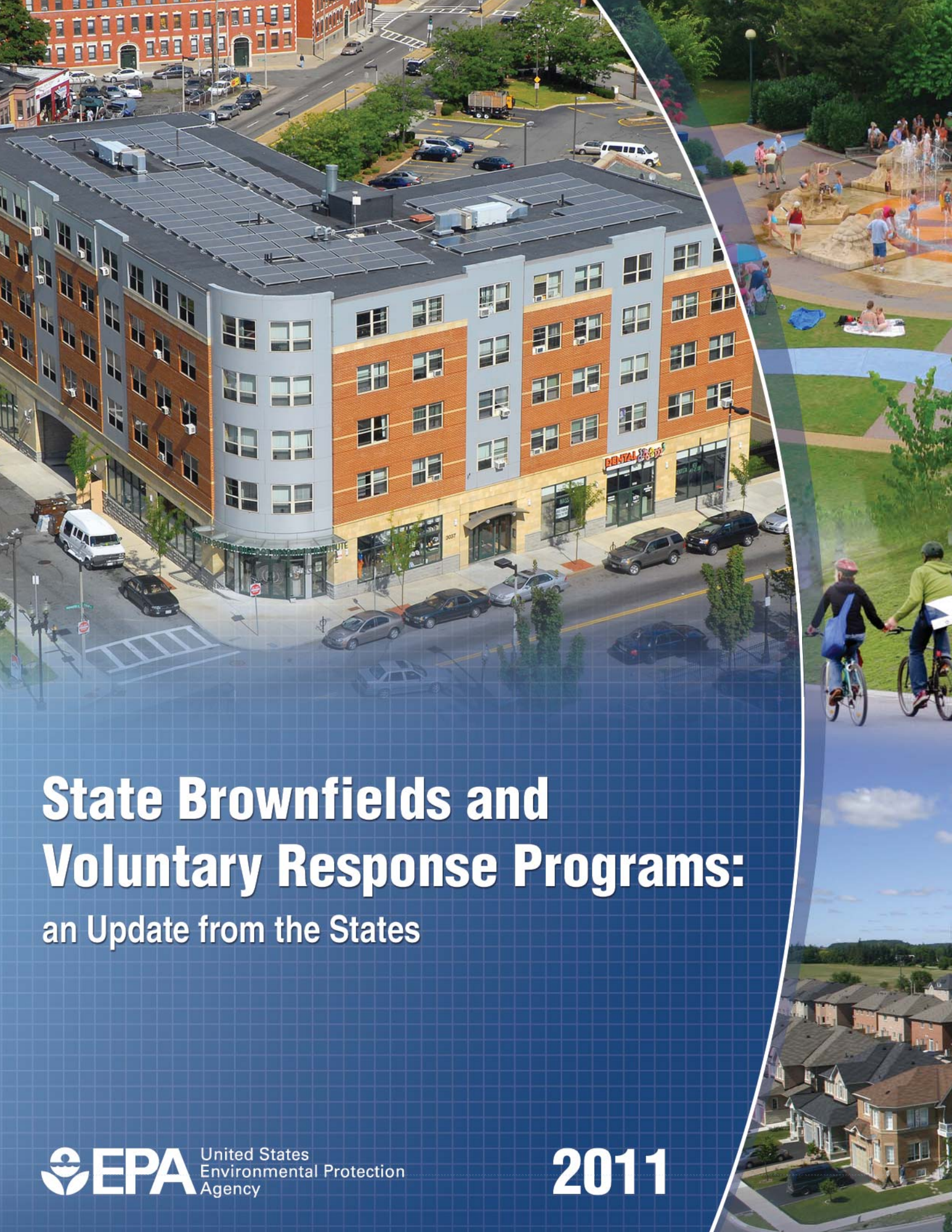


State Brownfields and Voluntary Response Programs:

an Update from the States

EPA United States Environmental Protection Agency

2011

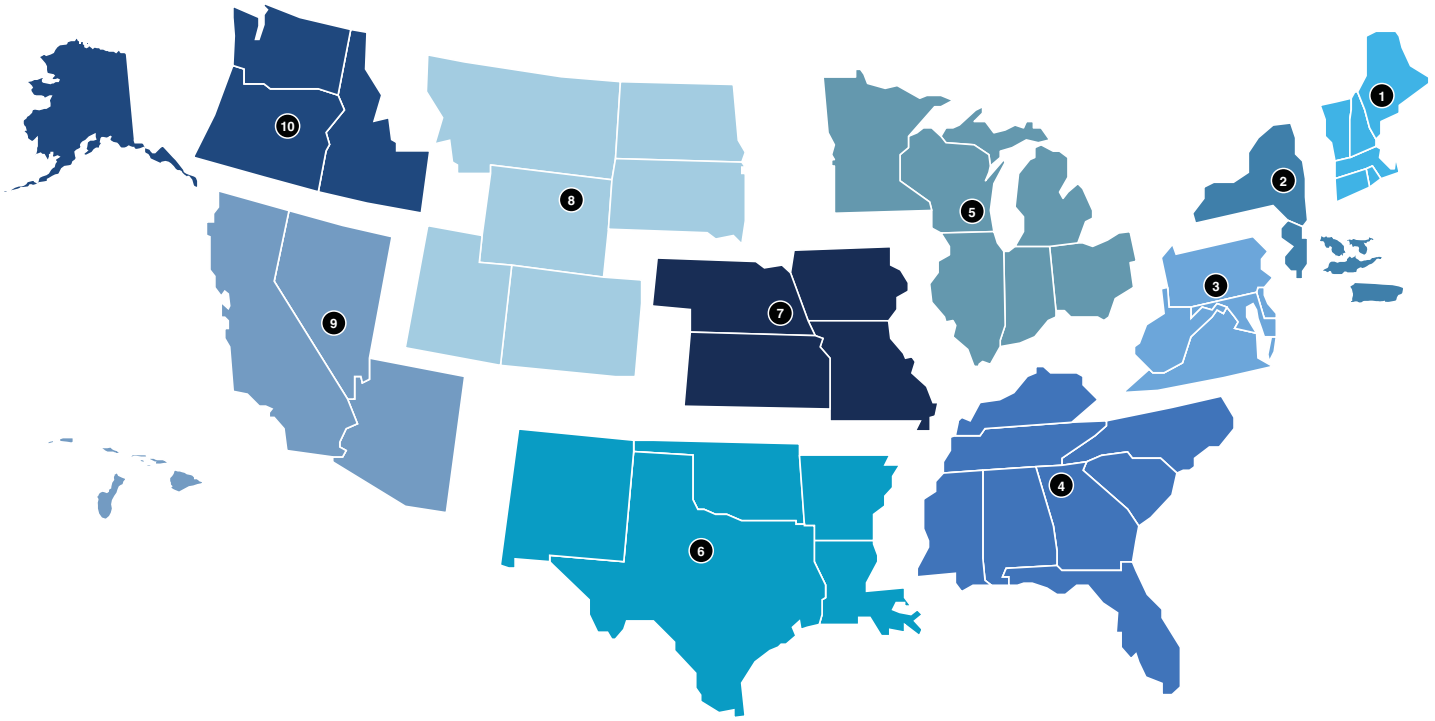
Foreword

"Cleaning up contamination is vitally important to the physical health of America's communities, but putting clean land back into productive use brings with it a range of social and economic benefits that will strengthen those communities for years to come. State response programs with support from CERCLA 128(a) funding are able to oversee assessment and cleanup activities at the majority of brownfields properties across the country. These accomplishments are as varied, as they are widespread. This report captures these successes and showcases them in a user friendly format."

– Mathy Stanislaus, *Assistant Administrator for EPA's Office of Solid Waste and Emergency Response (OSWER)*

U.S. Environmental Protection Agency
Office of Solid Waste and Emergency Response
Office of Brownfields and Land Revitalization
Washington, DC 20460

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State Brownfields and Voluntary Response Programs: *An Update from the States*

The "State Brownfields and Voluntary Response Programs: An Update from the States" explores the evolving landscape of state environmental, financial, and technical programs designed to promote brownfields cleanup and reuse. This update provides a concise, user-friendly synopsis of the programs and tools that are available through state programs. The information contained in this report was gathered from state response program contacts and state response program websites.

State programs continue to be at the forefront of brownfields cleanup and redevelopment, as both the public and private markets recognize the responsibilities and opportunities of state response programs in ensuring protective and sustainable cleanups. The increasing number of properties entering into state programs emphasizes the states' growing role in brownfields cleanup. State programs are continuing to adapt to meet the changing needs of property owners and communities. Many different—but equally effective—approaches are available to meet the multiple challenges and common objectives of brownfields reuse. Several states recently passed legislative changes to establish new programs, while other states adopted new regulations to enhance their programs and encourage cleanups.

Elements in the Analysis

This update looks at several components of state brownfields/response programs.

The **Program** overview lays out the basics of each state's voluntary response program and any other brownfields-related cleanup programs. It provides program titles and contact information for each state program, and discusses administrative elements, such as program costs, fees for service, and sources of funding for program staff and operations. A major part of the update is the review of **Cleanup Activities**. To the extent that states provided the **necessary** data, the update contains information on the number of properties that entered and/or subsequently completed a state's voluntary cleanup program.

Financial Elements provides an explanation of assessment and cleanup funding, tax incentives, and other forms of brownfields redevelopment support available under state programs, such as environmental insurance. Typically, the applicability of specific programs comes down to a state agency's interpretation of which brownfields properties and activities are eligible for any particular assistance program. This update includes information on programs directly available through state voluntary response programs, as well as other incentive programs identified as being applicable to brownfields reuse efforts. The update includes information on funding sources, funding amounts, and a program's focus on special types of properties, such as dry cleaners or petroleum properties. In addition, this section discusses liability relief provisions.

Program Elements provides information on the technical elements of individual state programs. It includes information on applicable cleanup methods and standards, contaminants covered or excluded under state programs, requirements governing institutional controls, and state approaches to long-term stewardship.

Program Highlights provides a success story or overview of a project or activity recently conducted using the Environmental Protection Agency's (EPA) Section 128(a) Response Program funding. The program highlights showcases the variety of ways states are using Section 128(a) Response Program funding to continue to develop their programs or conduct site-specific assessment or cleanup activities to protect human health and the environment.

EPA Region 1

Connecticut

Voluntary Remediation Program (VRP)
Connecticut Department of Environmental Protection (DEP)
79 Elm Street
Hartford, CT 06106-5127
www.ct.gov/dep/remediation

Contact(s): Robert Bell, *Assistant Director, Remediation Division*
Robert.E.Bell@ct.gov
860-424-3873

Program Overview

- Brownfields and Urban Sites Program
- Cost to Enter the Program: Varies
- Liability Relief Provisions
- Tax Incentives
- Licensed Environmental Professional Program

Program

The Brownfields and Voluntary Cleanup Program (VCP) in Connecticut are conducted under several state remediation programs, and are managed by the Remediation Division. A brochure titled "Site Cleanup in Connecticut" (which was produced by CT DEP using a portion of its Brownfields Section 128(a) Response Program funding) provides an overview of the programs for site cleanup which are managed through the Remediation Division. All remediation programs in Connecticut utilize the same remedial goals—the Remediation Standard Regulations, at:
www.ct.gov/dep/cwp/view.asp?a=2715&q=325028&depNav_GID=1626.

- **Funding Source(s) for the Program:** State funds (approximately 65%) and federal grants (approximately 35%)
- **Cost to enter program or fees for service:** Varies; $3,250 for Voluntary Remediation Program.
- **Sites Enrolled in VCP:** As of November 2010, more than 460 sites in Voluntary Response Programs.
- **Sites Completed under VCP:** As of November 2010, more than 34 sites completed under Voluntary Response Programs. Many other sites are remediated pursuant to mandatory State Laws.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

A variety of grants, loans, and technical assistance are available to assist with brownfields reuse projects.
Office of Brownfield Remediation and Development: http://www.ctbrownfields.gov/ctbrownfields/site/default.asp
www.ct.gov/dep/cwp/view.asp?a=2715&q=324942&depNav_GID=1626

INCENTIVES

- Urban and Industrial Site Investment Tax Credit Program – Tax credit for corporate taxes on redevelopment projects in industrial areas.
  www.ct.gov/ecd/cwp/view.asp?A=1101&Q=249842
- Enterprise Zone Program – Incentives provide tax abatement for real estate improvements and deferral of higher taxes resulting from increased property values after project completion.
  www.ct.gov/ecd/cwp/view.asp?a=1099&q=249766
- Housing and Historic Tax Credit Program – Provides financial incentives in the form of housing and historic tax credits.
  www.cttrust.org/index.cgi/114

LIABILITY RELIEF PROVISIONS

Two types of covenants not to sue are available for sites in Connecticut. A covenant not to sue is an agreement by the Commissioner that the Commissioner shall release claims related to pollution or contamination on or emanating from the property that resulted from a discharge, spillage, uncontrolled loss, seepage, or filtration on such property prior to the effective date of the covenant. One is instituted pursuant to section 22a-133aa of the Connecticut General Statutes (CGS) and one pursuant to section 22a-133bb.
In order to realize this benefit, the property must be remediated in accordance with the Department's Remediation Standard Regulations (RSRs) in effect on the effective date of the covenant, and any environmental land use restriction necessary to comply with the RSRs must be recorded on the land records and must remain in effect. www.ct.gov/dep/cwp/view.asp?a=2715&q=324936&depNav_GID=1626
Abandoned Brownfield Cleanup Program – allows new developers of certain brownfields to not incur liability to address pre-existing, off-site contamination as long as cleanup of on-site contamination continues, and migration of contamination from the site ceases.
http://www.cga.ct.gov/2011/pub/chap578.htm#Sec32-9ll.htm

Municipalities also have a variety of liability relief protections under various laws.
http://www.cga.ct.gov/2011/pub/chap578.htm - Sec32-9ll.htm

Licensed Environmental Professional Program – DEP allows a Licensed Environmental Professional (LEP) to be responsible for the direct oversight of site investigation and remediation projects at many sites, in lieu of DEP reviews and approvals.
www.ct.gov/dep/cwp/view.asp?a=2715&q=324978&depNav_GID=1626

Program Elements

METHODS/STANDARDS/CONTROLS

Remediation standard regulations (Regulations of Connecticut State Agencies [RCSA]) 22a -133k -1 through k3) were adopted in January 1996. These regulations provide published numeric criteria for cleanup of soil, soil vapor, and ground water; permit use of background concentrations; allow site-specific conditions; and provide for the use of engineered controls and institutional controls that change cleanup requirements but ensure the long-term stewardship of the site. The Risk-Based Corrective Action (RBCA) process was used as a guide in developing the criteria.
www.ct.gov/dep/cwp/view.asp?a=2715&q=325012&depNav_GID=1626

CONTAMINANTS COVERED

These regulations require remediation of all substances that are part of a release (including petroleum, asbestos, lead from paint, and polychlorinated biphenyls (PCBs)). If numeric criteria are not provided in the regulations, criteria must be proposed and submitted to DEP and the Department of Public Health (DPH) for review and approval.

INSTITUTIONAL CONTROLS (IC)

IC Tracking, Oversight, and Monitoring: Environmental land use restrictions (as prescribed in the remediation standard regulations) can be implemented with the land owner's consent, require the Commissioner's approval, are recorded on the land records, and are enforceable on future property owners.

The following Web address is a direct link to the state's public database that maintains an inventory of sites, maps sites, and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state:
www.ct.gov/dep/cwp/view.asp?a=2715&q=325018&depNav_GID=1626

Program Highlights

Licensed Environmental Professionals (LEPs) are authorized to "verify" that an investigation has been performed at a specific property in accordance with prevailing standards and guidelines, and that pollution on such property has been remediated in accordance with Connecticut's Remediation Standard Regulations. The Connecticut Department of Environmental Protection (CTDEP) reserves the right to audit such verifications. To assist the LEPs in writing verification reports that identify how a site achieves compliance with the RSRs, the Verification Report Guidance Document was developed by DEP with support from the Environmental Professionals Organization of Connecticut (EPOC). The Verification Report Guidance Document and DEP's audit process were presented in a four-hour short course for both DEP and EPOC. DEP used a portion of its Section 128(a) Response Program funding to generate the guidance document and provide this training.

