

### III. Other Considerations for Entities Seeking to Clean Up, Reuse and Revitalize Contaminated Property

#### A. Long-Term Stewardship

The success of the Brownfields program in responding to and even bolstering market demand for properties with known or suspected contamination has led to increased demand for contaminated properties that are cleaned up under the other EPA programs. The demand for and use of such sites includes those properties where some contamination remains, but is controlled on site and therefore long-term stewardship activities are needed to ensure the continued protection of the remedy and human health and the environment.

Long-term stewardship generally refers to the activities and processes used to control and manage residual contamination, limit inappropriate exposures, control land and resource uses, and ensure the continued protectiveness of “engineering” controls and “institutional” controls at sites. Long-term stewardship also takes on greater importance with the increased demand for the reuse of properties, especially properties where cleanup does not result in unrestricted uses or unlimited exposures.

Physical or “engineering” controls are the engineered physical barriers or structures designed to monitor and prevent or limit exposure to the contamination. Certain engineered cleanups will involve ongoing Operation and Maintenance (O&M), monitoring, evaluation, periodic repairs, and sometimes replacement of remedy components.

### **Examples of Engineering Controls**

- Landfill soil caps
- Impermeable liners
- Other containment covers
- Underground slurry walls
- Fences
- Bioremediation
- Groundwater pump-and-treat and monitoring systems

Legal or “institutional” controls are non-engineered instruments, such as administrative and/or legal controls, intended to minimize the potential for human exposure to contamination by limiting land or resource use. Institutional controls may be used to supplement engineering controls and also must be implemented, monitored, and evaluated for effectiveness as long as the risks at a site are present. Informational devices, such as signs, state registries and deed notices, are commonly used informational, non-enforceable tools. In February 2005, to further explain the requirements of Institutional Controls, EPA published a guidance document titled, *Institutional Controls: A Citizen’s Guide to Understanding Institutional Controls at Superfund, Brownfields, Federal Facilities, Underground Storage Tanks, and Resource Conservation and Recovery Act Cleanups*. EPA has also developed two cross-program guidances addressing the entire lifecycle of institutional controls, from evaluation to implementation and enforcement. These and other institutional controls guidance is available on the EPA institutional controls Web page at <http://www.epa.gov/superfund/policy/ic/index.htm>.

### **Examples of Institutional Controls**

- Government Controls -- Permits, Zoning
- Informational Devices -- Notices, Advisories, Warnings
- Proprietary Controls -- Easements, Restrictive Covenants
- Enforcement Mechanisms -- Administrative Orders, Cleanup Agreements

EPA, the states, and local governments have increased their knowledge about the long-term requirements needed to reuse and revitalize contaminated sites. The cleanup remedies for contaminated sites and properties often require the management and oversight of on-site waste materials and contaminated environmental media for long periods of time. EPA and its regulatory partners implement (or ensure that responsible parties implement) long-term stewardship after construction of the remedy for site cleanup and for as long as wastes are controlled on site. Long-term stewardship can last many years, decades, or in some cases, even longer. Long-term stewardship involves ongoing coordination and communication among numerous stakeholders, each with different responsibilities, capabilities, and information needs.

Even though the various cleanup programs have different authorities, there are common elements to address the long-term stewardship efforts. For example, under Superfund, long-term stewardship activities are performed as part of the O&M of a remedy. Responsibility for O&M is contingent upon whether the cleanup was conducted by a potentially responsible party (PRP), including federal facilities, or whether EPA funded the cleanup. Under the RCRA

program, cleanups are conducted in connection with the closure of regulated units and in facility-wide corrective action under either a permit, imminent hazard, or other order or agreement.

EPA, under the Brownfields program, provides cleanup grants to state and local governments and non-profit organizations to carry out cleanup activities, including monitoring and enforcement of institutional controls.

Pursuant to the Underground Storage Tanks (UST) program, when a release has been detected or discovered at an UST, the UST owner/operator must perform corrective action to clean up any contamination caused by the release. Under cooperative agreements between EPA and the states, states are largely responsible for overseeing corrective actions in connection with underground storage tanks, including long-term stewardship. EPA is generally responsible for overseeing the corrective actions, including long-term stewardship activities on tribal lands.

