



Green Cleanup Standard Initiative

January 2009 Update

Purpose

To develop a voluntary standard and verification system that evaluates and recognizes efforts to maximize the net environmental benefit of cleaning up contaminated sites, an approach known as green remediation or green cleanup. The goal of the standard is to encourage and provide a documentation tool for property owners, responsible parties, developers, and communities using green cleanup practices during project planning and implementation.

Approach

In conformance with the Standards Development Organization Advancement Act of 2004 and the National Technology Transfer and Advancement Act of 1996, EPA will not develop or adopt a standard. Instead, the Agency proposes collaboration with a standards development organization (SDO) accredited by the American National Standards Institute. EPA anticipates that key aspects will guide development of a standard:

- It will be voluntary; EPA is not mandating a new cleanup evaluation.
- It will be developed through a consensus-based SDO process with widespread input and transparency.
- It will be uniform, allowing for implementation under various regulatory frameworks.
- It will be flexible, allowing state and federal cleanup programs to develop their own incentives and recognition options.
- It will allow for innovation and technical advances.

EPA established a federal and state cross-program workgroup to (1) identify the needs and potential benefits associated with a voluntary national standard for green cleanups, (2) provide recommendations on the process for developing a standard and options for recognizing a standard, (3) develop guiding principles for a green cleanup standard, and (4) ensure input and feedback from the cleanup community during standard development. The workgroup currently is evaluating the interest and experience of potential SDOs.

Potential Components of a Green Cleanup Standard

Energy Use and Efficiency

- Use and generation of renewable energy
- Energy efficiency of treatment systems

GHG Emissions Based on Life Cycles

- Minimum emission of greenhouse gas (GHG)
- Maximum sequestration of greenhouse gas

Other Hazardous Air Emissions

- Use of diesel retrofit equipment
- Plans for emission mitigation

Water Use and Efficiency

- Minimum water consumption
- Maximum water recycling

Materials and Soil Reuse

- Reuse of construction/demolition debris
- Reuse of clean soil
- Use of industrial byproducts as treatment media

Enhancements to Ecosystems

- Minimum noise and light disturbance
- Minimum tree removal
- Native vegetation enhancements

Long-Term Management

- Integration of cleanup with anticipated reuse
- Minimum need for long-term use restrictions

The Green Cleanup Standard Initiative is sponsored by the U.S. EPA's Office of Solid Waste and Emergency Response (OSWER) and EPA Region 3's Hazardous Site Cleanup Division and Land & Chemicals Division. The Green Cleanup Standards Workgroup includes representatives from all OSWER cleanup programs, EPA regions, and states.

Benefits

The standard and verification system would provide incentives and a framework to the cleanup community for maximizing environmental outcomes of cleanups. Incentives for site owners may involve cost savings, streamlined processing, or agency recognition. Incentives to EPA and state agencies include greater net benefits of cleanups with measurable results but without requirements for additional resources to review individual projects. Other potential incentives may be identified by the Association of State and Territorial Solid Waste Management Officials (ASTSWO), which is preparing a white paper on green cleanups.

Project Progress

- Researched the development process for similar standards
- Coordinated with EPA's Standards Executive and the National Institute of Standards and Technology (NIST) to ensure consistency with government policies and practices
- Conducted outreach to assess stakeholder interest, developed related tracking mechanisms for meeting or conference presentations and stakeholder feedback or participation, and posted a project proposal on EPA's CLU-IN website
- Developed a draft workplan and web-based information repository for the workgroup
- Coordinated with ASTSWMO and provided input for the upcoming (April 2009) ASTSWMO "green cleanup incentives" paper
- Conducted EPA senior management briefings: OSWER Office Directors, December 15, 2008; OSWER Deputy Assistant Administrator, January 8, 2009; Office of Site Remediation Enforcement, January 14, 2009
- Developed criteria to evaluate expertise and interest of perspective SDOs

Upcoming Activities and Schedule

- Finalize the project workplan (February 2009)
- Develop a formal outreach and communications plan (February 2009)
- Conduct SDO outreach to assess expertise and interests and to understand the needs of perspective organizations (January/February 2009)
- Sponsor a CLU-In webinar to solicit stakeholder input (March 4, 2009)
- Host a plenary session at the March 2009 National Brownfields Association "Big Deal" conference
- Draft guiding principles of a green cleanup standard, for inclusion in draft recommendations to be forwarded to an SDO (June 2009)
- Finalize OSWER recommendations to be submitted to the SDO (August 2009)
- Announce EPA's formal support to the SDO beginning the standards development process (Fall 2009)
- Initiate development of EPA's recognition program (Fall 2009)
- Conduct a pilot project to evaluate the proposed green cleanup verification system (Fall 2010)
- Launch a full-scale green cleanup verification program (Fall 2011)

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Web Links

EPA CLU-IN/Green Remediation: <http://clu.in.org/greenremediation>

National Institute of Standards and Technology: <http://ts.nist.gov/standards/conformity/cainfo.cfm>