Other Land Programs

State Superfund Program
www.ct.gov/dep/cwp/view.asp?a=2715&q=325022&depNav_GID=1626

Underground Storage Tank Petroleum Clean-Up Program
www.ct.gov/dep/cwp/view.asp?a=2717&q=325322&depNav_GID=1652

Significant Environmental Hazard Program
www.ct.gov/dep/cwp/view.asp?a=2715&q=324976&depNav_GID=1626

Maine

Voluntary Response Action Program (VRAP)
Maine Department of Environmental Protection (DEP)
17 State House Station
Augusta, ME 04333-0017
www.maine.gov/dep/rwm

Contact(s): Nick Hodgkins (VRAP)
nick.hodgkins@maine.gov
207-287-4854

Jean Firth (Brownfields)
jean.m.firth@maine.gov
207-287-7716

VRAP Program Overview

- Cost to Enter the Program: $500
- Technical assistance
- Liability Relief Provisions

Brownfields Program Overview

- No Cost to Enter the Program
- Grant of Services for Assessments
- Remediation Assistance to Municipalities and Nonprofits

Program

In 1993, the Maine Legislature established the Voluntary Response Action Program (VRAP). The VRAP allows applicants to voluntarily investigate and clean up properties to the Maine Department of Environmental Protection's (MEDEP) satisfaction, in exchange for protections from enforcement actions. The VRAP is intended to encourage the cleanup and redevelopment of contaminated properties within the state.
www.maine.gov/dep/rwm/vrap/index.htm

- **Funding Source(s) for the Program:** Federal grants
- **Cost to enter program or fees for service:** $500 application fee and reimbursement of all staff costs.
- **Sites Enrolled in VCP:** As of October 2010, 71 sites are underway.
- **Sites Completed under VCP:** As of June 2010, 524 sites completed investigation and remedial action.

Financial Elements

Funding for the VRAP is provided by the applicants. Applicants conduct and submit investigation reports, remedial work plans and remediation completion reports to the VRAP for review and approval. Cost for VRAP project managers time is billed to the applicant.

BROWNFIELDS ASSESSMENT AND CLEANUP FUNDING

This program is funded through federal grants. Targeted Brownfields Site Assessment grants (contractor services) are available to municipalities, nonprofits or developers. Remedial grants are available for properties owned by municipalities and nonprofits.

LIABILITY RELIEF PROVISIONS

The VRAP Offers Certificate of Completion (COC) for all pollutants identified in site assessment and cleanup to the program's satisfaction. Legal authorities include: strict, joint and several, and retroactive liability; orders for information; site access and remediation orders; administrative order authority; cost recovery; liens and super liens; and punitive damages of treble the state's costs. Sites that have been assessed and or remediated through the Brownfields Program have all of the information needed to enter the VRAP.

BROWNFIELDS REDEVELOPMENT AUTHORITIES (OR SIMILAR)

The state's voluntary program is an alternative to the state's regular cleanup program. Some monies are dedicated to fund the state's participation; participants pay a $500 application fee and are charged for time spent by the state. Site owners are able to get full or partial liability releases depending on the cleanup work carried out at the site. Incentives for participation include getting sites back into economic use and getting a certificate from the state indicating that cleanup was completed to the state's satisfaction. MEDEP and the Maine Department of Economic and Community Development have partnered on a Revolving Loan Fund to assist developers with remedial costs at their properties.

Program Elements

METHODS/STANDARDS/CONTROLS

New cleanup guidelines are currently available and consider four separate exposure scenarios for soil contact: residential, outdoor commercial worker, construction/excavation worker, and recreational/park user. Alternatively, a site-specific goal may be established using the state's risk-assessment guidance document.
www.maine.gov/dep/rwm/sops/index.htm

CONTAMINANTS COVERED

All hazardous substances/wastes and petroleum.

INSTITUTIONAL CONTROLS (IC)

IC Tracking, Oversight, and Monitoring: ICs are part of most certifications at VRAP sites. All institutional controls are completed and recorded at the registry of deeds pursuant to the states' Uniform Environmental Covenants Act (UECA).

- **IC Tracking:** VRAP receives copies of the recorded UECAs.
- **IC Oversight:** Maine has no official IC oversight.
- **IC Monitoring:** VRAP audits a small number of ICs on annually.

The following Web address is a direct link to the state's public database that maintains an inventory of sites, maps sites, and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state.
www.maine.gov/dep/rwm/data/remdescriptanddata.htm

Program Highlights

The Town of Lisbon is located along the banks of the Sabattus and Androscoggin Rivers which supported the town's early industry and farming. In 2009 the town began researching possibilities for the reuse of a former schoolhouse property which had been unoccupied for seven years. The Brunswick Housing Authority, a nonprofit agency, whose goal is to provide safe, quality, and affordable housing for eligible persons in need of assistance, was approached about redeveloping this property into housing. The town submitted a Brownfields Assessment application to MEDEP. Through this program, Phase I and Phase II environmental assessments were completed with funding from an American Recovery and Reinvestment Act (ARRA) grant. The results of the investigations determined that asbestos, lead based paint, and numerous containers of chemicals were located throughout the building. After the assessment phase was completed, the property was entered into the MEDEP VRAP and MEDEP provided cleanup funding through its Section 128(a) Response Program grant to remove the hazardous materials from the property. Through the Neighborhood Stabilization Program, the town secured $2.4 million to assist in the construction and redevelopment of the building. The building will be redeveloped into a 12-unit senior housing facility with two community rooms and a laundry room while keeping the historic nature of the building.

Other Land Programs

Municipal Landfill Remediation Program
www.maine.gov/dep/rwm/landfillclosure/index.htm

Underground Storage Tanks Program
www.maine.gov/dep/rwm/ust/index.htm

Massachusetts

Brownfields Program
Massachusetts Department of Environmental Protection (MassDEP)
Bureau of Waste Site Cleanup
One Winter Street, 6th Floor
Boston, MA 02108
www.mass.gov/dep/cleanup

Contact(s): Catherine Finneran, *Brownfields Coordinator*
catherine.finneran@state.ma.us
617-556-1138

Program Overview

- Brownfields Program
- Cost to Enter the Program: Annual Compliance Fees
- Liability Relief Provisions
- Tax Incentives
- Environmental Insurance
- Licensed Site Professionals (LSPs)

Program

The Commonwealth of Massachusetts is committed to the cleanup and redevelopment of brownfields properties as a way to stimulate the economy and promote environmental protection goals. State brownfields program incentives are available to buyers, and sometimes sellers, of contaminated property provided there is a commitment to cleanup and redevelopment.
www.mass.gov/dep/cleanup/brownfie.htm

- **Funding Source(s) for the Program:** Federal grants and the state general fund. Funding from the Section 128(a) Response Program grant is used to support the Massachusetts Waste Site Cleanup and Brownfield Programs.
- **Cost to enter program or fees for service:** Annual Compliance Fees are assessed each year for each site reported to MassDEP until a site is permanently remediated. In addition, permit fees apply to some waste site cleanup submittals.
- **Sites Enrolled in VCP:** As of January 2011, 40,780 release notifications were made to MassDEP, with about 3,600 still active. Approximately 1,400 new releases enter the program each year.
- **Sites Completed under VCP:** As of January 2011, 35,360 releases were closed out. Beginning in 2002, the number of cleanups per year has surpassed the new notifications.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

A variety of grants, loans, and technical assistance are available to assist with brownfields reuse projects. The main source of state funding for assessment and cleanup is through the Brownfields Redevelopment Fund administered by MassDevelopment.
www.mass.gov/dep/cleanup/bffund.htm

INCENTIVES

- Brownfields Tax Credit Program
- Municipal Tax Abatement Program
- Economic Development Incentive Program (EDIP)
- State Historic Tax Credit
  www.mass.gov/dep/cleanup/brtxinc.htm

LIABILITY RELIEF PROVISIONS

The Massachusetts Brownfields Act established statutory liability relief for certain parties undertaking brownfields projects. A Brownfields Covenant Not to Sue Program is available through the Massachusetts Office of the Attorney General for some projects that are not eligible for statutory protection, and commit to cleanup and redevelopment.
www.mass.gov/dep/cleanup/bfliab.htm

ENVIRONMENTAL INSURANCE

The Brownfields Act created the Brownfields Redevelopment Access to Capital (BRAC) Program, which backs loans with state subsidized, volume discounted environmental insurance.
www.mass.gov/dep/cleanup/bfins.htm

BROWNFIELDS REDEVELOPMENT AUTHORITIES (OR SIMILAR)

Brownfields Support Team Initiative – In May 2008, Lieutenant Governor Timothy Murray announced the Brownfields Support Team Initiative to help communities clean up contaminated sites and prepare them for redevelopment.
www.mass.gov/dep/cleanup/brownfie.htm#bst

Program Elements

METHODS/STANDARDS/CONTROLS

A risk-based regulatory program is in place; the regulations are set forth in the Massachusetts Contingency Plan.
www.mass.gov/dep/cleanup/laws/regulati.htm

CONTAMINANTS COVERED

Any oil or hazardous material (OHM) released to the environment is covered, including common contaminants such as petroleum, asbestos (in soil), volatile organic compounds (VOCs), semi-VOCs, metals, PAHs and polychlorinated biphenyls (PCBs), perchlorate, research department explosive (RDX), and high melting explosives (HMX).

LICENSED SITE PROFESSIONALS (LSPS)

Those private parties who are financially responsible under MA law for assessing and cleaning up confirmed and suspected hazardous waste sites must retain a licensed Hazardous Waste Site Cleanup Professional to oversee the assessment and cleanup work.
www.mass.gov/dep/cleanup/licensed.htm

INSTITUTIONAL CONTROLS (IC)

Activity and Use Limitations (AULs), and deed notices/restrictions are used and are filed at county land record offices (Registry of Deeds).

- **IC Tracking:** AULs are tracked through publicly available databases, as well as GIS and KML/KMZ files.
- **IC Oversight:** The state has a Long-Term Stewardship goal and conducts periodic follow-up inspections.
- **IC Monitoring:** There is a state legislative mandate to audit all sites with AULs. An unfavorable audit may re-open cleanup.

The following Web address is a direct link to the state's public database that maintains an inventory of sites, maps sites, and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state.
www.mass.gov/dep/cleanup/sitesloc.htm

Program Highlights

MassDEP constantly works to enhance and improve its waste site cleanup program. Some efforts include development of the Institutional Control Tracking System, which is a dual effort with EPA Headquarters to develop a public electronic institutional control (IC) tracking system. MassDEP has also completed an evaluation of the previous standards and regulations regarding petroleum in GW-1 (drinking water areas) that resulted in a revision of the standards, subsequent wide distribution of those standards, and trainings to understand and identify the changes in the standards. The last process improvement involved the Indoor Air Workgroup which undertook a review of recent information on background indoor air concentrations and updated the numerical standards for indoor air. The workgroup established background indoor air levels, and plans to publish an up-to-date, comprehensive guidance that consolidates all previous guidance on the topic. EPA Section 128(a) Response Program funding has been critical to sustaining MassDEP's waste site cleanup program and the many initiatives listed above.

Other Land Programs

Hazardous Waste Management
www.mass.gov/dep/toxics/hazmatma.htm

Underground Storage Tanks Program
www.mass.gov/dep/toxics/ust/index.htm

New Hampshire

Brownfields Program
New Hampshire Department of Environmental Services
P.O. Box 95
Concord, NH 03301-0095
http://des.nh.gov

Contact(s): H. Keith DuBois
keith.dubois@des.nh.gov
603-271-2987

Program Overview

- Brownfields Program
- Cost to Enter the Program: $750 application fee/$4,500 participation fee
- Liability Relief Provisions
- Tax Incentives
- Grantee Assistance Program

Program

The New Hampshire Brownfields Program encourages the redevelopment of contaminated properties through a variety of approaches that address the uncertainty and liability concerns associated with brownfields sites. These approaches include: the Brownfields Covenant Program, Brownfields Assessment Program, Brownfields Cleanup Revolving Loan Fund, and the the Department of Environmental Services (DES)/Grantee Brownfields Partnership.
http://des.nh.gov/organization/divisions/waste/hwrb/sss/brownfields/index.htm

- **Funding Source(s) for the Program:** Hazardous Waste Cleanup Fund (HWCF) (20%) and federal grants (80%)
- **Cost to enter program or fees for service:** $750 application fee and a $4,500 participation fee for the Brownfields Covenant Program.
- **Sites Enrolled in VCP:** As of November 2010, 52 sites have enrolled in the program.
- **Sites Completed under VCP:** As of November 2010, 25 sites have completed the program.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

A variety of grants and loans are available to assist with brownfields reuse projects.
http://des.nh.gov/organization/divisions/waste/hwrb/sss/brownfields/categories/grants.htm

INCENTIVES

- "Qualified holder" provisions of hazardous waste and petroleum statutes provide protection to lenders and municipalities (for tax deeding).
- Brownfields sites are exempt from state hazardous waste generator fees.
- Municipalities can abate taxes at brownfield sites.

LIABILITY RELIEF PROVISIONS

- Program offers a No Further Action (NFA) letter (when active remediation measures were not required), a Certificate of Completion (COC), a Certificate of No Further Action (when active remediation measures were required to achieve closure), and a Covenant Not to Sue (CNTS).
- State law provides for strict, joint, and several liabilities. The state is authorized to issue administrative orders, including those for information, site access, and site cleanup.

BROWNFIELDS GRANTEE ASSISTANCE PROGRAM

In an effort to help New Hampshire grantees maximize the effectiveness of their grant dollars and the success of their efforts, DES established a policy of assigning a staff geologist or engineer to serve as a brownfields grant liaison. The liaison works closely with the grantee to provide technical assistance with implementing the grant work plan. Assistance includes review of draft work scopes and reports prior to submittal of formal reports.
http://des.nh.gov/organization/divisions/waste/hwrb/sss/brownfields/grantee.htm

Program Elements

METHODS/STANDARDS/CONTROLS

Risk characterization and management policy includes a three-tiered risk-based approach. Contaminant-specific generic soil and ground water cleanup standards are provided in table form; alternatives can be developed based upon site-specific information.
http://des.nh.gov/organization/divisions/waste/hwrb/sss/brownfields/categories/rules.htm

CONTAMINANTS COVERED

Petroleum, asbestos, lead paint, and polychlorinated biphenyls (PCBs) are all covered.

INSTITUTIONAL CONTROLS (IC)

Activity and Use Restrictions (AURs) are used when the risk characterization depends upon the restriction of site activities and uses to achieve or maintain protection of human health and/or environment. After completion of active remedial measures, a ground water management permit (an institutional control itself) is typically issued to monitor ground water quality until it meets standards.

- **IC Tracking:** Requires responsible parties (RPs) to submit draft Notices of Activity and Use Restriction to DES. Groundwater use is addressed under Groundwater Management Permits and a Notice of Groundwater Management Permit is recorded in the chain of title for each property located within the permit Groundwater Management Zone. Copies of Recorded Notices of Activity and Use Restriction and Notices of Groundwater Management Permit bearing the County Registry of Deeds stamp are required. Final recorded Notices of Activity and Use Restrictions, and Groundwater Management Permits are on the OneStop database for public access.
- **IC Oversight:** DES reviews and approves all draft Notices of Activity and Use Restrictions prior to recordation in the chain of title for a site.
- **IC Monitoring:** DES does not currently have a program for monitoring compliance with Notices of Activity and Use Restrictions. However, DES is considering instituting a trial monitoring program in the future. RPs and subsequent site owners are required to submit self-certification forms to DES on an annual basis to demonstrate continued compliance and awareness of the Notice of Activity and Use Restriction. Non-compliance with the conditions of a Notice of Activity and Use Restriction is grounds for requiring active remedial actions and termination of the Notice of Activity and Use Restriction.
  http://des.nh.gov/organization/divisions/waste/hwrb/sss/brownfields/controls.htm

The following Web address is a direct link to the state's public database that maintains an inventory of sites, site maps, and institutional controls. This link also provides additional information regarding contaminated sites in the state.
http://www2.des.state.nh.us/OneStop

Program Highlights

Dating back to the 1800s, the Brown Paper Company conducted a pulp and paper mill operation, including supporting railroad operations located on the east side of the Androscoggin River in Berlin. To revive this blighted area, the New Hampshire Department of Environmental Services (DES) provided the City of Berlin technical assessment services through its Section 128(a) Brownfields State Response Program grant. The grant funding enabled the city to conduct Phase I and Phase II environmental assessments on the property and address soil and ground water contamination likely associated with historic activities. Anticipated development outcomes from this project include a riverfront walk and additional recreational trails. DES is currently providing cleanup planning assistance through the Brownfields Coalition Assessment Grant.



