

Environmental Security Technology Certification Program (ESTCP)

WEAPONS SYSTEMS AND PLATFORMS

Proposals in this area should address the current and future environmental and worker safety liabilities associated with the design, construction, maintenance, demilitarization, repair and operations of Department of Defense weapons systems and platforms. Areas of interest include:

MANUFACTURING AND MAINTENANCE

Alternative Materials. Demonstrate environmentally benign materials for application in weapons and platforms. Targeted applications for alternative materials include but are not limited to:

- Coatings
- Surface Treatments
- Refrigerants
- Flame Retardants
- Firefighting
- Degreasers

Alternative Processes. Demonstrate processes that eliminate or reduce the generation or use of hazardous or toxic materials.

Alternative Inspection Methodologies. Demonstrate new technologies for the inspection of weapons systems that would reduce the requirement for maintenance and overhaul.

Monitoring and Control of Emissions. Demonstrate technologies to detect and monitor hazardous materials used in industrial processes as well as the technologies to control the release of these materials into the environment.

Additional information on manufacturing and maintenance efforts may be found on our website describing our [ASETSDefense](#) (Advanced Surface Engineering Technologies for a Sustainable Defense) workshops and data base. We have also developed [strategy and implementation documents](#) for Cd and hexavalent chromium alternatives and these are also available on our website.

ENERGETICS

Alternative Materials. Demonstrate new propellants, pyrotechnics and explosive materials that reduce or eliminate the release of toxic materials into the environment.

Alternative Manufacturing Processes. Demonstrate environmentally benign synthesis and production processes for energetic materials and munitions.

Monitoring and Control of Emissions. Demonstrate technologies to detect, monitor, and control hazardous materials used in munitions manufacturing.

Demilitarization of Ordnance. Demonstrate technologies to disassemble a specific high volume ordnance item and recycle the energetic materials from the item.

WASTE REDUCTION

Ships. Demonstrate technologies that reduce or eliminate liquid wastes from ships or control their release into the environment.

Forward Operating Bases. Demonstrate technologies that reduce or eliminate solid waste streams and have the potential to generate a useful energy source.

LEAD-FREE ELECTRONICS

Demonstrate alternative alloys or conformal coatings that mitigate whisker growth or improve reliability of electronic components that are lead-free.

SPECIAL INTEREST TOPIC

In FY20, ESTCP has issued one topic area of general interest through a Broad Agency Announcement (BAA) to the private sector:

- Innovative Technology Transfer Approaches

DoD investigators are encouraged to submit proposals through the DoD submittal process that respond to this BAA topic area.

POINT OF CONTACT

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For pre-proposal submission due dates, instructions, and additional solicitation information, visit the [ESTCP website](#).