More information on long-term stewardship is available on EPA's Land Revitalization Web site at [http://www.epa.gov/LANDREVITALIZATION/lstf\\_report/what\\_is\\_longterm\\_stewardship.htm](http://www.epa.gov/LANDREVITALIZATION/lstf_report/what_is_longterm_stewardship.htm).

## B. State Response Programs

### 1. Voluntary Cleanup Programs

State response programs play a significant role in assessing and cleaning up brownfield sites. As Congress recognized in the legislative history of the Brownfield Amendments,

*“[t]he vast majority of contaminated sites across the Nation will not be cleaned up by the Superfund program. Instead, most sites will be cleaned up under State authority.”*

Voluntary cleanup programs (VCPs) are typically the state authority used to address brownfield and other lower-risk sites. Links to state VCPs can be found on EPA's Web site at [http://www.epa.gov/brownfields/state\\_tribal.htm#links](http://www.epa.gov/brownfields/state_tribal.htm#links).

EPA has historically supported the use of VCPs and continues to provide grant funding to establish and enhance VCPs. EPA also continues to provide general enforcement assurances to individual states to encourage the assessment and cleanup of sites addressed under VCP oversight. This approach to VCPs was codified in the Brownfields Amendments as Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) § 128:

- CERCLA § 128(a) addresses grant funding and Memoranda of Agreements (MOAs) for state response programs (*i.e.*, VCPs);
- CERCLA § 128(b) addresses the “enforcement bar” which limits EPA enforcement actions, under CERCLA §§ 106(a) and 107(a), at sites addressed in compliance with such programs; and
- CERCLA § 128(b)(1)(C) addresses the establishment and maintenance of a public record by a state to document the cleanup and potential use restrictions of sites addressed by a VCP.

## **2 Memoranda of Agreement**

Since 1995, EPA has encouraged the use of VCPs at lower-risk sites by entering into non-binding Memoranda of Agreement (MOAs) with interested states based on a review of the state VCP's capabilities. MOAs can be a valuable mechanism to support and strengthen efforts to achieve protective cleanups under VCP oversight. The purpose of the MOAs is to foster more effective and efficient

working relationships between EPA and individual states regarding the use of their VCPs. Specifically, MOAs define EPA and state roles and responsibilities and provide EPA recognition of the state's capabilities. MOAs typically include a general statement of EPA enforcement intentions regarding certain sites cleaned up under the oversight of a VCP. A number of states are also using their VCPs to address facilities subject to corrective action under the Resource Conservation and Recovery Act (RCRA). As a result, EPA and several states have expanded upon the CERCLA VCP MOA concept to address some facilities subject RCRA corrective action. Those agreements are commonly known as RCRA Memoranda of Understanding (MOUs). EPA has also entered into a few MOAs that address multiple cleanup programs and are consistent with EPA's One Cleanup Program. More information on EPA's One Cleanup Program is available on EPA's Web site at <http://www.epa.gov/oswer/onecleanupprogram/>.

Copies of a specific MOA or MOU, and additional information about state and tribal response programs are available from EPA's Web site at <http://www.epa.gov/swerosps/bf/html-doc/statemoa.htm>.

### **3. Eligible Response Sites**

The Brownfields Amendments included the concept of an eligible response site (CERCLA § 101(41)), which is a site at which EPA may not take an enforcement action under §§ 106 or 107 in certain circumstances, and that may be eligible for deferral from listing on the National Priorities List (NPL) in certain circumstances. CERCLA §§ 128(b), 105(h). If an EPA Region determines that a site is not an "eligible response site," that site will not be subject to the deferral provisions in § 105(h) and the limitations on EPA's enforcement and cost recovery authorities under § 128(b). For more information on eligible response sites, please see EPA's March 2003 guidance, *Regional Determinations Regarding Which Sites Are Not "Eligible Response Sites."*

## C. Supplemental Environmental Projects (SEPs)

Supplemental Environmental Projects (SEPs) may play a key role in revitalizing contaminated sites. SEPs are environmentally beneficial projects undertaken by a party, in a settlement of an environmental enforcement action, but which the violator is not otherwise legally required to perform. SEPs are critical to site revitalization because they are one of only a few tools EPA can use to enhance the environment of those communities that were directly put at risk by the violator. The successful use of SEPs is even more important because many sites are in environmental justice communities.