The New Berlin District Courthouse Building

Brown Paper Company also operated one of the first industrial research and development facilities on the west side of the river immediately south of the Northern Forest Heritage Park. DES has been working with the Northern Forest Heritage Park and Tri-County Community Action Program, Inc. to assess and clean up the former Research and Development site since 2000. CERCLA 128(a), state funding, and funding from the Brownfields Coalition Assessment Grant were used to fully assess the site. The east wing and exterior soils were remediated in the summer and fall of 2010 using state funding, a cleanup sub-grant from DES' Brownfields Cleanup Revolving Loan Fund, and an EPA Cleanup Grant awarded to Tri-County Community Action program, Inc. Northern Forest Heritage Park is in the process of renovating the interior of the east wing building to house a park visitor's center, museum space, and park offices. Cleanup of the west wing building is on hold pending additional funding.

Other Land Programs

Asbestos Management
http://des.nh.gov/organization/divisions/air/cb/ceps/ams/index.htm

Underground Storage Tanks Program
http://des.nh.gov/organization/divisions/waste/orcb/ocs/ustp/index.htm

Rhode Island

State Site Remediation and Brownfields Program
Rhode Island Department of Environmental Management
235 Promenade Street
Providence, RI 02908-5767
http://www.dem.ri.gov

Contact(s): Kelly J. Owens
kelly.owens@dem.ri.gov
401-222-2797

Program Overview

- Brownfields Program
- Cost to Enter the Program: $1,000
- MOA with EPA Region 1
- Liability Relief Provisions
- Tax Incentives
- Economic Development Corporation (EDC)

Program

The Rhode Island Site Remediation and Brownfields Programs regulates and provides technical oversight for the investigation and remediation of releases of hazardous waste or hazardous material to the environment; ensures that those investigations and remedial activities are conducted in a consistent manner that adequately protects human health and the environment; and enforces regulations regarding the proper remediation of Resource Conservation and Recovery Act (RCRA) Corrective Action sites.
http://www.dem.ri.gov/programs/benviron/waste/topicrem.htm

- **Funding Source(s) for the Program:** Federal grants and General State Fund
- **Cost to enter program or fees for service:** The only fee is the $1,000 Remedial Action Approval fee which is required of all projects that fall under the Remediation Regulations.
- **Sites Enrolled in VCP:** As of November 2010, 847 sites were in active investigation, remediation or monitoring stages of the program.
- **Sites Completed under VCP:** As of November 2010, 782 sites have completed the Voluntary Cleanup Program.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

A variety of grants and loans are available to assist with brownfields reuse projects.
http://www.dem.ri.gov/brownfields/financial/index.htm

INCENTIVES

Enterprise Zone Business Tax Credit: Any business filed as a C-corporation with a certified business facility within a state-designated Enterprise Zone or a Federally-designated Enterprise Community in Rhode Island may qualify for a state business tax credit equal to 75% of the total wages paid to employees living in an enterprise zone or 50% of wages paid to workers not living in an enterprise zone.

- Rhode Island Economic Development Corporation (RIEDC): RIEDC - Enterprise Zones - Application & Certification
  http://www.riedc.com/business-services/enterprise-zones/application-and-certification
- RI General Law
  http://www.rilin.state.ri.us/Statutes/TITLE42/42-64.3/INDEX.HTM
- Historic Preservation Investment Tax Credits: The Rhode Island Historic Preservation and Heritage Commission administers both the federal and the new state tax credit programs.
  http://www.rihphc.state.ri.us/pdfs_zips_downloads/credits_pdfs/hpitc_pdfs/hpitc_regs08-10-20.pdf

LIABILITY RELIEF PROVISIONS

Under state law, all responsible parties (RP) are strictly, jointly, and severally liable for remediating the site. The remedial liability is retroactive in the sense that liability attaches when a site is determined to be contaminated without regard to when the site became contaminated or whether the activity that caused the contamination was legal at the time it occurred.

BROWNFIELDS REDEVELOPMENT AUTHORITIES (OR SIMILAR)

The state Economic Development Corporation (EDC) in coordination with DEM administers a Brownfields Cleanup Revolving Loan Fund. EDC acts as the financial program manager and DEM acts as the site manager. Sub-grants are available to nonprofits and municipalities under the RLF, and loans are available to all interested parties.
http://www.riedc.com/business-services/site-selection/brownfield-sites

Program Elements

METHODS/STANDARDS/CONTROLS

The Remediation Regulations were amended on February 24, 2004. The public hearing for revisions to the 2004 Remediation Regulations is scheduled for January 20, 2011. The proposed changes include the following: 1) Revised capping requirements on arsenic-only sites. The standards for Residential and Industrial/Commercial Direct Exposure Criteria of 7.0 mg/kg will remain the same; 2) Environmental Land Usage Restriction (ELUR) requirements for residential properties shall change; and 3) Addition of Environmental Justice requirements with respect to Public Notices will be added to Regulations for the first time.
http://www.dem.ri.gov/pubs/regs/regs/waste/remreg04.pdf
http://www.dem.ri.gov/programs/benviron/waste/pnremreg.htm

CONTAMINANTS COVERED

Petroleum and polychlorinated biphenyls (PCBs) are included under the Remediation Regulations. Lead-based paint from industrial/commercial properties also are covered under the regulations, but only in cases where they are in the environment and not still on a structure. Lead-based paint contamination at residential properties falls under the jurisdiction of the Department of Health.

INSTITUTIONAL CONTROLS (IC)

Rhode Island supports the use of Environmental Land Usage Restrictions (ELURs) on properties when warranted. Annual ELUR compliance self-monitoring is required. In addition, DEM's Office of Waste Management has been auditing a percentage of the properties that have ELURs since 2005. Benefits of institutional controls are that more sites are being cleaned and reused. Community concerns are being addressed by mandatory public notice requirements at various points during investigation and remedy selection and there are additional Public Notice requirements on sites in Environmental Justice areas.

- **IC Tracking:** ELURs are recorded on the deeds of the properties and their presence is tracked in a database maintained by DEM. The self-monitoring and audits are also tracked in the database. Properties not in compliance are issued progressive enforcement documents.
- **IC Oversight:** DEM provides oversight on all remediation projects, which includes reviewing plans for engineered caps and ELURs.
- **IC Monitoring:** DEM audits a percentage of all sites with ELURS every year since 2005 and has required annual self monitoring of the ELURs by property owners since approximately 1999.

The following Web address is a direct link to the state's Congressional mandated Brownfield lists, which includes a list of sites remediated during the last year and a list of sites expected to be remediated during the coming year.
http://www.dem.ri.gov/brownfields/documents/#pubrecrd

The following link is a GIS system that maps sites.
http://www.dem.ri.gov/maps/index.htm

Program Highlights

A 20-acre former industrial area was redeveloped into the Woonsocket Middle School Campus, the largest middle school campus in New England. With the support of EPA and the Rhode Island Department of Environmental Management (RIDEM), the City of Woonsocket successfully implemented a proactive public outreach strategy to address school siting and environmental justice concerns in a forthright and transparent manner. RIDEM used Section 128(a) Response Program funding to assist with the characterization of the property. The EPA, RI Economic Development Corporation and RIDEM Brownfield programs using 128(a) money provided almost $2 million in brownfields grant funding for assessment and cleanup of the property, as well as oversight and feedback. Results of environmental assessment activities revealed that substantial contamination was present throughout the property. Cleanup costs to ensure that the school was safe totaled approximately $6 million. The project schedule was met while staying under budget and the campus opened for occupancy in January 2010.



The New Woonsocket Middle School Campus

Other Land Programs

Underground Storage Tank Management Program
http://www.dem.ri.gov/programs/benviron/waste/topictan.htm

Waste Management Facilities Program
http://www.dem.ri.gov/programs/benviron/waste/topicwfm.htm

Superfund and Department of Defense Program
http://www.dem.ri.gov/programs/benviron/waste/topicffp.htm

Vermont

Redevelopment of Contaminated Properties Program (RCPP)
Vermont Department of Environmental Conservation (DEC)
103 South Main Street
Waterbury, VT 05671-0404
www.anr.state.vt.us/dec/wmd.htm

Contact(s): George Desch, *Division Director*
george.desch@state.vt.us
802-241-3888

Patricia Coppolino, *Brownfields Program Coordinator*
patricia.coppolino@state.vt.us
802-241-3888

Program Overview

- Brownfields Program
- Cost to Enter the Program: $500
- MOA with EPA Region 1
- Liability Relief Provisions
- Tax Incentives
- Environmental Insurance

Program

The Brownfields Reuse and Environmental Liability Limitation Act (BRELLA) or Brownfields Program, provides participants with a broad release from state liability in exchange for cleanup of a contaminated property. Participation in BRELLA is open to prospective purchasers and innocent current owners, provided that they did not cause or contribute to the contamination and are not affiliated with any entity that caused or contributed to the contamination.
www.anr.state.vt.us/dec/wastediv/SMS/brownfields-home.htm

- **Funding Source(s) for the Program:** Federal grants (75%), the state general fund (23%), and state cleanup funds (2%)
- **Cost to enter program or fees for service:** All applicants must pay a non-refundable application fee of $500.
- **Sites Enrolled in BRELLA:** As of March 2011, there were 19 active projects enrolled in BRELLA.
- **Sites Completed under BRELLA:** As of March 2011, 12 projects had received Certificates of Completion (COC) through BRELLA and four projects withdrew or had been removed from BRELLA.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

A variety of grants, loans and technical assistance are available to assist with brownfields reuse projects.
www.anr.state.vt.us/dec/wastediv/SMS/RCPP/Loans_Grants.htm

INCENTIVES

- Tax incentives for rehabilitation of existing properties in designated “downtown” areas; not specific to brownfields, but contaminated properties are eligible.
- Participants in BRELLA are exempted from the state’s hazardous waste transport tax for hazardous waste that is being removed from the brownfield site in connection with the cleanup.

LIABILITY RELIEF PROVISIONS

The Environmental Liability Limitation Program provides participants with a COC upon implementation of a state approved Corrective Action Plan. The COC effectively releases the property owner from state liability, which release may only be rescinded in limited circumstances, such as fraud or hazardous material releases which occur subsequent to the cleanup.
http://www.anr.state.vt.us/dec/wastediv/SMS/RCPP/Liability-Limitation.htm

ENVIRONMENTAL INSURANCE

The Brownfields Revitalization Fund can provide grants to assist with the purchase of environmental insurance in connection with implementation of a state-approved work plan.

BROWNFIELDS REDEVELOPMENT AUTHORITIES (OR SIMILAR)

Economic Development - The Brownfields Initiative combines the economic development expertise of the Agency of Commerce and Community Development (ACCD) with the environmental experience of the Agency of Natural Resources (ANR).
http://economicdevelopment.vermont.gov/Programs/BrownfieldInitiative/tabid/118/Default.aspx

Program Elements

METHODS/STANDARDS/CONTROLS

Cleanup standards/screening values are set in State Rules or guidance documents. Ground water standards are located in the Vermont Groundwater Rule; Surface Water Standards are the Vermont Surface Water Quality Standards. Soil, sediments and indoor air/soil gas values are located within the Remediation of Contaminated Properties document.

Risk assessment at sites is allowed using the EPA Risk Assessment Guidance (RAGs) and will need approval from the Vermont Department of Health.
www.anr.state.vt.us/dec/wastediv/SMS/RCPP/Cleanup-Stand-Guid.htm

CONTAMINANTS COVERED

Volatile Organic Compounds (VOC), semi-VOCs, metals, polychlorinated biphenyls (PCBs), asbestos releases not associated with building materials.

The Department of Health has jurisdiction on lead and asbestos abatement. Agency of Agriculture has jurisdiction over pesticides.

INSTITUTIONAL CONTROLS (IC)

IC Tracking, Oversight, and Monitoring: Annual reporting/monitoring is required for sites with an IC.

The following Web address is a direct link to the state's public database that maintains an inventory of sites, maps sites, and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state.
http://www.anr.state.vt.us/dec/wastediv/SMS/hazsites.htm

Program Highlights



Artist's Rendition of the ReSOURCE Office and Training Building

ReSOURCE, a Nonprofit Community Enterprise is expanding its successful social enterprise and innovative training programs by redeveloping a brownfields property in Barre. The former Buttura & Gherardi Granite Artisans building is being redeveloped to create office and training spaces. The Vermont Department of Environmental Conservation (DEC) provided $11,000 in Section 128(a) Response Program Funding for environmental assessment and contributed technical assistance to the developer and the multi-stakeholder team. Heavy metals, PAHs, and petroleum contaminated soil, as well as several thousand gallon underground storage tanks (UST) and asbestos containing materials were identified during the environmental assessment. Cleanup of contaminated soil is nearly complete and the USTs will be removed in spring 2010. This brownfields reuse project will incorporate green features and create new opportunities for Barre's struggling workforce. The revitalized facility will enable ReSOURCE to create employment, provide job skill training to low-income youth who have dropped out of school, protect the environment by reusing hundreds of tons of materials that would otherwise end up in landfills, and relieve poverty by providing low-cost and free goods to low-income people in rural central Vermont.

Cleanup funding ($33,334) was provided by an EPA Revolving Loan Fund grant managed by ACCD. A *Certificate of Completion*, a liability limitation closure letter issued through Vermont's *Brownfield Reuse and Environmental Liability Limitation Act* codified at 10 V.S.A. §6641-§6656 was issued to ReSOURCE in July 2010.

Other Land Programs

Hazardous Waste Management Program
http://www.anr.state.vt.us/dec/wastediv/rcra/rcrahome.htm

Underground Storage Tanks Program
http://www.anr.state.vt.us/dec/wastediv/ust/home.htm

EPA Region 2

New Jersey

Brownfield Development Area (BDA) Initiative
New Jersey Department of Environmental Protection (NJ DEP)
Office of Brownfield Reuse
401 East State Street, 6th Floor
P.O. Box 420, Mail Code 401-06
Trenton, NJ 08625-0420
http://www.nj.gov/dep/srp

Contact(s): Tim Bartle
timothy.bartle@dep.state.nj.us
609-292-1251

Program Overview

- Brownfield Program
- Cost to Enter the Program: Oversight fees
- Liability Relief Provisions
- Brownfield Reimbursement Program
- Hazardous Discharge Site Remediation Fund

Program

In October 2002, the Office of Brownfield Reuse (OBR) was created to serve as the focal point for the New Jersey Department of Environmental Protection's (NJDEP) brownfields program. OBR is charged with coordinating remediation and reuse efforts at specific brownfield sites and piloting innovative approaches to expedite the revitalization process. Under the Brownfield Development Area (BDA) Initiative, OBR works with selected communities affected by multiple brownfields to design and implement remediation and reuse plans for these properties simultaneously.
http://www.nj.gov/dep/srp/brownfields

- **Funding Source(s) for the Program:** Federal grants, direct billing, fees, and state general fund
- **Cost to enter program or fees for service:** No fee to enter BDA program. Annual remediation fee calculated by evaluating the number of areas of concerns (AOCs) and affected environmental receptors at each site, fixed fees for certain activities and programs, and calculated fees based on hourly rate for any oversight.
- **Sites Enrolled in BDA Program:** As of December 2010, there are 31 BDAs with 339 sites.
- **Sites Completed under BDA Program:** As of December 2010, OBR issued 15 No Further Action (NFA) determinations indicating that remediation was complete.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

Municipalities may apply for remediation grants and loans up to $5 million per year for investigation and cleanup activities from the Hazardous Discharge Site Remediation Fund.
http://www.nj.gov/dep/srp/finance/hdsrf

INCENTIVES

- Brownfield Reimbursement Program administered by the NJ Department of Treasury and the NJ Economic Development Authority reimburses up to 75% of remediation costs based on specific new taxes that are generated from a redevelopment project.
http://www.nj.gov/dep/srp/brownfields/bf_reimbursement.htm
- Environmental Opportunity Zones, designated by municipal ordinance, allow for an incremental tax abatements on real property (to offset cleanup costs) for up to 15 years.

