

Environmentally Acceptable Technologies For the Replacement of Cadmium Coatings for Defense Applications

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Cadmium coatings are used extensively in military and aerospace applications. Many of these coatings are applied to high-strength steel parts used in "critical" applications. Pollution prevention mandates require that cadmium coatings be replaced with environmentally acceptable alternatives. These alternatives need to meet functional performance requirements and be affordable, considering both deposition costs and total ownership costs. Application-specific functional performance requirements will be established and leading alternative technologies will be evaluated. Cost-based analysis of alternative technologies will also be conducted. The best overall alternative technologies will be transitioned. Because of the scope and breadth of applications in which cadmium coatings are currently used, it is likely that several alternative technologies will need to be transitioned in order to replace cadmium coatings.

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