As stated in the November 2006 *Brownfield Sites and Supplemental Environmental Projects (SEPs)* fact sheet, EPA does not approve SEPs that require assessment and/or cleanup of brownfield sites because appropriations law prohibits SEP activities that are funded by Congress. Congress provides funds for assessment and cleanup activities to EPA's brownfields program. However, EPA does approve SEP activities that complement brownfield site activities, such as: green building projects; projects that call for the violator to provide energy-efficient building materials to a redeveloper; urban forest projects; and stream restoration projects. To learn more about the general requirements of a SEP, please refer to *U.S. EPA Supplemental Environmental Projects Policy* ("*U.S. EPA SEP Policy*") (May 1, 1998).

## D. OECA Guiding Principles

OECA is guided in the development of policy documents not only by enforcement principles such as "polluter pays" and "enforcement first," but also by broader principles that have been established to carry out the Agency's mission. Key among these guiding principles are:

- the recognition and addressing of environmental justice issues;
- the requirement of public participation in the Agency's work; and
- financial assurance to ensure the costs of cleanup are addressed.

## 1. Environmental Justice

EPA recognizes that minority and/or low-income communities frequently may be exposed disproportionately to environmental harms and risks. As a result, the Agency works to protect these and other communities burdened by adverse human health and environmental effects of its programs and has incorporated environmental justice as a priority throughout the Agency. Accordingly, EPA maintains its ongoing commitment to the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies, including the brownfields program. More information about EPA's environmental justice program as it relates to Superfund can be found at <http://www.epa.gov/oswer/ej/index.html>.

EPA's Office of Enforcement and Compliance Assurance (OECA) is committed to improving environmental performance through compliance with environmental requirements, preventing pollution, promoting environmental stewardship, and by incorporating environmental justice across the spectrum of our programs, policies, and activities. When working with local environmental justice communities, private parties should address the following environmental justice issues:

- Meaningfully involve the community in the planning, cleanup and revitalization process;
- Review the cumulative effects of multiple sources of contamination in close proximity;



- Ensure an equitable distribution of brownfields assistance to environmental justice communities;
- Adhere to community commitments made in brownfields grant proposals;
- Assist environmental justice communities in obtaining independent technical advisors to help communities navigate the brownfields cleanup and redevelopment process;
- Provide equal opportunity for local minority owned businesses specializing in environmental assessment and cleanup work to compete for contracts needed to plan, cleanup and revitalize brownfields; and
- Take steps to limit the displacement, equity loss and cultural loss of the local community.

## 2 Public Participation

Citizens are an essential component of the Superfund cleanup and RCRA permitting processes and for the revitalization of these sites and brownfield sites. The formal public participation activities, required by law or regulation, are designed to provide citizens with both access to information and opportunities to participate in the cleanup process. EPA uses the term “public participation” to denote the activities that:

- Encourage public input and feedback;
- Encourage a dialogue with the public;
- Provide access to decision-makers;
- Assimilate public viewpoints and preferences; and
- Demonstrate that those viewpoints and preferences have been considered by the decision-makers.

“The public” in this case refers to not only private citizens, but also representatives of consumer, environmental, and minority associations; trade, industrial, agricultural, and labor organizations; public health, scientific, and professional societies; civic associations; public officials; and governmental and educational associations. Considered in this broad sense, public participation can mean any stakeholder activity carried out to increase the public’s ability to understand and influence the Superfund cleanup and RCRA permitting processes and the revitalization of contaminated sites.

In the revitalization context, working with a variety of community members, local planners, and elected officials is an effective way to identify and integrate long-term community needs into the reuse plans for the site. Redevelopment planning enables citizens to realize their vision for the future reuse of the site. This process should encourage participation of all community members in goal development, action planning, and implementation. By considering a community’s vision of future land uses for contaminated sites, EPA often can tailor cleanup options to accommodate community goals.

While successful redevelopment planning can occur at any stage of a cleanup, redevelopment planning should begin as early as possible in the remedial process. The planning process can last several days or months depending on the issues facing the community. It is vital to help communities think of long-term strategies for sustainable future land use and EPA should begin the public participation process in the earliest stages of redevelopment.

### **3. Financial Assurance**

Financial assurance requirements are implemented under Superfund and RCRA to ensure that adequate funds are available to address closure and cleanup of facilities or sites that handle hazardous materials.