LIABILITY RELIEF PROVISIONS

The New Jersey Site Remediation Reform Act (SRRA) established statutory liability relief for certain parties undertaking brownfields projects.
http://www.nj.gov/dep/srp/brownfields/site_reuse.htm

BROWNFIELDS REDEVELOPMENT AUTHORITIES (OR SIMILAR)

The Brownfields Redevelopment Interagency Team (BRIT) is made up of representatives of numerous state agencies and introduces projects to all affected state agencies and departments. The BRIT enables and facilitates dialogue among the state, the municipality and the developer. This dialogue assists in identifying opportunities and obstacles, as well as applicable financial and technical assistance, early on in the planning process of a project so they may be addressed with minimal impact.
http://nj.gov/state/planning/brtf.html

Program Elements

METHODS/STANDARDS/CONTROLS

The state allows three cleanup levels: 1) unrestricted use remedial actions; 2) limited restricted use remedial actions (institutional controls only); and 3) restricted use remedial actions (engineering and institutional controls). Natural attenuation is allowed in some circumstances when combined with a Classification Exception Area (CEA) institutional control. Contamination source must be removed.
http://www.nj.gov/dep/srp/regs/techrule

CONTAMINANTS COVERED

All hazardous substances on adopted list pursuant to Section 4 of P.L. 1983, c. 315 (NJSA 34:5A-4), including petroleum.

INSTITUTIONAL CONTROLS (IC)

Institutional and engineering controls for soils and ground water are acceptable remedies when they meet the risk-based requirements of the regulations. The SRRA required NJDEP to develop a permitting system to track the obligations for maintaining institutional and engineering controls. Part of this permitting system includes the submission of a biennial certification to report on the status of the controls' effectiveness; state inspection is required every five years.

- **IC Tracking:** NJDEP tracks those cases that have used engineering and institutional controls to ensure that inspection and reporting obligations meeting the biennial certifications are submitted.
- **IC Oversight and Monitoring:** NJDEP reviews all biennial certifications to ensure that the remedy remains protective. Any integrity issues with a remedy must be addressed by the party responsible for maintaining the control. In addition, any person that fails to submit a biennial certification may be subject to penalties.

The following Web address is a direct link to the state's public database that maintains an inventory of sites, maps sites and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state.
http://www.nj.gov/dep/srp/kcsnj

Program Highlights

The Town of Harrison in Hudson County took a huge step toward its revitalization goals with the opening of the Red Bull Arena. This world-class soccer venue was made possible in large part by the efforts of NJDEP. The 25,000-seat Red Bull Arena is the cornerstone of a massive commercial, retail, and residential waterfront redevelopment project that is being coordinated under NJDEP's Brownfield Development Area program, which is funded through its Section 128(a) Response Program grant. The Harrison waterfront was once home to industry along the Passaic River, but over the decades the waterfront disintegrated into a collapsing collection of abandoned factories and warehouses. With help from NJDEP, the structures were demolished and contaminated soil was removed, clearing the way for one of the largest mixed-use redevelopments projects in New Jersey. NJDEP engaged various stakeholders, including owners of contaminated properties, potentially responsible parties, developers, community groups, and local governments to participate in developing the cleanup and revitalization strategies.



Artist's rendition of the Red Bull Soccer Arena

Other Land Programs

Underground Storage Tanks (USTs) Program
http://www.nj.gov/dep/srp/bust

Unregulated Heating Oil Tank Program
http://www.nj.gov/dep/srp/unregulatedtanks

Industrial Site Recovery Act (ISRA)
http://www.nj.gov/dep/srp/isra

Superfund Program
http://www.nj.gov/dep/srp/superfund

New York

Brownfield Cleanup Program (BCP)
New York State Department of Environmental Conservation (DEC)
Division of Environmental Remediation
625 Broadway
Albany, NY 12233-7011
http://www.dec.ny.gov/chemical/brownfields.html
(DEC's Environmental Cleanup and Brownfield Page)
http://www.dec.ny.gov/about/627.html
(Information on DEC's Division of Environmental Remediation)

Contact(s): Main Email Contact: derweb@gw.dec.state.ny.us
Main Phone Contact: 518-402-9764
Central Office and Regional Contacts: http://www.dec.ny.gov/about/776.html

Program Overview

- Brownfield Cleanup Program
- Cost to Participate in the Program: Reimbursement of State Oversight Costs
- Tax Credits for Site Preparation and Cleanup, Redevelopment, and Environmental Insurance
- Liability Relief Provisions

Program

The goal of the Brownfield Cleanup Program (BCP) is to enhance private-sector cleanups of brownfields and to reduce development pressure on "greenfields." A brownfield site is any real property, the redevelopment or reuse of which may be complicated by the presence or potential presence of a contaminant.
http://www.dec.ny.gov/chemical/8450.html (DEC's BCP Web page)

- **Funding Source(s) for the Program:** State funds, as well as federal grants (Section 128(a)).
- **Cost to enter program or fees for service:** There are no fees associated with the BCP application process. However, state oversight costs are reimbursed by the party cleaning up the site. Responsible parties also pay past state remedial costs.
- **Sites Enrolled in BCP:** As of December 2010, DEC approved 347 applications for participation in the BCP.
- **Sites Completed under BCP:** As of December 2010, DEC issued 92 Certificates of Completion (COC) for BCP sites since the program's inception.

Financial Elements

Investigations and remediations are carried out under state oversight. Once remediation is completed, DEC issues a COC, which entitles the BCP party to a state liability limitation (with standard reservations) and to claim various tax credits.

INCENTIVES

http://www.dec.ny.gov/chemical/8450.html (DEC's main BCP webpage)
http://www.tax.ny.gov/pdf/publications/multi/pub300.pdf (New York State Department of Taxation and Finance's publication New York State Tax Credits Available for Remediated Brownfields)

LIABILITY RELIEF PROVISIONS

http://www.dec.ny.gov/regs/4372.html#15095 (BCP Certificates of Completion)

Program Elements

METHODS/STANDARDS/CONTROLS

Cleanups under the BCP must be protective of public health and the environment based on remedy selection criteria including the current, future, and reasonably anticipated land use of the site. New York State law prescribes a multi-track approach for the remediation of contamination: Track 1 (unrestricted use); Track 2 (restricted use with generic soil cleanup objectives); Track 3 (restricted use with modified soil cleanup objectives); and Track 4 (restricted use with site-specific soil cleanup objectives). A responsible party (RP) must also conduct any necessary off-site remediation. Post cleanup, the remedial party submits periodic certifications that confirm that the required institutional and/or engineering controls are in place and effective.
http://www.dec.ny.gov/regs/4372.html#15096 (BCP Remedial Program)

CONTAMINANTS COVERED

Hazardous waste (including hazardous substances) and petroleum contaminants are eligible under BCP.

INSTITUTIONAL CONTROLS (IC)

Institutional controls and/or engineering controls are utilized in the BCP. Environmental easements are required for sites that rely upon one or more institutional and/or engineering controls. The required controls, as well as operation, maintenance and/or monitoring requirements, are set forth in each site's Site Management Plan (SMP).

- **IC Tracking:** DEC tracks all institutional and engineering controls, and municipalities have a statutory obligation to coordinate with DEC regarding any permit or authorization if a site has an environmental easement.
- **IC Oversight:** DEC reviews and approves all aspects of the cleanup, including institutional and engineering controls.
- **IC Monitoring:** DEC monitors institutional and engineering controls. Post cleanup, the remedial party submits periodic certifications that confirm that the controls are in place and effective.

GENERAL WEBSITES

The following websites provide additional information on the BCP as well as other DER Remedial Programs:
http://www.dec.ny.gov/regulations/2393.html (Remediation Guidance and Policy Documents, including State Regulation)
http://www.dec.ny.gov/chemical/48236.html (Finalizing Remedial Projects)
http://www.dec.ny.gov/chemical/61092.html (Contaminated Sites)

REMEDIAL SITE DATABASE

DEC offers access to site information in the state's remedial programs and spill database in a searchable format.
http://www.dec.ny.gov/chemical/8437.html (DEC's Environmental Site Database Search)

Program Highlights

Courtlandt Corners Redevelopment, Bronx, New York
Participation in New York's Brownfield Cleanup Program made it possible for developers to create a mixed-income housing development for 323 families on one of the few available parcels in the South Bronx. DEC uses Section 128(a) Response Program funds to help administer the BCP. Courtlandt Corners consists of two sites directly across from each other on East 161st Street between Melrose and Courtlandt Avenues. Previous site uses include an auto repair shop and gas station. Petroleum contaminants were detected in the soil and groundwater, as well as soil vapor samples. Under the remedial action workplan developed through the BCP, contaminated soils were removed, groundwater was pumped and treated, and a vapor barrier and sub-slab depressurization system were installed. The buildings, which include ground-floor commercial space, became available for new tenants at the end of 2010.



Courtlandt Corners Mixed-income Housing Developments in the Melrose Commons Neighborhood of Bronx, New York

Land Programs Administered by Other State Agencies

Brownfield Opportunity Areas (BOA) Program, administered by New York State Department of State
http://nyswaterfronts.com/grantopps_BOA.asp

Other Voluntary Response Programs

Environmental Restoration Program
http://www.dec.ny.gov/chemical/8444.html

Voluntary Cleanup Program
http://www.dec.ny.gov/chemical/8442.html

Enforcement Programs
http://www.dec.ny.gov/chemical/8428.html

Superfund Program
http://www.dec.ny.gov/chemical/8439.html

Hazardous Waste Management Program
http://www.dec.ny.gov/chemical/8486.html

Virgin Islands

Virgin Island Voluntary Response Program (VIVRP) and Brownfields Program

Virgin Islands Division of Environmental Protection
Department of Planning & Natural Resources (DPNR)
45 Mars Hills
Frederiksted, VI 00841
http://www.dpnr.gov.vi/dep/brownfields.htm

Contact(s): Dr. Clanicia Pelle
clanicia.pelle@dpnr.gov.vi
340-773-1082

Program Overview

- Brownfields Program
- Cost to Enter the Program: $5,000 or one percent of the actual costs of remediation

Program

The Department of Planning and Natural Resources (DPNR) is developing a Voluntary Response Program (VRP) under a cooperative agreement with EPA to spur cleanup of brownfield sites in the Virgin Islands. The activities funded under this agreement include: 1) forming a technical committee to guide the development of the VCP; 2) hiring consulting firms to assist DPNR in developing VCP strategies; and 3) training personnel on relevant aspects of the VCP and site inventory procedures. Virgin Islands VRP Rules and Regulations:
http://dpnr.gov.vi/documents/uploads/1856408589.pdf

- **Funding Source(s) for the Program:** Federal grants
- **Cost to enter program or fees for service:** Registration fees to be collected from persons conducting voluntary remediation to defray the actual reasonable costs of the voluntary remediation program expended at the site not to exceed the lesser of $5,000 or one percent of the actual costs of remediation; however, no registration fee is required when the person conducting voluntary remediation is an agency, department or authority of the Virgin Islands' government.
- **Sites Enrolled in VCP:** N/A
- **Sites Completed under VCP:** N/A

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

N/A

INCENTIVES

As a part of the VRP development, the Commission may provide tax credits or benefits for cleanup and redevelopment activities.

LIABILITY RELIEF PROVISIONS

N/A

Program Elements

METHODS/STANDARDS/CONTROLS

Remediation levels shall be based upon a risk assessment of the site and surrounding areas that may be impacted, reflecting the current and future use scenarios.
http://dpnr.gov.vi/documents/uploads/1856408589.pdf

CONTAMINANTS COVERED

All sites that meet the definition of a "brownfield" as defined in Section 553-1(e) of the VIVRP Rules and Regulations are eligible for participation in the VIVRP.
http://dpnr.gov.vi/documents/uploads/1856408589.pdf

INSTITUTIONAL CONTROLS (IC)

Land use controls, including institutional controls, can be used in conjunction with remediation in the VIVRP.
http://dpnr.gov.vi/documents/uploads/1856408589.pdf

Program Highlights

The United States Virgin Islands (USVI) is using Section 128(a) Response Program funding to establish a Voluntary Cleanup Program (VCP). On July 20, 2010, USVI Department of Planning and Natural Resources (DPNR) issued a notice of intent to promulgate rules and regulations pursuant to the Brownfield Revitalization and Environmental Restoration Act of 2008 for the establishment of a VCP. Hearings on the proposed VCP Rules and Regulations were held in August 2010 on all three islands (St. Croix, St. John and St. Thomas). The VCP Rules and Regulations are for the purpose of establishing cleanup standards that are protective of human health and the environment for voluntary cleanup activities.

Other Land Programs

Underground Storage Tanks (UST) Program
http://www.dpnr.gov.vi/dep/tanks.htm

EPA Region 3

Delaware

Voluntary Cleanup Program (VCP) and Brownfields Development Program (BDP)

Delaware Department of Natural Resources and Environmental Control (DNREC)
Division of Air and Waste Management
Site Investigation and Restoration Branch
391 Lukens Drive
New Castle, DE 19720-4801
http://www.awm.delaware.gov

Contact(s): James Poling
james.poling@state.de.us
302-395-2600

Program Overview

- Brownfields Program
- Cost to Enter the Program: Oversight fees
- MOA with EPA Region 3
- Liability Relief Provisions
- Tax Incentives
- Brownfields Advisory Committee (BAC)

Program

In 1990, Delaware enacted its Hazardous Substance Cleanup Act (HSCA) to deal with sites potentially contaminated with hazardous substance releases in the state that will not be addressed under the federal Superfund program. Three major programs are administered under the HSCA. They are the Voluntary Cleanup Program (VCP), the Brownfields Development Program (BDP), and the HSCA Enforcement Program.
http://www.awm.delaware.gov/SIRB/Pages/Voluntary_Cleanup_Program.aspx
http://www.awm.delaware.gov/SIRB/Pages/Brownfields.aspx
http://www.awm.delaware.gov/SIRB/Pages/SIRB_HSCA_program.aspx

- **Funding Source(s) for the Program:** The majority of funding for administrative and staff costs come from the federal grants (35%) and the Hazardous Substances Cleanup Act Fund (HSCAF) (49%). Oversight cost reimbursements (10%) and state general fund (6%) comprise the balance.
- **Cost to enter program or fees for service:** There is no cost to enter into the BDP and the VCP. There are oversight costs for investigative or remedial activities for DNREC staff time. To fund the state's VCP oversight, participants are required to remit an initial deposit up to a maximum of $5,000. Additional deposits will be requested based on the oversight cost estimate as the site cleanup progresses. Any deposit funds not expended by the state are returned to the participant.
- **Sites Enrolled in VCP:** As of November 2010, there are 170 sites in the VCP and 125 sites in the BDP.
- **Sites Completed under VCP:** As of November 2010, 113 sites were completed under the VCP and the BDP.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

A variety of grants, loans, and technical assistance are available to assist with brownfields reuse projects.
http://www.awm.delaware.gov/SIRB/Pages/SIRBLoansGrants.aspx

INCENTIVES

- Tax credits of $650/year per new job created related to cleanup and redevelopment ($900/year in poverty areas).
- Participants receive tax credits based on the size of investment and number of new employees brought to the site. Grants of up to $25,000 are available for site investigation and cleanup. In addition, low interest loans up to $250,000 are also available for brownfield sites. About 700 sites have been identified for inclusion in the program, with cleanup underway at 96.

LIABILITY RELIEF PROVISIONS

The BDP offers complete liability protection for existing contamination to qualified brownfield developers provided that they enter into a Brownfields Development Agreement (BDA), and agree to clean up the contamination as specified in the Final Plan of Remedial Action approved by the Department prior to development of the site. Once the remedy is in place, the developer may request and receive a Certificate of Completion of Remedy (COCR) which provides liability protection as long as the requirements of the COCR are followed. The BDP offers liability protection for geographic or environmental media specific operable units identified within the site.

