United States Environmental Protection Agency

Office of Solid Waste and Emergency Response (OSWER)

Standard Guide for Greener Cleanups

For more information on core elements of greener cleanups, see OSWER's

Principles for Greener Cleanups

http://www.epa.gov/oswer/ greenercleanups

EPA Contacts:

Carlos Pachon, EPA Superfund Program: pachon.carlos@epa.gov or 703-603-9904

Patricia Overmeyer, EPA Brownfields Program: overmeyer.patricia@epa.gov or 202-566-2774

Deborah Goldblum, EPA Region 3 goldblum.deborah@epa.gov or 215-814-3432

Web Links:

U.S. EPA Greener Cleanups http://www.epa.gov/oswer/ greenercleanups/standard.html

U.S. EPA CLU-IN/Green Remediation Focus

http://www.cluin.org/greenremediation/ subtab_b5.cfm

ASTM International http://www.astm.org/COMMIT/ COMMITTEE/E50.htm

Purpose

The investigation and cleanup of contaminated properties consumes energy, water, and natural resources, creating an environmental footprint. Greener cleanups strive to consider all

To provide a process and technical direction on how to reduce the environmental footprint of a cleanup

environmental effects during a cleanup and incorporate approaches to minimize the footprint. The goal of the U.S. Environmental Protection Agency (EPA) greener cleanup standard initiative is to develop, through a consensus process, a standard that improves the environmental outcome of a cleanup by employing approaches to minimize the footprint. Use of the standard will promote resource efficiencies and technology innovation resulting in measurable improvements to human health, the environment, and communities.

Approach

In 2008, EPA convened a federal and state cross-program workgroup to: (1) identify the potential benefits associated with a standard for greener cleanups; (2) provide recommendations on the process for developing a standard and options for recognition and incentives; (3) develop core elements for a greener cleanup standard; and (4) identify a standard developing organization to develop a private sector consensus-based standard. Through this process, EPA:

- Identified greener cleanup core elements that were incorporated within OSWER's cross-program *Principles for Greener Cleanup* policy issued in August 2009
- Agreed to collaborate with ASTM International to develop a standard for greener cleanups through a consensus-based process
- Provided ASTM International with materials to kick off the effort in October 2009
- Facilitated dialogue among EPA and state waste-cleanup program representatives volunteering to serve on the ASTM International task group drafting the standard

Core Elements of Greener Cleanup

- Minimize total energy use and maximize use of renewable energy
- Minimize air pollutants and greenhouse gas emissions
- Minimize water use and impacts to water resources
- Reduce, reuse, and recycle material and waste
- Protect land and ecosystems

Benefits

EPA anticipates that a private sector standard would increase the use of greener cleanup approaches by:

- Providing clear definitions, methods, expectations, and goals for use by all stakeholders involved in a cleanup, making it easier for regulators and the regulated community to implement greener cleanups
- Establishing a framework to support new tools for evaluating impacts from cleanups
- Building upon state and local government incentives for greener cleanups

The standard is intended to complement regulatory and voluntary cleanup programs and accommodate each phase of a cleanup

Status

The draft standard has undergone multiple ballots to become a usable tool that strikes a balance between regulatory, industry, and community interests. The draft ASTM standard

recognizes greener cleanups implemented through the use of best management practices that may be supported by environmental footprint analysis.

Publication of the ASTM standard is anticipated in late 2013

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