Financial assurance requirements can play an important role in promoting the revitalization of contaminated sites. Where the financial resources are available for cleanup and closure activities, entities interested in reusing or redeveloping the property are not confronted with the question of where to obtain the resources for cleaning up the property. When there are inadequate financial assurance funds, EPA or the states may have to spend taxpayer money to fund cleanups. This not only shifts the responsibility away from the liable party, it may also result in a significant delay in closure or cleanup activities. While the property awaits the performance of closure or cleanup activities, it is often difficult to attract outside parties to the property for further reuse and redevelopment.

Given the importance of financial assurance requirements and concerns that entities were not providing adequate financial assurance in accordance with their obligations, financial responsibility was selected as a national enforcement and compliance priority for the fiscal year (FY) 2007-2008 period. The goal of the financial responsibility priority is to ensure that EPA optimizes its financial safeguards under the existing financial assurance requirements through compliance assistance, compliance monitoring, and enforcement. OECA has developed tools, guidance, and training to assist the Regions and states in these areas, which are available on EPA's Web site at <http://cfpub.epa.gov/compliance/data/planning/priorities/financialresp/resources/>.

## E. Initiatives and Programs

OSRE has worked closely with other EPA offices including the Office of Brownfields and Land Revitalization (OBLR), the Office of Site Remediation and Technology Innovation (OSRTI), and the Office of Solid Waste (OSW), all within the Office of Solid Waste and Emergency Response (OSWER), to develop and launch new initia-

tives or programs to address certain revitalization challenges. Four of those initiatives -- the Environmentally Responsible Redevelopment and Reuse (ER3) Initiative, brownfields grants and state/tribal funding, the Superfund Redevelopment Initiative (SRI), and the RCRA Brownfields Prevention Initiative -- are described below.

## 1. ER3 - The Environmentally Responsible Redevelopment and Reuse Initiative

OSRE formally launched its Environmentally Responsible Redevelopment and Reuse (ER3) Initiative in the fall of 2004 at the National Brownfields Conference in St. Louis, MO. The genesis for ER3 was the recognition by former Administrator Christine Todd Whitman that the “built” environment has a tremendous impact on the natural environment and that every office within EPA should work to reduce that impact. OSRE realized that it could reduce the impact of redevelopment by encouraging *sustainable redevelopment* of contaminated sites by offering enforcement and liability relief incentives to developers and other parties. Historically, under the liability schemes found in both Superfund and RCRA, developers faced enforcement and liability concerns if they purchased or operated contaminated land for redevelopment. To some extent, these concerns were addressed, at least for Superfund sites, by the 2002 Brownfields Amendments. ER3 was designed to provide extra relief as an enforcement incentive not only to develop, but to develop in a sustainable manner. For more information on ER3, please visit the ER3 Web site at <http://www.epa.gov/compliance/cleanup/revitalization/er3/index.html>.

ER3 is composed of three interconnected principles. First, OSRE will provide an extra layer of liability relief incentives through a variety of tools available to it (*e.g.* prospective purchaser agreements (PPAs), comfort letters, etc.). That is, OSRE will provide comfort regarding the statutory requirements of CERCLA or RCRA. In return for this “extra” comfort, developers will be required to develop

sustainably. However, OSRE recognizes that many builders do not know *how* to build with sustainable principles. So as the second component, the ER3 team created a national network of outside partners who have this expertise. Finally, the third component is joint outreach and education on sustainable development principles by the OSRE ER3 team, other EPA offices, and the ER3 partners. Information on the ER3 partners is available on EPA's Web site at <http://www.epa.gov/compliance/cleanup/revitalization/er3/partner/index.html#partners>.

In March 2006, OECA Assistant Administrator Granta Nakayama issued a memorandum to EPA Regions calling for ER3 pilot projects. To date, there have been two pilots and the ER3 team is in the process of developing others. For information on ER3 pilot projects, see EPA's Web site at <http://www.epa.gov/compliance/cleanup/revitalization/er3/pilot.html>.