BROWNFIELDS REDEVELOPMENT AUTHORITIES (OR SIMILAR)

The Brownfields Advisory Committee (BAC) represents the public and community interest in Delaware's Brownfield Program by providing advice and assistance to DNREC's Division of Air & Waste Management. The BAC is comprised of consultants, developers, local business men and women, and representatives from the Division of Air & Waste Management.
http://www.awm.delaware.gov/BAC/Pages/BACPortal.aspx

Program Elements

METHODS/STANDARDS/CONTROLS

Risk-based cleanup standards of 1.0x10-5 for carcinogenic risk and a Hazard Index of 1.0 for non-carcinogenic risks are used. DNREC provides guidance on the investigation and remediation of sites.

CONTAMINANTS COVERED

Hazardous substances as defined in HSCA are covered. In addition, petroleum contamination is covered on brownfield sites; asbestos and lead paint contamination are covered if found in the soil.

INSTITUTIONAL CONTROLS (IC)

Institutional controls/land-use controls are allowed, including Uniform Environmental Covenants, operation and maintenance plans, and Ground Water Management Zones (GMZs). GMZs prevent the use of ground water and encourage development by allowing low levels of contamination to remain in the ground water while preventing exposure.

- **IC Tracking:** DNREC uses a database to track sites with ICs. This database is in the process of being improved.
- **IC Oversight:** DNREC performs inspections on a regular basis of the sites that have O&M requirements.
- **IC Monitoring:** DNREC reviews O&M reports for sites with O&M controls.

The following Web address is a direct link to the state's public database that maintains an inventory of sites, maps sites, and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state.
http://www.awm.delaware.gov/SIRB/Documents/Certified%20BF%20List_2010_November.pdf

Program Highlights

The Delaware's Department of Natural Resources and Environmental Control (DNREC) used Section 128(a) Response Program funding to conduct a Phase I Environmental Site Assessment (ESA) at the Wiley Cork property in Wilmington. The ESA indicated unacceptable levels of arsenic and PAHs in the soil as well as high levels of iron and manganese. The human health risk assessment indicated that the cumulative risk from the presence of arsenic and PAHs was above DNREC's risk management level. The plan for redevelopment includes the demolition and renovation of some of the structures on the property and the construction of a parking lot. The property will be redeveloped by the New Destiny Fellowship to build a community center, which will include a bank, food service, and a social needs assistance center.

Other Land Programs

Underground Storage Tanks (USTs) Program
http://www.dnrec.state.de.us/dnrec2000/Divisions/AWM/ust

Superfund Program
http://www.nav.dnrec.delaware.gov/DEN3

District of Columbia

Voluntary Cleanup Program (VCP)
District of Columbia Department of the Environment

1200 First Street NE, 5th Floor
Washington, DC 20002
http://www.ddoe.dc.gov

Contact(s): James Sweeney
james.sweeney@dc.gov
202-535-2289

Program Overview

- Brownfields Program
- Cost to Enter the Program: $10,000
- Liability Relief Provisions
- Possible Tax Incentives

Program

On June 15, 2001, the *Brownfield Revitalization Amendment Act of 2000* became effective. The Act established the Voluntary Cleanup Program (VCP) and a brownfields program, and provides for long-term stewardship of sites that have been cleaned up under these programs. The Act also authorized tax and other incentives for development of contaminated property, and amended provisions of the *Tax Increment Financing Authorization Act of 1998, National Capital Revitalization Corporation Act of 1998, and the District of Columbia Community Development Act of 1975* to incorporate and support the cleanup and redevelopment of contaminated property. As of February 2011, the tax incentive portion of the act had not yet been implemented.
http://ddoe.dc.gov/ddoe/cwp/view,a,1209,q,495015,ddoeNav_GID,1486,ddoeNav,%7C31375%7C31377%7C.asp

- **Funding Source(s) for the Program:** Appropriated funds and federal brownfields grants
- **Cost to enter program or fees for service:** The application fee to enter the District's VCP is $10,000.
- **Sites Enrolled in VCP:** As of February 2011, 20 sites are enrolled in the program.
- **Sites Completed under VCP:** As of February 2011, eight sites were completed since the program's inception.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

Participants may receive grants (subject to the availability of funds in the Clean Land Fund), loans, and tax credits to offset real property taxes and business franchise taxes.

INCENTIVES

Participants may receive tax credits to offset real property taxes and business franchise taxes.

LIABILITY RELIEF PROVISIONS

The Brownfield Revitalization Amendment Act of 2000 authorizes a civil penalty of up to $50,000 and strict, joint, and several liability for the unlawful release of any hazardous substance. It does not authorize punitive damages or retroactive liability.

Program Elements

METHODS/STANDARDS/CONTROLS

The District is developing hazardous substance cleanup standards. The District Department of the Environment (DDOE) must publish cleanup standards for contaminated properties under the VCP that include ground water, surface water, and soil standards. Until these cleanup standards are published, the VCP will use the District's Water Pollution Control Act ground water standards and federal Regional Screening Levels (RSL). For petroleum related contaminants DDOE uses the District's LUST program standards.

INSTITUTIONAL CONTROLS (IC)

The Brownfield Revitalization Amendment Act of 2000 authorizes DDOE to create, maintain, and disseminate records, informational systems, and educational materials that are necessary to protect public health and the environment at contaminated properties cleaned up under the Act. IC-related activities under DDOE may include:

- **IC Tracking:** The Brownfield Revitalization Amendment Act of 2000 authorizes DDOE to create an institutional control tracking process.
- **IC Oversight:** The Brownfield Revitalization Amendment Act of 2000 authorizes DDOE to create an institutional control oversight process.
- **IC Monitoring:** The Brownfield Revitalization Amendment Act of 2000 authorizes DDOE to create an institutional control monitoring process.

The following Web address is a direct link to the state's public database that maintains an inventory of sites, maps sites, and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state.
http://ddoe.dc.gov/ddoe/cwp/view,a,1209,q,495666.asp

Program Highlights

How often do over forty thousand people and the President of the United States attend the grand opening of a completed voluntary cleanup project? It happened at the opening day ceremonies for the 2008 Washington Nationals baseball season on March 30, 2008. Nationals Park, the nation's first Leadership in Energy & Environmental Design (LEED) Silver Certified professional sports stadium, is the largest voluntary cleanup project in the District of Columbia. With oversight from the District Department of the Environment (DDOE), a Section 128(a) Response Program grantee, over 350,000 cubic yards of contaminated soil were removed from the former industrial area. Ground water filtration and treatment will continue through a state-of-the-art ground water collection system operating beneath the stadium.



March 30, 2008 - Opening Day Ceremonies at Nationals Park

Other Land Programs

Underground Storage Tanks (USTs) and Leaking Underground Storage Tanks (LUST) Program
http://ddoe.dc.gov/ddoe/cwp/view,a,1209,q,494854,ddoeNav_GID,1486,ddoeNav,%7C31375%7C31377%7C.asp

Maryland

Brownfields Redevelopment Initiative Voluntary Cleanup Program (VCP)

Maryland Department of the Environment (MDE)
1800 Washington Boulevard, Suite 625
Baltimore, MD 21230-1719
http://www.mde.state.md.us/Pages/Home.aspx

Contact(s): James Carroll
JCarroll@mde.state.md.us
410-537-3459

Program Overview

- Brownfields Program
- Cost to Enter the Program: $6,000
- MOA with EPA Region 3 (February 1997)
- Liability Relief Provisions
- Tax incentives

Program

The Brownfields Revitalization Incentive Program was established in February 1997 as part of Maryland's Smart Growth policy. This program is intended to promote economic development, especially in distressed urban areas, by identifying and redeploying underutilized properties. Reusing real property makes efficient use of existing infrastructure while providing an alternative to developing open space that contributes to urban sprawl.
http://www.mde.state.md.us/programs/Land/MarylandBrownfieldVCP/Pages/programs/landprograms/errp_brownfields/default.aspx

Established by the state legislature in 1997, Maryland's Voluntary Cleanup Program (VCP) is administered by the Maryland Department of the Environment (MDE) Land Management Administration's Land Restoration Program (LMA's LRP) to provide state oversight for voluntary cleanups of properties contaminated with hazardous substances.
http://www.mde.state.md.us/programs/Land/MarylandBrownfieldVCP/MDVCPInformation/Pages/programs/landprograms/errp_brownfields/vcp_info/index.aspx

- **Funding Source(s) for the Program:** State general fund (10%), the state cleanup fund (10%), and federal grants (80%)
- **Cost to enter program or fees for service:** An initial fee of $6,000 is collected from each participant, although the fee is ultimately based on the actual cost of state oversight.
- **Sites Enrolled in VCP:** As of November 2010, 432 sites have been accepted into the VCP.
- **Sites Completed under VCP:** As of November 2010, 205 sites totaling approximately 3,028 acres have been completed.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

A variety of grants, loans and technical assistance are available to assist with brownfields reuse projects.
http://www.mde.state.md.us/programs/Land/MarylandBrownfieldVCP/Pages/programs/landprograms/errp_brownfields/bf_info/bffunding.aspx

INCENTIVES

Tax credits may be extended to 10 years in designated Enterprise Zones (EZs); incentive available in jurisdictions which agree to contribute 30% of the increase to the state's Brownfields Revitalization Incentive Fund.

LIABILITY RELIEF PROVISIONS

- VCP offers Certification of Completion (COC) or No Further Requirements Determination; sites contaminated after October 1, 1997, listed on the National Priorities List (NPL), or under active enforcement are not eligible.
- Maryland has strict, joint, and several liability designations, but provides for apportionment where there is a reasonable basis for determining a party's contribution. Under state law, the state program may impose liability for cleanup of substances disposed of before the date program was enacted. State has civil penalty authority up to $25,000 per violation. Punitive damages are not available.
- Through the VCP, certain purchasers who did not cause or contribute to contamination may limit their retroactive liability upon purchase of the property. Amendments effective October 1, 2004 clarify that a person who is not a "responsible person" because he meets one of the statutory exclusions is entitled to "inculpable person" status. The new law also ensures liability protection.

Program Elements

METHODS/STANDARDS/CONTROLS

VCP provides a menu of cleanup options: uniform risk-based standards; site-specific risk assessment; federal/state soil standards or water quality standards; federal/state maximum contaminant levels (MCLs); and other federal/state standards. Site-specific risk assessments follow a Risk-Based Corrective Action (RBCA)-like process.
http://www.mde.state.md.us/programs/Land/MarylandBrownfieldVCP/Pages/programs/landprograms/errp_brownfields/forms/index.aspx

CONTAMINANTS COVERED

Polychlorinated biphenyls (PCBs) and oil (as of October 1, 2004) are OK; other contaminants accepted conditionally—petroleum (not exclusively, but along with other contaminants); and paint and asbestos (as long as they comply with all other applicable laws and regulations).

INSTITUTIONAL CONTROLS (IC)

Institutional controls are allowed and are included in the No Further Requirements Determination (NFRD) or COC. The state notes that institutional controls "probably have resulted in more cleanups and more properties reused" and "also have probably lowered the cost of cleanups."

- **IC Tracking:** Institutional Controls/Land Use Controls (IC/LUCs) are tracked by the Maryland Department of the Environment's Land Restoration Program. These documents are also recorded in the land records and sent to Miss Utility. Both programs are currently engaged in updating the GIS-based website to ensure that sites with IC/LUCs are readily available to the general public.
- **IC Oversight:** When the Voluntary Cleanup Program (VCP) issues NFRDs or COCs with LUCs, the enforcement of the IC/LUC falls to the VCP through follow-up inspections.
- **IC Monitoring:** Other IC/LUCs associated with No Further Action (NFA) letters issued by the Controlled Hazardous Substance Enforcement Division are enforced by the Department and recorded with the land records.

The following Web address is a direct link to the state's public database that maintains an inventory of sites, maps sites, and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state.
http://www.mde.state.md.us/programs/Land/MarylandBrownfieldVCP/mapping/Pages/programs/landprograms/errp_brownfields/mapping/index.aspx

Program Highlights

The MDE Land Restoration Program (LRP) used Section 128(a) Response Program funding to make advances to its Geographic Information System (GIS) website. The previous website was limited in its functionality and was not adequately serving internal and external end-users' needs. The initial phase of upgrades to the website included streamlining the data structure to allow for a more user-friendly public website and data entry portal for LRP staff. The software employed in the upgrade is consistent with Governor O'Malley's iMap initiative to reduce reprogramming costs. This approach allows for the cohesive development of a public mapping site that can integrate important programmatic elements. Once the baseline mapping site is functional, LRP plans to integrate the public mapping site data directly into Maryland iMap and develop the associated Web-based mapping system such that real-time data can be available to the public through Maryland iMap.

Other Land Programs

Oil Pollution and Tank Management Programs
http://www.mde.state.md.us/programs/Land/OilControl/Pages/programs/landprograms/oil_control/index.aspx

Hazardous Waste Program
http://www.mde.state.md.us/programs/Land/HazardousWaste/HazardousWasteHome/Pages/programs/landprograms/hazardous_waste/home/index.aspx

Pennsylvania

Land Recycling and Cleanup Program

Pennsylvania Department of Environmental Protection (DEP)
P.O. Box 8471
Harrisburg, PA 17105-8471
http://www.depweb.state.pa.us (keyword "Brownfields")

Contact(s): Troy Conrad
tconrad@state.pa.us
717-783-7816

Program Overview

- Brownfields Program
- Cost to Enter the Program: Fees for services
- MOA with EPA Region 3 (April 2004)
- Liability Relief Provisions
- Brownfields Reimbursement Program
- Brownfields Development Area (BDA) Initiative

Program

Pennsylvania's Land Recycling Program—its Voluntary Cleanup Program—familiarly known as Act 2, encourages the voluntary cleanup and reuse of contaminated commercial and industrial sites. The Land Recycling Program (LRP) is built on four cornerstones that break down redevelopment obstacles: uniform cleanup standards; liability relief; standardized reviews and time limits; and financial assistance.
http://www.portal.state.pa.us/portal/server.pt/community/brownfield_redevelopment/10306

- **Funding Source(s) for the Program:** State cleanup fund provides 100% of administrative costs.
- **Cost to enter program or fees for service:** $250 for statewide health final report, background final report and site-specific reports except final; $500 for site-specific final report; no fee for Special Industrial Areas (SIA) reports; not required for regulated tank cleanups; and if combined reports are submitted, multiple fees apply.
- **Sites Enrolled in VCP:** As of December 31, 2010, 1,227 sites are currently enrolled in the program.
- **Sites Completed under VCP:** As of December 31, 2010, 3,636 sites have been completed under the program.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

A variety of grants, loans and technical assistance are available to assist with brownfields reuse projects.
http://www.portal.state.pa.us/portal/server.pt?open=514&objID=552081&mode=2

INCENTIVES

- Job Creation Tax Credit Program created a tax credit of $1,000 per new job for firms that increase employment by 25 jobs or 20% within three years from start date (with program).
- Brownfield Tax Incentive
  http://www.portal.state.pa.us/portal/server.pt?open=514&objID=552085&mode=2

LIABILITY RELIEF PROVISIONS

- Program offers relief from liability for approved cleanups and potentially responsible parties (PRP) may participate. The program identifies risk-based standards for cleanup, simplifies the approval process, and limits future liability when standards are attained.
- Pennsylvania signed a Memorandum of Agreement (MOA) with EPA in April 2004 that clarifies that sites remediated under the state LRP may also satisfy requirements under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), Resource Conservation Recovery Act (RCRA), or Toxic Substances Control Act (TSCA). This was the first One Cleanup Program MOA negotiated with EPA in the nation.

