

CRITERIA FOR EVALUATION OF TECHNOLOGY ALTERNATIVES TO OB/OD OF CONVENTIONAL MUNITIONS

Presented by the CEASE FIRE Campaign to:

Committee on Alternatives for the Demilitarization of Conventional Munitions

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The CEASE FIRE Campaign seeks to protect human health and the environment by calling for the immediate implementation of safer alternatives to open air burning, detonation and non-closed loop incineration/combustion of military munitions. These alternatives must incentivize waste prevention and recycling; prevent, to the greatest possible extent, the release of toxic emissions and pollutants; and advance the principles of environmental justice by assuring that all people enjoy the same degree of protection and access to the decision-making process. We pursue these goals through peaceful non-violent action and democratic organizing consistent with the Jemez Principles.

More than 60 social justice, environmental health, tribal, veterans service and conservation groups have endorsed the above.

1. Overall protection of human health and the environment:

- a) Treatment method is fully protective of human and ecological health and prevents toxic emissions.
- b) Treatment method offers maximum protection to workers.
- c) Treatment method is sensitive to the elevated levels of pollution that already exist in the area (such as current NOx, and ground-level ozone levels).
- d) Treatment method does not cause or contribute to soil, air or water pollution.
- e) Any residue from treatment is fully and accurately characterized and safely disposed of.
- f) Treatment method offers maximum safety controls to prevent any and all releases.
- g) Treatment method prevents the potential for catastrophic release.
- h) Treatment method has aggressive process safety management protocols.
- i) Treatment method is fully protective of human health and the environment even when full characterization of wastes is not possible.
- j) Treatment method is fully protective of marine and aquatic receptors and ecosystems, including fisheries.

2. Monitorability:

- a) Treatment method can be monitored effectively, both at the site and in the surrounding community, and tested to assure protective levels of contamination before any possible release (sometimes referred to as hold, test, and release).
- b) All effluents from the treatment system should be monitorable including solids, gases and liquids.

3. Long-term effectiveness and permanence:

- a) Treatment method is a complete solution, minimizing the need for additional treatment, long-term storage or disposal in the future.
- b) Treatment method does not require long-term maintenance, storage and monitoring and effectively eliminates any long-term liability to this or future generations.
- c) Treatment method allows the property to be returned to unrestricted and productive use.
- d) Treatment method is superior when fiscal considerations are fully inclusive of ecological, environmental, health, remedial, investigative, site closure, residual contamination burden, and other life-cycle costs.

4. Reduction of toxicity, mobility, or volume through treatment:

- a) Treatment method/remedy does not create a more toxic by-product (such as dioxins and products of incomplete combustion) that does not already have an authorized treatment plan.
- b) Treatment method is effective at safely treating dunnage, packaging and other related materials that require treatment or specialized disposal.
- c) Treatment method will safely and effectively treat degradation products, impurities, cross-contaminants, and other inadvertent by-products and constituents, including depleted uranium.

5. Short-term effectiveness:

- a) Treatment method can be implemented safely and quickly to replace the use of open burning/open detonation.

6. Implementability:

- a) Treatment method is legal.
- b) Treatment method can be implemented within the federal and state environmental standards, regulations and advisories.

7. State/territorial acceptance:

- a) Treatment method is supported by state or U.S. territorial government and environmental regulators.

8. Community acceptance:

- a) Treatment method is supported by local community leaders.
- b) Treatment method is supported by the affected community.
- c) Treatment method safety controls are supported by local first responders.
- d) Treatment method health and safety precautions are supported by on-site workers.

9. Environmental Justice:

- a) Treatment method is supported by tribes and indigenous peoples who are both directly and indirectly impacted.
- b) Treatment method reflects and honors the cultural values of tribes and indigenous peoples who are both directly and indirectly impacted.
- c) Treatment method is not opposed by tribal government.
- d) Treatment method is not opposed by tribal elders.
- e) Treatment method offers maximum protection when evaluated in terms of indirect exposures. Examples include, but are not limited to, consumption of fish and wild game, and consumption and use of medicinal plants.
- f) Treatment method will achieve short-term and long-term compliance with tribal environmental regulations, standards and health advisory levels.
- g) Treatment method offers maximum protection when evaluated in terms of disproportionate impact to disadvantaged, vulnerable or susceptible populations.
- h) Treatment method offers maximum protection when evaluated in terms of cumulative, additive and synergistic direct and indirect risks to residents, workers, onsite personnel and others.
- i) Treatment method achieves compliance with Health Advisory Levels (or equivalent) when enforceable environmental standards are unavailable - for example, as with emerging contaminants.
- j) Treatment method does not put other global communities at risk.
- k) Treatment method will incentivize and encourage the development of advanced alternative technologies.

10. Transparency:

- a) The treatment method does not utilize “resource recovery”, “energy generation” or other incidental outcomes to avoid regulation under RCRA and other applicable laws and regulations.
- b) The treatment method does not encourage rolling (successive) short-term emergency permits.
- c) All monitoring data is immediately published in an accessible format to assure that community members, workers, and soldiers are informed and empowered in the decision-making process.
- d) Details of how the technology and its pollution abatement systems work are fully disclosed to assure that community members, workers, on-site personnel and soldiers are informed and empowered in the decision-making process.

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