

US EPA ARCHIVE DOCUMENT

United States Air Force  
And the  
United States Environmental Protection Agency Region 9

**Memorandum of Understanding  
Green and Sustainable Remediation Strategies**

Whereas, the U.S. Environmental Protection Agency, Region 9 ("EPA"), and the U.S. Air Force ("Air Force") commend the Green and Sustainable Remediation (GSR) practices already achieved at Air Force installations in the Southwest Region (Region).

Whereas, GSR employs strategies for cleanups that use natural resources and energy efficiently, reduce negative impacts on the environment, minimize or eliminate pollution at its source, protect and benefit the community at large, and reduce waste to the greatest extent practicable. GSR considers all environmental effects of remedy investigation, design, implementation and operation, and incorporates options to minimize the environmental/ecological footprint while meeting statutory mandates of CERCLA and the National Contingency Plan (NCP) criteria.

Whereas, EPA and the Air Force have also made great progress in developing life cycle approaches for the remediation of contaminated sites which may be used to reduce the environmental impact of CERCLA cleanups nationwide, and

Whereas, EPA and the Air Force seek to collaborate to develop a process that can serve as a national model to use GSR to achieve these federal mandates:

- EO 13423: Strengthening Federal Environmental, Energy, and Transportation Management
- EO 13514: Federal leadership in Environmental, Energy and Economic Performance

THEREFORE, the representatives of the Air Force and the EPA agree to collaborate and leverage their resources and technical expertise to support and expand GSR practices at the Air Force facilities within the Region and reduce the negative environmental/ecological impacts of our cleanup actions while continuing to comply with the NCP. Specifically, the signers agree to the following objectives:

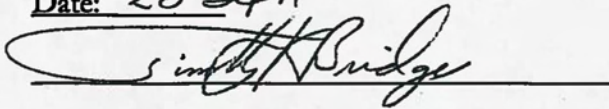
1. By October 15, 2011, meet and identify one or two Air Force CERCLA sites (i.e., an Operating Unit or installation or remedy) to participate in a pilot study where the EPA Region 9 footprint analysis tool and Air Force SRT will be conducted for comparison. The parties will define how this pilot study analysis will be conducted.
2. By March 15, 2012, report on the pilot study findings and jointly make recommendations for follow up action. These recommendations should include developing a strategy for how to apply the pilot study findings to other appropriate Air Force CERCLA sites in the Region. This strategy should address (a) the use of life cycle analyses approaches for remedial alternatives in future Feasibility Studies; (b) green remediation practices, such as water reuse, soil consolidation, alternative energy sources, and optimization of pump and treat remedies in RD/RA work; and/or (c) a process (i.e., optimization or five year reviews) to periodically evaluate existing remedial actions and/or technologies that could reduce the environmental/ecological footprint and improve the environmental benefits of our CERCLA cleanups.

Each facility will work with the installation project management team to identify and employ practices that best suit its operations and clean-up activities, using site-specific information and targeting base-specific operations, factoring in timely responses, and utilizing all CERCLA evaluation criteria to allow implementation of best available technology and other relevant considerations.

The signers agree to evaluate the effectiveness of the GSR practices implementation efforts. Information on GSR implementation will be provided at quarterly and annual EPA and Air Force meetings and shared on their respective web sites. The signatories will continue partnerships with States and other Federal agencies.

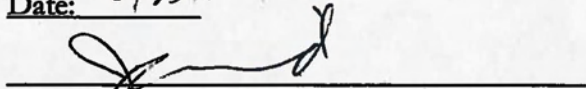
Beyond the scope of the pilot projects, all future undertakings under this MOU will be subject to the availability of appropriated funds.

Date: 28 Sep 11

  
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Mr. Timothy K. Bridges, SES  
Deputy Assistant Secretary of the Air Force  
(Environment, Safety & Occupational Health)

Date: 8/23/2011

  
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Ms. Jane Diamond, SES  
Superfund Division Director  
U.S. Environmental Protection Agency, Region 9