BROWNFIELDS ACTION TEAM

The Brownfields Action Team (BAT) encompasses the other facets involved with a redevelopment project other than the remediation. BAT is responsible for expediting the remediation, reclamation, reuse, and redevelopment of brownfields and abandoned mine lands for locally identified high-priority redevelopment and reuse projects. BAT may be able to shorten the permitting process by involving all DEP programs for a specific redevelopment effort as well as facilitating efforts with other state agencies. This can result in a significant savings of time and money for a project.
http://www.portal.state.pa.us/portal/server.pt?open=514&objID=552061&mode=2

Program Elements

METHODS/STANDARDS/CONTROLS

The Cleanup Standards Scientific Advisory Board assists DEP in developing cleanup standards and identifying appropriate statistical and scientific procedures.
http://www.portal.state.pa.us/portal/server.pt/community/guidance___technical_tools/10316

CONTAMINANTS COVERED

Act 2 establishes environmental remediation standards to provide a uniform framework for cleanups. The standards established under Act 2 are used for most voluntary and mandatory cleanups conducted in Pennsylvania. The three types of cleanups are background, statewide health and site-specific.

The remediator selects which cleanup standard is best suited for their remediation project. The statewide health standards are provided at the following link.
http://www.portal.state.pa.us/portal/server.pt/community/land_recycling_program/10307/statewide_health_standards/552039

INSTITUTIONAL CONTROLS (IC)

In late 2007, Act 68, the Uniform Environmental Covenants Act (UECA), was signed into law. Act 68 provides a standardized process for creating, documenting and assuring the enforceability of activity and use limitations on contaminated sites. Under UECA, an environmental covenant will be required whenever an engineering or institutional control is used to demonstrate the attainment of an Act 2 remediation standard for any cleanup conducted under an applicable Pennsylvania environmental law.
http://www.portal.state.pa.us/portal/server.pt/community/land_recycling_program/10307/uniform_environmental_covenants_act/552045

- **IC Tracking:** Environmental covenants created under the law will be recorded in county land records and in a state registry to be created by DEP.
- **IC Oversight and Monitoring:** The environmental covenants will be binding and enforceable on successive owners over time.

The following Web address is a direct link to the state's public database that maintains an inventory of sites, maps sites and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state.
http://www.pasitesearch.com

Program Highlights

With support from EPA's Section 128(a) Response Program funding, Pennsylvania held its 6th Annual Brownfields Conference in Allentown on September 28 and 29, 2010. The conference attracted local governments, community and economic development professionals, consulting firms, and state and federal environmental officials. The conference agenda reflected current areas of interest such as sustainable redevelopment, renewable energy on contaminated lands, and financial transaction opportunities in challenging economic times. The conference also featured a tour of the former Bethlehem Steel facility, generally known as the largest brownfields redevelopment effort in the country. Approximately 200 people attended the conference.

Other Land Programs

Storage Tank Cleanup Program
http://www.portal.state.pa.us/portal/server.pt/community/cleanup_program/14100

Hazardous Sites Cleanup Program
http://www.portal.state.pa.us/portal/server.pt?open=514&objID=589565&mode=2

RCRA Corrective Action Program
http://www.portal.state.pa.us/portal/server.pt/community/rcra_corrective_action_program/14075

Virginia

Virginia Department of Environmental Quality (DEQ)
Division of Land Protection and Revitalization

Brownfields and Land Renewal Program
Voluntary Remediation Program (VRP)
629 East Main Street, P.O. Box 1105
Richmond, VA 23218
http://www.deq.virginia.gov/waste/homepage.html

Program Overview

- Brownfields Program
- Cost to Enter the VRP: $5,000 or 1% of the cost of remediation
- MOA with EPA Region 3 (January 2002)
- Liability Relief Provisions
- Tax Incentives

Contact(s): Office of Remediation Programs
Durwood Willis
durwood.willis@deq.virginia.gov
804-698-4192

VRP
Kevin Greene
kevin.greene@deq.virginia.gov
804-698-4236

Brownfields
J. Meade R. Anderson, CPG
j.meade.anderson@deq.virginia.gov
804-698-4179

Program

Since 1997, Virginia has operated a program for voluntary cleanups of contaminated sites. Regulations provide a framework for selecting cleanup standards under the Voluntary Remediation Program (VRP). Eligibility is limited to sites where remediation is not clearly mandated pursuant to a federal or state regulatory program.
http://www.deq.virginia.gov/vrp

On March 12, 2004, Virginia issued an Interim Brownfields Manual. DEQ's goal in implementing the Brownfields program is to make its innovative and business oriented provisions substantive, user friendly, and timely.
http://www.deq.virginia.gov/brownfieldweb

- **Funding Source(s) for the Program:** State General Fund and federal grants
- **Cost to enter program or fees for service:** $5,000 or 1% of the cost of remediation, whichever is less.
- **Sites Enrolled in Voluntary Cleanup Program:** As of January 1, 2011, 353 sites have enrolled in the VRP.
- **Sites Completed under Voluntary Cleanup Program:** As of January 1, 2011, 217 sites have received No Further Action (NFA) Certificates.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

The Voluntary Resources Authority (VRA) is available to provide low interest loans for funding brownfields remediation projects for localities and governmental authorities across the commonwealth, through the Virginia Pooled Financing Program (VPFP) and the Virginia Water Facilities Revolving Fund (VWFRF).

INCENTIVES

Defines environmental restoration sites holding Certification of Satisfactory Completion of Remediation (Certificate) as a separate class of property and allows local governments to adopt an ordinance partially or fully exempting that class from taxation.
http://www.deq.virginia.gov/vrp/tax.html

LIABILITY RELIEF PROVISIONS

Virginia's brownfields law protects bona fide prospective purchasers (BFPP) and innocent landowners from having to conduct containment or cleanup under Virginia's air, water, and waste laws at a brownfield site if they meet the statutory definitions and the additional requirements in the statute.
http://www.deq.virginia.gov/export/sites/default/brownfieldweb/documents/BROWNFIELDS_MANUAL-BC-12-29-2009.pdf

Program Elements

METHODS/STANDARDS/CONTROLS

The Program uses a Risk-Based Corrective Action (RBCA) process that utilizes institutional controls and engineering controls recorded with the deed for the property. Applicants have a choice of remediation standards: Tier I (background), Tier II (look-up values adopted/modified from EPA standards), or Tier III (risk-based, including institutional controls). Tier III may also include a site-specific risk assessment based on methodology derived from the Risk Assessment Guidance for Superfund.
http://www.deq.virginia.gov/vrprisk

CONTAMINANTS COVERED

Petroleum and polychlorinated biphenyls (PCBs) can be addressed by VRP, if not regulated under another program.
http://www.deq.virginia.gov/vrp/guidance.html

INSTITUTIONAL CONTROLS (IC)

Institutional controls are allowed; however, Virginia does not have a long-term stewardship program for its state cleanup program or for its Voluntary Cleanup Program. UECA laws went into effect in July 2010; regulations under development.

The following Web address is a direct link to the state's public database that maintains an inventory of sites, maps sites, and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state.
http://www.deq.virginia.gov/brownfieldweb/brnsites.html
http://www.deq.state.va.us/vrp/public.html

SITE SPECIFIC ASSESSMENT (SSA)

The Brownfields Program recently worked with six localities to complete Phase I and Phase II Environmental Site Assessments or further characterization of existing properties in order to facilitate property sales, purchases and/or redevelopments. The Program is now working with nine additional localities on future subgrants.

ACCELERATED DRY CLEANER PROCESS (ADCRP)

The purpose of the ADCRP is to streamline the site characterization and risk analysis of VRP dry cleaning sites, as well as to accelerate the implementation of appropriate remedial systems that adequately address environmental impacts in commercial buildings resulting from dry cleaning operations. The program is most applicable to sites without offsite contamination, and relies on self-certification of characterization and remediation by the participants.

Program Highlights

The City of Lynchburg is continuing its work at the former Allen Morrison facility. The property has a long history of contamination and was abandoned in 1998. The city enrolled the property in the Virginia Brownfields and Voluntary Remediation Programs, and the Virginia Department of Environmental Quality (DEQ) used Section 128(a) Response Program funding to conduct additional assessment activities. Demolition and deconstruction activities including asbestos abatement are now being conducted at the property. The city plans to transform the property into a recreational facility and will continue to provide opportunities for public input into the development of the master revitalization plan. The city is filming the project work and community meetings for a documentary on the project. The documentary, titled Brownfields to Green Fields: The Allen Morrison Project is available on the city's website at: http://www.lynchburgva.gov/Index.aspx?page=4590. The city also continues to document their "Fields of Opportunity" work on their website.

The City of Roanoke continues to redevelop the area known as South Jefferson, which just a few years ago consisted of underutilized, often blighted industrial properties and scrap yards along the Roanoke River. Initial work focused on redeveloping individual properties, and as momentum grew, a synergy was created. Virginia's VRP and Brownfields Programs have been heavily involved in this redevelopment—working with VRP project management; and utilizing SSA sub grants, BFPP liability letters, and EPA Brownfields grants in order to facilitate the revitalization of this area.
http://www.epa.gov/reg3hwmd/bf-lr/newsletter/2010-Winter/03-scrapstoscrubs.html

Other Land Programs

VA DEQ Division of Land Protection & Revitalization
http://www.deq.state.va.us/waste/homepage.html

West Virginia

Voluntary Remediation Program (VRP)

West Virginia Department of Environmental Protection (DEP)
Division of Land Restoration
601 57th Street, SE
Charleston, WV 25304-2345
http://www.dep.wv.gov/dlr/Pages/default.aspx

Contact(s): Ken Ellison
Ken.W.Ellison@wv.gov
304-926-0455

Program Overview

- Cost to Enter the Program: Fee is calculated according to the size of property
- Liability Relief Provisions
- Licensed Remediation Specialists (LRS) Program
- Brownfields Assistance Centers

Program

The Voluntary Remediation and Redevelopment Act (VRRA) encourages voluntary remediation and redevelopment through an administrative program set out in the West Virginia Code of State Regulations, Title 60, Series 3 entitled the Voluntary Remediation and Redevelopment Rule (the Rule), which became effective on July 1, 1997. The VRRA limits enforcement actions by DEP, provides financial incentives to entice investment in brownfield sites, and limits liability under environmental laws and rules for those who remediate sites under the standards provided in the Rule.
http://www.dep.wv.gov/dlr/oer/voluntarymain/Pages/default.aspx

- **Funding Source(s) for the Program:** State General Fund and federal grants
- **Cost to enter program or fees for service:** Fee is calculated according to the size of property.
- **Sites Enrolled in VCP:** As of November 2010, 193 sites have entered the Voluntary Remediation Program (VRP).
- **Sites Completed under VCP:** As of November 2010, 85 Certificates of Completion (COC) have been issued.

Financial Elements

LIABILITY RELIEF PROVISIONS

- The VRP offers Certificates of Completion (COC) that provide liability relief.
- Any person demonstrating compliance with the applicable standards whether by remediation or where the site assessment shows that the contamination at the site meets applicable standards, shall be relieved of further liability for the remediation of the site. Contamination identified in the remediation agreement submitted to and approved by the DEP shall not be subject to citizen suites or contribution actions.

LICENSED REMEDIATION SPECIALIST (LRS) PROGRAM

Under the VRRA, Licensed Remediation Specialists (LRS) are required to supervise activities during cleanups pursuant to VRRA.
http://www.dep.wv.gov/dlr/oer/voluntarymain/lrs/Pages/LRS.aspx

BROWNFIELDS REDEVELOPMENT AUTHORITIES (OR SIMILAR)

Brownfields Assistance Centers – Many small communities in rural West Virginia do not have the staff or technical expertise to undertake brownfields redevelopment projects on their own. The West Virginia Brownfields Assistance Centers, located at West Virginia University and Marshall University, were created to empower communities to plan and implement brownfields redevelopment projects. The Brownfields Assistance Centers are available to assist local governments, nonprofits, prospective developers and other stakeholders navigate the brownfields redevelopment process in West Virginia.
http://www.wvbrownfields.org

Program Elements

METHODS/STANDARDS/CONTROLS

Risk assessment is used to make two important decisions about what is done at sites in the VRP. First, risk assessment is used to decide whether a site needs to be cleaned up to reduce risk to human health. Second, if cleanup is needed, risk assessment helps determine how much cleanup is needed.
http://www.dep.wv.gov/dlr/oer/voluntarymain/Documents/Risk%20Assessment%20Guide.pdf

CONTAMINANTS COVERED

No exclusions.

INSTITUTIONAL CONTROLS (IC)

DEP established by rule the criteria for deed recordation of land-use covenants and contains all necessary deed restrictions. DEP causes all land-use covenants to appear in the chain of title by deed and be recorded properly in the office of the county clerk where the site is located. If institutional and engineering controls are used, in whole or in part, to achieve a remediation standard, DEP directs that a land-use covenant be applied.

- **IC Tracking:** The Office of Environmental Remediation is continuing to work with the Information Technology (IT) and Geographic Information System (GIS) sections of DEP to complement the VRP sites on the agency's interactive mapper with the development of links to the recorded Land Use Controls (LUC) so that they may be reviewed online or downloaded by interested parties.
- **IC Oversight:** Effective January, 2008 DEP implemented a policy requiring an inspection and reporting paragraph be inserted in all future recorded land-use covenants, requiring self-inspection of the restrictions contained in the LUC, and submittal of the inspection report to the agency by the property owner. The frequency of the inspection is dependent upon the restrictions imposed by the LUC, but in no case less frequent than once per year.
- **IC Monitoring:** DEP is a member of the MISS Utility of West Virginia, the one-call system for notification regarding excavation activities as potentially related to recorded LUCs. For the period of calendar year 2008, DEP received 712 notifications of excavation activities for sites within the MISS Utility grid network and for January through July 2009 received 685. Each notification received is forwarded to the respective project manager for review and follow-up as appropriate. Project managers also conduct routine inspections of VRP sites with LUCs.

The following Web address is a direct link to the state's public database that maintains an inventory of sites, maps sites and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state.
http://gis.dep.wv.gov/imap/index.html

DEP established an Institutional Controls Focus Group to provide an independent perspective to DEP about the feasibility of utilizing a public-private land stewardship program for the long-term safeguarding of remediated sites using ICs and engineering controls (ECs) (collectively, IECs) to ensure that the remedy remains protective of human health and the environment. The WV Institutional Controls Focus Group Interim Report can be found at:
http://www.dep.wv.gov/dlr/oer/voluntarymain/Pages/default.aspx.

Program Highlights

The West Virginia Brownfield Assistance Centers (BACs) at Marshall University and West Virginia University created the FOCUS WV mini-grant program, funded through a private foundation, in order to provide project assistance. West Virginia Department of Environmental Protection used Section 128(a) Response Program funding to assist the BACs with the conference. There are 32 active FOCUS projects which are showcased at the Annual West Virginia Brownfields Conference. The conference attendance has attracted over 200 participants in recent years. It has keynote speakers ranging from the Governor, Congressional representatives, and top business and community leaders; it is the premiere state event for networking amongst brownfields redevelopment professionals.



Congresswoman Shelley Moore Capito and Benedum Foundation Program Officer Mary Hunt-Lieving Present One of Four FOCUS WV Grants at the Conference

Other Land Programs

Leaking Tank Program
http://www.dep.wv.gov/dlr/oer/lustmain/Pages/default.aspx

Superfund Program
http://www.dep.wv.gov/dlr/oer/superfund/Pages/default.aspx

EPA Region 4

Alabama

Brownfields Redevelopment and Voluntary Cleanup Program (VCP)

Alabama Department of Environmental Management (ADEM)
Land Division
1400 Coliseum Boulevard
Montgomery, AL 36110-2059
http://www.adem.state.al.us/programs/land/default.cnt

Contact(s): Larry Norris, *Chief - Redevelopment Section*
334-279-3053
lan@adem.state.al.us

Program Overview

- Brownfields Program
- Cost to Enter the Program: $2,360
- Oversight Fees
- Liability Relief Provisions
- Revolving Loan Fund
- Tax Incentives

Program

Alabama's Brownfields Redevelopment and Voluntary Cleanup Program present municipalities and developers with a wealth of opportunities and information. Reclaiming contaminated or unused sites and creating valuable, profitable and environmentally sound property benefits every member of the community.
http://www.adem.state.al.us/programs/land/brownfields.cnt

- **Funding Source(s) for the Program:** Federal grants (95%) and Alabama Land Recycling and Economic Redevelopment Act (ALRERA) fees
- **Cost to enter program and fees for service:** All applicants must pay a non-refundable application fee of $2,360. Various designated programmatic fees cover state oversight costs.
- **Sites Enrolled in VCP:** As of January 2011, 91 sites are enrolled in the VCP.
- **Sites Completed under VCP:** As of January 2011, 223 sites have successfully completed requirements of the VCP and received Letters of Concurrence (no further action letters).