## **2 Brownfields Grants and State/Tribal Funding**

The 2002 Brownfield Amendments established a competitive grant program for the assessment and cleanup of brownfield sites, along with environmental job training under CERCLA § 104(k). Regarding site cleanup, the brownfield grant program provides direct funding for brownfields assessment, cleanup, and revolving loans (that is, establishment of a revolving loan fund for eligible entities to make

**Office of Brownfields and Land  
Revitalization Grants and Funding  
Web Access**

For information on the EPA brownfields grant program, please refer to:

<http://www.epa.gov/brownfields>

loans to be used for cleanup), which helps communities revitalize blighted sites by allowing them to take what is often the first step in the process - addressing potential contamination. To be eligible for a brownfield grant, an entity must be an eligible entity and must plan to use the grant funding at an eligible “brownfield site.” *See* CERCLA §§ 104(k)(1), 104(k)(3), and 101(39). The 2002 Brownfields Amendments define a brownfield site broadly, but exclude certain sites from funding eligibility. Still other sites are excluded unless EPA makes a property-specific determination for funding.

CERCLA § 104(k)(4)(B) provides certain other restrictions on the use of brownfield grant funding, such as the prohibition on the use of funds to pay response costs at a site at which a recipient of the federal grant funds would be considered liable as a PRP.

Because state and tribal response programs play a significant role in cleaning up brownfields, the Brownfields Amendments also authorized EPA to provide assistance to states and tribes to establish or enhance their response programs. *See* CERCLA § 128(a).

### **3. The Superfund Redevelopment Initiative**

EPA’s Superfund Redevelopment Initiative helps communities return some of the nation’s worst hazardous waste sites to safe and productive use. While cleaning up these Superfund sites and making them protective of human health and the environment, the Agency is working with communities and other partners in considering future use opportunities and integrating appropriate reuse options into the cleanup process.

EPA’s goal is to make sure that at every cleanup site, the Agency and its partners have an effective process and the necessary tools and information needed to fully explore future uses, before the cleanup remedy is implemented. This gives the Agency the best chance of

making its remedies consistent with the likely future use of a site. In turn, EPA gives communities the best opportunity to productively use sites following cleanup.

As part of the Superfund Redevelopment Initiative, EPA has developed a series of tools to aid in the redevelopment of Superfund sites. One principal tool is the Ready for Reuse (RfR) Determination document, which the Agency creates to provide potential users of Superfund sites with an environmental status report. This documents a technical determination by EPA, in consultation with states, tribes, and local governments, that all or a portion of a real estate property at a site can support specified types of uses and remain protective of human health and the environment. For more information on RfR Determinations, please refer to <http://www.epa.gov/superfund/programs/recycle/policy/reuse.html>.

Before EPA created the RfR determination, potential users often had to seek out information about a site's environmental condition from many different sources, and the information that was available was often expressed in terms difficult for the marketplace to interpret. This meant that many sites able to accommodate certain types of uses were needlessly difficult to market. With the creation of the RfR determination, potential users and the real estate marketplace will have an affirmative statement written in plain English and accompanied by supporting decision documentation, that a site identified as ready for reuse will remain protective as long as all required response conditions and use limitations identified in the site's response decision documents and land title documents continue to be met.

#### **4. The RCRA Brownfields Prevention Initiative**

A potential RCRA brownfield is a RCRA facility that is not in full use, where there is redevelopment potential, and where reuse or redevelopment of that site is slowed due to real or perceived concerns

about actual or potential contamination, liability, and RCRA requirements. The RCRA Brownfields Prevention Initiative was established by EPA to encourage the reuse of potential RCRA brownfields so that the land better serves the needs of the community, either through more productive commercial or residential development or as greenspace. More information on the RCRA Brownfields Prevention Initiative is available on EPA's Web site at <http://www.epa.gov/swerosps/rcrabf/>.

The Initiative links EPA's brownfields program with EPA's RCRA Corrective Action Program and other Agency cleanup programs, as well as with state cleanup programs to help communities address contaminated and often blighted properties that may stand in the way of economic vitality. The initiative includes:

- Showcasing cleanup and revitalization approaches through RCRA Brownfields Prevention Pilot projects;
- Addressing barriers to cleanup and revitalization with Targeted Site Efforts (TSEs);
- Supporting outreach efforts to EPA Regional offices, states, and the RCRA community through conferences, training, Internet seminars, and the RCRA Brownfields Web page; and
- Identifying policies that inadvertently may be hindering cleanup, and addressing them with guidance and technical assistance, or through other means.