully demonstrated in a sustainable, production-ready demil execution environment for a wide variety of munition items containing explosive residues only.”

From our reading of the regulatory requirements, a flashing furnace is included in the definition of an incinerator in 260.10. The permitting agency would not have any flexibility and this unit must be regulated as an O/EEE unit. Furthermore, we note that the definition of “contaminated scrap” could mean combustible or non-combustible materials. In the case where contaminated scrap is a combustible material, we see no way in which the unit can avoid being defined as an “incinerator.” We note that in the case of metals part furnaces, there is an exclusion/exemption in the definition.

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<sup>2</sup> 89 FR 19,978

Perhaps some of the confusion here is in the definition of terms. The term “flash” or “flashing furnace” appears to be used to describe both metal parts furnaces that are used to decontaminate metal parts and to describe units that are used to treat combustible solid/reactive waste. CRWI suggests this confusion could be alleviated by more clearly defining terms.

#### Siting requirements

On all monitoring plans (groundwater monitoring, surface monitoring, etc.), EPA states that facilities should:

“...take into account the potential for climate change impacts, such as changes to precipitation and to groundwater levels and flow, potential extreme weather events, and, as appropriate, the potential for sea-level rise...”

It is unclear how the Agency expects owner/operators to comply with this requirement. CRWI is concerned that the agency is providing no information or guidance on how to accomplish these tasks.

#### Alternative treatment technology reevaluation

Proposed paragraph 264.707(d)<sup>3</sup> requires that “To continue OB/OD, the owner/operator must conduct an alternative technology reevaluation every five years following the initial alternative technology evaluation.” CRWI does not believe that the technology will change quickly enough to justify a reevaluation every five years. We suggest that a more appropriate interval would be 10 years, beginning after implementation of any previously selected technology. This would match the timetable for the RCRA permits for the unit.

#### Implementation schedule

In the preamble discussion on an implementation schedule for an alternative technology<sup>4</sup>, EPA states that “In general, generators of hazardous waste can conduct non-thermal treatment on site in enclosed tanks or containers without a permit.” CRWI is not aware of any place where hazardous waste can be treated without a permit.

As proposed, the initial alternative technology evaluation must be submitted as a part of a new application, a renewal of an existing permit, or a Class 2 or 3 modification of an existing permit<sup>5</sup>. Once that evaluation has been submitted, the owner/operator is required to submit an implementation schedule within 180 days<sup>6</sup>. This timing raises several questions. Does the alternative technology evaluation need to be approved

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<sup>3</sup> 89 FR 20,016

<sup>4</sup> 89 FR 19,974

<sup>5</sup> 40 CFR 264.707(c)

<sup>6</sup> 40 CFR 264.707(e)

before the owner/operator can/should proceed with construction or is it self-implementing? How does the owner/operator deal with delays by the permitting authority in approving the technology selected? It is likely the permitting authority will have questions or need/want additional information before approving the evaluation. One cannot build the technology in the evaluation without a permit. The permitting agency review cycle is completely out of the applicant's hands. Until the owner/operator knows that the permitting authority has approved their design, it makes no sense to submit an implementation schedule within 180 days because they have no idea what they will be implementing. CRWI believes that it makes more sense to start the 180 day clock after the permitting authority has approved the evaluation. CRWI suggests the Agency add regulatory language that builds in time for approval of permits.

#### Requirement to check private property for kickout

The proposed rule would require facilities gain access to private properties to do inspections for kickouts. The Department of Defense (DoD) already requires a minimum safety corridor between the treatment unit and the property boundary to ensure that any kickout remains on property. While this distance varies depending on the net explosive weight of the material being treated, in general, a minimum of 1,250 feet is required for fragmentation protection. The Department of Defense Explosives Safety Board (DDESB) and DoD have developed design standards to ensure adequate separation between the treatment unit and the property boundary. If the unit is designed per the applicable DDESB and DoD standards, there should be no likelihood for kick-out from routine operations. CRWI feels this provision is unnecessary and should be removed.

#### Alternative technology evaluation

Safety should be the primary consideration when making an alternative technology evaluation. Just because an explosion happens rarely when treating a particular waste stream should not justify using an alternative technology. All it takes is one event where the explosive residue is higher than anticipated or is confined to cause an injury or fatality. There are certain types of highly variable wastes where the only alternative is OB/OD simply to prevent accidents. For example, consider the following two different scenarios.

Scenario 1: The facility routinely treats contaminated personal protective equipment (PPE) in a regulated open burn unit. That PPE has visible but low levels of contamination on it. The unit is rated to withstand the deflagration caused by simultaneous burning of that material. However, in one container of PPE, some of that material accumulates and becomes confined. That material may now tend towards detonation instead of deflagration. These are not materials made to a specification – they are contaminated wastes that may carry the reactivity characteristic.

Scenario 2: A facility treats wastes from the manufacturing of nitroglycerin. Measures are taken to mix any liquid nitroglycerin with sawdust and desensitizers upon generation of the waste stream. However, it is impossible to ensure that 100 percent of the time 100 percent of the nitroglycerin will absorb into the sawdust. In the event that a drop of liquid nitroglycerin remains and that material is subject to treatment under pressure (e.g. in an enclosed chamber), a significant possibility exists for a credible event. If this material is open burned, both the risk to equipment and personnel is removed.

CRWI believes that safety should be the primary consideration when making an alternative technology determination.

In addition, capacity at commercial units should be considered when making an alternative technology evaluation. Most of the material that could be sent to commercial units will be containerized. There remains a considerable backlog at commercial hazardous waste combustors for containerized materials. EPA has acknowledged this and developed a policy in 2021 to address this issue<sup>7</sup>. That policy remains in effect and will need to remain so until new capacity comes on line. Energetic wastes being fed into a commercial hazardous waste combustor is mostly done in small batches over a relatively long period of time. The Agency needs to remember that just because the commercial unit is permitted for that waste does not mean they can actually process it in a reasonable amount of time. CRWI believes that the final rule should allow the alternative technology evaluation to take existing capacity issue into consideration.

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<sup>7</sup> <https://www.epa.gov/hw/backlog-containerized-hazardous-waste-needing-incineration>