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

A variety of grants, loans and technical assistance are available to assist with brownfields reuse projects.

- Industrial grants of up to $375,000 can be adapted for brownfields purposes.
- EPA-capitalized Brownfields Revolving Loan Fund (RLF) targeted to counties and municipalities.
  http://www.adem.state.al.us/programs/land/brownfields/bfredevelopment.cnt

INCENTIVES

Tax credits and incentives are available, including the environmental cleanup deduction which allows businesses to deduct the qualified cleanup cost of hazardous substances in certain areas (brownfields) in the tax year the business pays or insures the cost.

LIABILITY RELIEF PROVISIONS

Program incentives include letters of concurrence providing limited liability protection for owners and operators and broad liability protection for prospective purchasers, lenders and clean-hands parties after the receipt and review of a compliance certification.

Program Elements

METHODS/STANDARDS/CONTROLS

Formal Risk-Based Corrective Action (RBCA) process is in place; state uses Alabama Risk-based Corrective Action Guidance and background information using the residential numbers for soil and below Maximum Contaminant Levels (MCLs) for ground water, at sites not using institutional controls.

CONTAMINANTS COVERED

Program covers all types of contaminants and pollutants including, petroleum, asbestos, lead paint, and polychlorinated biphenyls (PCBs).

INSTITUTIONAL CONTROLS (IC)

Alabama has a long-term stewardship program for its state voluntary, brownfields and Resource Conservation and Recovery Act (RCRA) sites.

- **IC Tracking:** A MS Excel database is used to track institutional and engineering controls at cleanup sites as part of the voluntary and brownfields programs, and will be adapted to other programs. Environmental covenants are required by law for sites not returned to an unrestricted use scenario.
- **IC Oversight and Monitoring:** Sites using institutional controls are addressed through a site-specific risk assessment and have a longer term enabling mechanism (covenant) to ensure that institutional controls are maintained.

ENVIRONMENTAL COVENANTS

All sites remediated to less than unrestricted use standards are required to have an environmental covenant giving a description of the property, types of contaminants remaining onsite, and the use restrictions placed on the property.

The following Web address is a direct link to the state's public database that maintains an inventory of sites, maps sites and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state.
http://www.adem.state.al.us/programs/land/landforms/128Spreadsheet.htm

Program Highlights

Located one block west of downtown Anniston, the 22-acre Chalkline, Inc. mill began operation as the Anniston Manufacturing Company in 1888 and closed in 1994. After the facility closed, the property was sold and the buildings were deconstructed, creating a significant scar of debris and rubble on the landscape. The city bought the property and the Alabama DEM used Section 128(a) Response Program funds to conduct assessment activities at the property. The city was then awarded an EPA Brownfields Cleanup grant and an Appalachian Regional Commission (ARC) grant. With remedial activities slated to be complete in 2011, construction is planned for a new Department of Human Resources building. In addition, a section of Snow Creek near the south end of property that has been channeled for over 100 years will be restored to a free flowing stream. The 33-mile Chief Ladiga Trail, built on abandoned railway rights-of-way, will be extended six miles from the Town of Weaver to the former mill property. And, a new federal courthouse will be constructed at the former auto parts repair property adjacent to the Chalkline property. Local officials believe that these brownfields projects will spur other public and private revitalization efforts in the downtown Anniston area.



Artist's Rendition of the Redevelopment Area

Other Land Programs

Underground Storage Tanks (UST) Program
http://adem.alabama.gov/programs/water/groundwater.cnt

Superfund Program
http://www.adem.state.al.us/programs/land/remediationCleanup.cnt

Florida

Brownfields Redevelopment Program

Florida Department of Environmental Protection (DEP)
Division of Waste Management
2600 Blair Stone Road
Tallahassee, FL 32399-2400
http://www.dep.state.fl.us/waste

Contact(s): Kim Walker, *Brownfields Program Manager*
kim.walker@dep.state.fl.us
850-245-8934

Program Overview

- Brownfields Program
- Cost to Enter the Program: No Fee
- MOA with EPA Region 4 (October 2005)
- Liability Relief Provisions
- Tax Incentives

Program

The primary goals of the Brownfields Redevelopment Act are to reduce public health and environmental hazards on existing commercial and industrial sites that are abandoned or underused due to these hazards; create financial and regulatory incentives to encourage voluntary cleanup and redevelopment of sites; derive cleanup target levels and a process for obtaining a "No Further Action" letter using Risk-Based Corrective Action principles; and provide the opportunity for Environmental Equity and Justice.
http://www.dep.state.fl.us/waste/categories/brownfields/default.htm

- **Funding Source(s) for the Program:** State General Fund
- **Cost to enter program or fees for service:** There is no fee to enter the Florida Brownfields Redevelopment Program. Sites that enter the program and that choose to apply for the annual Voluntary Cleanup Tax Credit must submit a $250 fee with each annual tax credit application. There is no fee for sites that choose to conduct voluntary cleanup outside the Brownfields Redevelopment Program.
- **Sites Enrolled in Brownfields Program:** As of January 2011, 155 sites have voluntarily entered into brownfield site rehabilitation agreements with the Department of Environmental Protection (DEP).
- **Sites Completed under Brownfields Program:** As of November 2010, 46 sites have been issued final Site Rehabilitation Completion Orders ("No Further Action" letters) from DEP since the start of the program.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

A variety of grants, loans and technical assistance are available to assist with brownfields reuse projects.
http://www.dep.state.fl.us/waste/categories/brownfields/pages/economic_incentives.htm#State

INCENTIVES

- State sales tax credit on building materials (purchased on or after July 1, 2000) used for the construction of a redevelopment project (e.g., housing or mixed-use project) located in urban high crime area, enterprise and empowerment zones, Front Porch Communities, and designated brownfields or urban infill area.
- Job Bonus Refund – up to $2,500 for each new job created in a brownfields area by an eligible business. The job bonus refund is available to companies that create new jobs at any site within a designated brownfields area. A company may qualify for the job bonus refund if the new business is a qualified target industry (QTI) in Florida or if the new business makes a capital investment of at least $2,000,000, and creates at least 10 jobs.
- Tax credit (corporate income) of 50% on voluntary cleanup activity that is integral to site rehabilitation, with a maximum of $500,000 in tax credits, per site per year. The annual tax credit authorization is $2,000,000. The Voluntary Cleanup Tax Credit program has issued a total of $15,523,651.53 in tax credits since inception of the program in 1998.
- Loan guarantee program provides limited guarantees for up to five years on the primary lender's financing for qualified redevelopment projects in brownfields areas.
- Other economic incentives, such as those associated with the Florida's Enterprise Zone program, may be combined with brownfields incentives to create additional leverage for redevelopment projects.
- Local option sales surtax exemptions are available for sales made in urban infill and redevelopment areas.
http://www.dep.state.fl.us/waste/categories/brownfields/pages/economic_incentives.htm#State

LIABILITY RELIEF PROVISIONS

Under the Brownfields Redevelopment Program (as amended) non-responsible parties and certain responsible parties may receive liability protection from state and third party claims. Liability protection is provided for lenders serving in a fiduciary capacity on any site in a brownfields area. Nonprofit conservation organizations that purchase contaminated sites and are acting in the public interest also receive liability protection. When no further action at the brownfield site is approved the state issues a Site Rehabilitation Completion Order ("No Further Action" letter).
http://www.dep.state.fl.us/waste/categories/brownfields/pages/economic_incentives.htm#State

Program Elements

METHODS/STANDARDS/CONTROLS

A Risk-Based Corrective Action (RBCA) process is in place that establishes default cleanup target levels for residential and commercial/industrial scenarios, and provides additional flexibility in managing risk through use of site-specific risk assessment and appropriate institutional and engineering controls.
http://www.dep.state.fl.us/waste/categories/brownfields/pages/LawsandRules.htm

CONTAMINANTS COVERED

All contaminants are accepted including petroleum and polychlorinated biphenyls (PCBs).

INSTITUTIONAL CONTROLS (IC)

Institutional controls are key to a RBCA approach and are allowed in all cleanup program areas. The property owner must agree to the use of an institutional control such as a deed restriction or restrictive covenant on the property if an engineering control is the selected remedy.
IC Tracking: DEP maintains a tracking system that tracks the use of institutional controls at sites. It is available online for public users.
IC Oversight and Monitoring: Institutional controls are audited by DEP every five years. The following Web address is a direct link to the state's public database that maintains an inventory of sites, maps sites and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state.
http://www.dep.state.fl.us/waste/categories/brownfields/pages/ICR.htm

Program Highlights

Originally developed and operated as a cannery from 1936 until 1981, the site of Florida's newest IKEA store had been characterized by local media as a "gritty industrial site between the Port of Tampa and Ybor City." Panattoni Development purchased the property in 2005 and entered the Florida Brownfields Redevelopment Program in 2007. IKEA purchased the property in 2008 from Panattoni after most of the environmental remedial work was complete and opened the store in May 2009. The environmental issues associated with the property were managed by removal of underground storage tanks, railroad tracks, and contaminated soil and the use of engineering and institutional controls. The redeveloped 29-acre site now contains a 353,000 square foot store, a 350-seat restaurant and approximately 1,700 parking spaces. The IKEA project created 500 construction jobs and 400 new, in-store jobs. The presence of the IKEA store is expected to be a catalyst for additional redevelopment in the area.



New IKEA Store Located Adjacent to Hstoric Ybor City and Within the Adamo Corridor

Other Land Programs

Petroleum Cleanup Program
http://www.dep.state.fl.us/waste/categories/pcp/default.htm

Drycleaning Solvent Cleanup Program
http://www.dep.state.fl.us/waste/categories/drycleaning/default.htm

Superfund Program
http://www.dep.state.fl.us/waste/categories/wc/pages/cleanup/pages/nplsites.htm

Georgia

Brownfields Program

Georgia Department of Natural Resources (DNR)
Land Protection Branch
2 Martin Luther King Jr. Drive SE
Suite 1154 East Tower
Atlanta, GA 30334
http://www.gaepd.org/Documents/index_haz.html

Contact(s): Madeleine Kellam
Madeleine_Kellam@dnr.state.ga.us
404-656-7802

Program Overview

- Brownfields Program
- Cost to Enter the Program: $3,000
- Liability Relief Provisions
- Tax Incentives

Program

Georgia's Brownfields Program was created in 2002, upon passage of the Hazardous Site Reuse and Redevelopment Act. The program encourages reuse of contaminated properties by granting broad liability relief for innocent prospective purchasers of properties with known releases of hazardous constituents or petroleum. In exchange for cleanup of contaminated soil and source material, qualified prospective purchasers are not liable to the state or to third parties for damages resulting from the pre-existing release, nor are they required to clean up ground water. Georgia also offers property tax relief for recovery of certified costs for brownfields investigation and cleanup.
http://www.gaepd.org/Documents/vrp.html and http://www.gaepd.org/Documents/brownfields.html

- **Funding Source(s) for the Program:** Federal grants (100%)
- **Cost to enter program or fees for service:** A non-refundable $3,000 application review fee is required to participate in the program. Additional fees may be invoiced if the review costs exceed the initial fee.
- **Sites Enrolled:** As of January 2011, 345 properties were enrolled in the program; 18 of these were subsequently withdrawn.
- **Sites Completed:** As of January 2011, 174 properties completed cleanup under the program or certified compliance following site investigation under program oversight.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

No monetary grants or loans are provided for under the program; however, a limited amount of direct assistance, in the form of Targeted Brownfields Assessment, is provided to eligible entities subject to state criteria and available funds.

INCENTIVES

Tax abatement provisions are available for recovery of certified investigation and cleanup costs at qualifying properties.
http://www.gaepd.org/Files_PDF/outreach/BFTax.pdf

LIABILITY RELIEF PROVISIONS

The Hazardous Site Reuse and Redevelopment Act (Brownfields Act) (OCGA §12-8-200, as amended) provides liability relief (from third-party and ground water cleanup liability) for qualified prospective purchasers of contaminated property who voluntarily agree to remediate soil and source material to promulgated risk reduction standards.
http://www.gaepd.org/Files_PDF/outreach/BFGALeg.pdf

Program Elements

METHODS/STANDARDS/CONTROLS

Risk reduction standards promulgated under the Georgia Hazardous Site Response Act (the state Superfund statute) are used to determine compliance with cleanup requirements under the Brownfields Program. These risk-based standards provide four options for cleanup, all of which are designed to protect human health and prevent degradation of ground water quality: 1) standardized residential; 2) site-specific residential; 3) standardized non-residential; and 4) site-specific non-residential. For sites where these four standards cannot be applied, a fifth option provides for control measures (institutional controls, engineering controls, and or monitoring, as appropriate) to be maintained.

CONTAMINANTS COVERED

Hazardous constituents and petroleum are covered.

INSTITUTIONAL CONTROLS (IC)

Georgia has promulgated institutional controls provisions for brownfield sites that are on the state Superfund list and that have not certified compliance with a residential risk reduction standard for soil and ground water. In addition, Georgia has enacted a Uniform Environmental Covenants Act to establish an additional mechanism for creating and maintaining engineering and institutional controls.
http://www.gaepd.org/Documents/uec.html

- **IC Tracking:** For non-listed brownfields properties (which do not have such regulatory requirements) Georgia uses Response Program Grant funding to inspect, monitor and track institutional controls. A database to capture all institutional controls has been developed under the Response Program Grant. Georgia's brownfields statute contains provisions for revocation of the limitation of liability for failure to conduct approved cleanups or failure to abide by land-use controls embodied in the certification of compliance with risk reduction standards.
- **IC Oversight:** Oversight and technical review is provided by environmental engineers and geologists under both the Brownfields and Hazardous Site Response Programs.
- **IC Monitoring:** Monitoring is required when dictated by statute, (i.e., at Hazardous Site Inventory (HSI)-listed sites and at sites that rely on long-term stewardship/institutional controls).

The following Web address is a direct link to the state's public Brownfields database that maintains an inventory of brownfields and/or tracks institutional controls.
http://www.gaepd.org/Files_PDF/outreach/BFList.pdf

The following Web address is a direct link to the state's public database that maintains an inventory of state Superfund sites, maps sites and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state.
http://www.gaepd.org/Documents/hazsiteinv.html

Program Highlights

The City of Atlanta has begun construction on a massive brownfields redevelopment project that will transform a 22-mile loop of in-town rail into a linear greenway linking parks, trails, neighborhoods and local businesses. The Atlanta BeltLine was first proposed in a Master's thesis by Georgia Tech graduate student Ryan Gravel. The BeltLine gained immediate interest and citizen support, and over the years it has grown to include transit, parks, trails, neighborhood preservation and revitalization, affordable housing, and brownfields cleanup and revitalization. The Atlanta BeltLine is named after the loop of freight rail that encircled the city prior to the Civil War. The tracks once served the industries clustered at the core of the city, but as Atlanta expanded and industries gravitated to the outlying areas most fell into disuse. The abandoned rail corridor is itself, a brownfield, but many adjacent properties that once housed industry are also contaminated. The 6,500 acres that will eventually comprise the BeltLine and its associated parks and approach corridors include an estimated 1,100 brownfield acres. Both state and federal brownfields programs provide assistance to the Beltline. As Atlanta Beltline, Inc. (the development agency charged with making the project a reality) acquires individual properties for the project, the Georgia Brownfields Program provides assistance in identifying and assessing environmental impacts. Contaminated parcels enrolled in the Georgia Brownfields Program are eligible for liability protection, and where necessary, cleanup is conducted with oversight by the state. Cleanup is funded, in part, by EPA, which awarded the city a $1,000,000 Brownfields Revolving Loan Fund grant for cleanup along the BeltLine.

Other Land Programs

Hazardous Site Cleanup
http://www.gaepd.org/Documents/epdforms_hwb.html#cleanup
http://www.gaepd.org/Documents/vrp.html

Underground Storage Tanks Program
http://www.gaepd.org/Documents/techguide_lpb.html#ust

Kentucky

Kentucky Brownfield Redevelopment Program
Kentucky Division of Compliance Assistance
300 Fair Oaks Lane
Frankfort, KY 40601
http://dca.ky.gov/brownfields

Contact(s): Herb Petitjean
Herb.Petitjean@ky.gov
800-926-8111

Program Overview

- Brownfield Redevelopment Program
- Notice of Completion Letter available for no charge (at present)
- Covenant Not to Sue available. Fee and reimbursement for expenses required, but may be waived in certain circumstances.
- Liability Relief Provisions
- Negotiations in progress with EPA Region 4 towards an MOA
- Tax Incentives

Program

The Kentucky Brownfield Program seeks to help redevelop and revitalize properties that are abandoned or underutilized due to real or perceived contamination. There are an estimated 8,000 brownfields across the state. They include sites such as old gas stations, mine-scarred lands, abandoned factories, old schools and hospitals, and meth labs. The program offers comprehensive services to help with these problem properties.
http://dca.ky.gov/brownfields

- **Funding Source(s) for the Program:** State Hazardous Waste Management fund and federal grants
- **Cost to enter program or fees for service:** No cost at present for cleanup utilizing informal program and leading to Notice of Completion letter. Entry into the Voluntary Environmental Remediation Program (VERP), which leads to Covenant Not to Sue, is $1,000 to $2,500 based on acreage plus any oversight costs beyond that. Fees may be waived in certain circumstances.
- **Sites Enrolled in VCP:** As of January 2011, two properties are in the VERP. The other, less formalized program, remains available and is actively utilized by the majority volunteers.
- **Sites Completed under VCP:** As of November 2010, no sites have been completed under the VERP. Kentucky's Superfund program has addressed approximately 4,000 sites under the less formal process.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

A limited number of free assessments are available each year to qualified local governments and nonprofits. Technical assistance, including help with identifying and applying for potential funding, is available to both public and private sector entities.
http://dca.ky.gov/brownfields/Pages/Funding.aspx

INCENTIVES

Kentucky offers property tax incentives and income tax credits to individuals or businesses that complete a cabinet-approved cleanup on a qualified property.
http://dca.ky.gov/brownfields/Pages/TaxIncentives.aspx

LIABILITY RELIEF PROVISIONS

Kentucky law offers liability defenses for bona fide prospective purchasers, contiguous property owners and innocent landowners. The requirements for these defenses are the same as under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA). Volunteers may apply to obtain a Covenant Not to Sue (CNTS) under VERP.
http://dca.ky.gov/brownfields/Pages/Liability.aspx

Kentucky has entered into Memoranda of Agreement (MOA) negotiations with EPA that would provide federal liability protection for qualified properties that have been addressed under the state cleanup program.

BROWNFIELDS REDEVELOPMENT AUTHORITIES (OR SIMILAR)

- The Kentucky Housing Corporation is establishing a program to assist qualified persons and families of lower and moderate income to help defray the cost of assessment and decontamination of methamphetamine contamination of inhabitable properties. A person shall not be eligible for the program if convicted of a felony or found by the corporation to be responsible for contamination of the relevant property through methamphetamine (meth) production.
- Duke Energy and E.ON U.S. (Louisville Gas and Electric and Kentucky Utilities) have programs that offer reduced electrical rates for companies that redevelop on qualified brownfields.

Program Elements

METHODS/STANDARDS/CONTROLS

State Superfund statute provides four cleanup options: (1) Proving that no action is required; (2) Proving that site/release can be managed with engineering/institutional controls; (3) Removal; (4) Any combination of the above (options #1, #2, and/or #3).

Kentucky currently uses the 2002 EPA Region 9 Preliminary Remediation Goals, and accompanying guidance, for screening. Legislation has been introduced in the 2011 Regular Session of the Kentucky General Assembly to replace this with the current EPA Region 3 Screening Level Table.

CONTAMINANTS COVERED

Petroleum and polychlorinated biphenyls (PCBs) are covered, but petroleum releases are not eligible for CNTS if they fall under the Underground Storage Tank (UST) program. Asbestos and lead paint are covered if released in the environment and not part of a structure.

Kentucky has contractor certification requirements and guidance for decontamination of meth labs in inhabitable properties.

INSTITUTIONAL CONTROLS (IC)

Kentucky adopted legislation that mirrors the Uniform Environmental Covenant Act. Kentucky Revised Statutes (KRS) 224.80-100 to 210 provide greater assurance that protective measures remain in place at properties where contamination is being managed onsite.

- **IC Tracking, Oversight, and Monitoring:** The party or applicant shall conduct annual (or other approved frequency) inspections of the engineering and institutional controls and shall make annual (or other approved frequency) certification to the cabinet that the controls remain protective of human health, safety and the environment. In accordance with KRS 224.01-400 (17), a review of environmental conditions at sites that have not been restored or remediated shall be conducted every five (5) years to determine if additional action is necessary to protect human health or the environment.

Program Highlights

"Imagine what you want your community to look like in the future. Now draw it!" Those were the instructions given to a group of citizens who attended a community visioning session in Frankfort. The method used in the Frankfort visioning session was an abbreviated version of the Vision-to-Action process developed by EPA and the U.S. Army Corps of Engineers that has been used across the country. This session was a cooperative effort featuring the Kentucky Brownfields Redevelopment Program, the City of Frankfort, KY Excellence in Environmental Leadership (EXCEL) members, and other brownfields stakeholders. At the session, each attendee drew its vision and presented it to the group. The group then integrated the images and developed a collective vision. After discussing resources and how they can move their communities to action, the end result of the process was a series of drawings that helped communicate a shared community revitalization goal and vision.



The Collective Results of Community Visioning

Other Land Programs

Underground Storage Tanks Branch
http://waste.ky.gov/UST/Pages/default.aspx

Methamphetamine Lab Cleanup
http://waste.ky.gov/SFB/MethLabCleanup/Pages/default.aspx

Superfund Branch
http://waste.ky.gov/SFB/Pages/default.aspx

Mississippi

Mississippi Brownfield Program

Mississippi Department of Environmental Quality (MDEQ)
Ground Water Assessment and Remediation Division
P.O. Box 10385
Jackson, MS 39289-0385
http://www.brownfield.ms

Contact(s): Trey Hess, *Brownfield Coordinator*
Trey_Hess@deq.state.ms.us
601-961-5654

Program Overview

- Brownfield Program
- Cost to Enter the Program: $2,000 plus $100/hour oversight, waived for Cities/ Counties
- Liability Relief Provisions
- Tax Incentives

Program

The Groundwater Assessment and Remediation Division (GARD) is responsible for the assessment and remediation of contaminated sites in the State of Mississippi.
http://www.brownfield.ms

- **Funding Source(s) for the Program:** State Brownfield Cleanup and Redevelopment Trust Fund, State General Fund, Voluntary Evaluation Program Trust Fund, and federal grants
- **Cost to enter program or fees for service:** At the time an application is filed, the applicant agrees to pay the Mississippi Department of Environmental Quality (MDEQ) all reasonable and direct costs associated with the administration of the application at the rate of $100/hour.
- **Sites Enrolled in VCPs:** As of November 2010, 183 sites are currently enrolled in MS Response Programs.
- **Sites Completed under VCPs:** As of November 2010, 616 sites have been completed under MS Response Programs.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

- MDEQ conducts limited assessments for eligible entities on a competitive basis for brownfields projects. EPA Section 128(a) Response Program funding to MDEQ is used for environmental assessments at brownfield sites throughout the State of Mississippi under the Targeted Brownfield Assessment Program.
  http://bit.ly/MDEQ-TBA
- The Brownfield Voluntary Cleanup and Redevelopment Incentives Act expands eligible projects for financial assistance under the Local Governments Capital Improvements Revolving Loan Program to include remediation of brownfield sites; cities and counties may apply for a low interest loan through the Mississippi Development Authority (MDA) to remediate a brownfield site.
  http://bit.ly/MDACAP

INCENTIVES

The Brownfield Voluntary Cleanup and Redevelopment Incentives Act provides an income tax credit for a property owner equal to 25% of the costs of remediating a brownfields property, with the annual credit capped at $40,000, and the total credit not to exceed $150,000. Any unused portion of the tax credit may be carried over into succeeding tax years. In lieu of the state income tax credit, the property owner may claim a job tax credit for each new employee created as a result of the cleanup and redevelopment of a brownfield site.
http://bit.ly/MS-Brownfield-Tax-Credit

LIABILITY RELIEF PROVISIONS

Brownfields parties who execute a Brownfield Agreement shall be relieved of liability to all persons, including MDEQ (other than the United States) for remediation of the Brownfield Agreement site other than the remediation required by the Brownfield Agreement, and all costs reasonably related to the remediation other than the remediation costs required by the Brownfield Agreement or the regulations. For sites cleaned up to unrestricted levels, a No Further Action letter is issued.
http://bit.ly/MS-Code-49-35-15

Program Elements

METHODS/STANDARDS/CONTROLS

MDEQ uses a three tiered risk-based approach to remediation. Tier 1 evaluation compares site-specific data to a table of chemical-specific Target Remediation Goals (TRG). Tier 2 provides the applicant the option of performing a more in-depth evaluation of site-specific conditions to develop site-specific Remediation Goals (RG). Tier 3 is a site-specific risk assessment to evaluate the potential human health and ecological risks at the site that will result in the development of site-specific RGs. Institutional controls play a major role in Tier 2 and Tier 3 assessments.
http://bit.ly/MDEQ-Risk-Evaluation-Procedures

CONTAMINANTS COVERED

Hazardous Substances, asbestos, lead paint, polychlorinated biphenyls (PCBs), and petroleum are covered.

INSTITUTIONAL CONTROLS (IC)

The Mississippi Uniform Environmental Covenants Act (MUECA), Miss. Code Ann. § 89-23-1, et. seq. (Rev. 2008) is in effect for the purpose of subjecting the site to the activity and use limitations.

- **IC Tracking, Oversight, and Monitoring:** The state tracks and monitors institutional controls with an online database located at: http://list.brownfields.ms

The following Web address is a direct link to the state's public database that maintains an inventory of sites, maps sites and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state.
http://list.brownfields.ms

Program Highlights



Artist's Rendering of the Holt Collier Environmental Interpretative and Education Center

The highly visible Red Barn on U.S. 61 South of Rolling Fork, Mississippi has been selected as the site of the $6.0 million Holt Collier Environmental Interpretative and Education Center. Because of its proximity to the Holt Collier and Theodore Roosevelt bear hunting site in Sharkey County, the site was selected by local stakeholders with the help of the U.S. Army Corps of Engineers (USACE). Roosevelt hunted the Mississippi Delta at least twice, with one occasion giving rise to the Teddy Bear after a newspaper cartoon depicted Roosevelt declining to shoot a cub. Collier, a former slave, Confederate soldier and noted outdoorsman, guided the president on the hunt. The 33-acre Rolling Fork site also was home to a Native American village during the 1300s and 1400s. The leadership of MDEQ staff, the property owner and USACE worked through the environmental concerns associated with petroleum soil and ground water contamination, which culminated with a Brownfield Agreement between the property owner and the Commission on Environmental Quality on April 22, 2010. The Holt Collier Interpretive and Educational Center will be constructed on the 33-acre plot and is scheduled to open in 2012.

Other Land Programs

Voluntary Evaluation Program
http://www.deq.state.ms.us/MDEQ.nsf/pdf/GARD_ussvep/$File/Ussvep.pdf?OpenElement

Underground Storage Tanks (UST) Program
http://www.deq.state.ms.us/MDEQ.nsf/page/UST_PageHome?OpenDocument

CERCLA/Superfund Program
http://www.deq.state.ms.us/MDEQ.nsf/page/GARD_home?OpenDocument

North Carolina

Brownfields Program and Inactive Hazardous Sites Voluntary Cleanup Program
North Carolina Department of Environment and Natural Resources (DENR)
Division of Waste Management
401 Oberline Road, Suite 150
Raleigh, NC 27605
http://portal.ncdenr.org/web/wm

Contact(s): Bruce Nicholson
bruce.nicholson@ncmail.net
919-508-8400 (Brownfields)

Charlotte Jesneck
charlotte.jesneck@ncmail.net
919-508-8400 (Voluntary Cleanup)

Program Overview

- Brownfields Program
- Cost to Enter the Program: $2,000/$2,500
- Liability Relief Provisions
- Tax Incentives

Program

Brownfields Program – Authorized by the state statute known as the Brownfields Property Reuse Act, the program provides a mechanism to treat prospective developers of brownfield sites differently than the parties responsible for contaminating them. Prospective developers negotiate a brownfields agreement with the program that defines activities needed to make the site suitable for reuse, rather than cleaning up the site to regulatory standards (which responsible parties are required to do).
http://portal.ncdenr.org/web/wm/bf

Inactive Hazardous Sites Program – The Superfund Section of the Division of Waste Management (DWM), is responsible for oversight and approval of the assessment and remediation of all historical, and any recent accidental releases of hazardous substances and pollutants with the exceptions outlined below. The Inactive Hazardous Sites Branch (IHSB) oversees remedial actions, conducts any necessary enforcement of assessment and remediation at sites deemed to be a priority, and conducts the work itself at orphaned sites when state resources are available for such.
http://portal.ncdenr.org/web/wm/sf/ihshome

- **Funding Source(s) for the Program(s):** Federal grants, fees, appropriations, and tax
- **Cost to enter program or fees for service:** Under the Brownfields Program there is a $2,000 fee for a brownfields agreement. Under the IHSB's privatized portion of the Voluntary Cleanup Program (VCP), remediating parties must pay an annual fee of between $2,000 and $2,500. For the first year, the fee is $2,500.
- **Sites Enrolled in VCP:** Brownfields Program – As of November 2010, 112 sites are enrolled in the program. IHSB's VCP – As of January 2011, 183 sites have approved voluntary assessments and/or cleanups underway.
- **Sites Completed under VCP:** Brownfields Program – As of November 2010, 52 brownfields agreements have been completed. IHSB's VCP – As of January 2011, 450 sites have completed all work and been assigned No Further Action status under the Inactive Hazardous Sites Program.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

Assessment and cleanup are funded by the brownfields applicant in the Brownfields Program and by the remediating party in the VCP. Note that the Inactive Hazardous Sites Program has a separate program for addressing non-permitted landfills that closed prior to 1983. A waste disposal tax funds the assessment and mitigation of these sites. The state contracts this work. Local governments can also perform the assessment and get reimbursed if conducted under a plan approved by the Inactive Hazardous Sites Program. The state also has a program to address dry cleaning solvent releases. For those that qualify, the state funds the assessment and cleanup through a sales tax on dry cleaning.

INCENTIVES

2000 legislation authorized a sliding scale of property tax abatements for increased value of sites being redeveloped under a brownfields agreement (90% for year one, down to 10% in year five), effective July 1, 2001.
http://portal.ncdenr.org/web/wm/bf/incentivesfaq

LIABILITY RELIEF PROVISIONS

A brownfields agreement provided by the Brownfields Program is designed to break down barriers to obtaining financing at lending institutions through the Covenant Not To Sue (CNTS) contained within.

Program Elements

METHODS/STANDARDS/CONTROLS

Under the Brownfields Program, because the program only works with non-causative prospective developers, site cleanup is required only to the extent necessary to make the site safe for intended reuse or the permanence of the agreement is threatened by uncontrolled migration of contaminants. Site-specific risk-based cleanup standards and land use restrictions are used.

Under the IHSB's VCP, site-specific risk-based standards can be used at VCP sites for soils where the remedy includes land use restrictions and the soils are not a source of ground water contamination. Ground water cleanup under the VCP must meet state ground water standards unless a demonstration is made and approved that cleanup is technically impracticable.

CONTAMINANTS COVERED

Sites with exclusively petroleum hydrocarbon contamination from Underground Storage Tanks (UST) are ineligible for the Brownfields Program. Otherwise, all soil and ground water contaminants are OK, including those with comingled UST contamination. The IHSB's VCP addresses only non-petroleum hazardous substance and pollutant contamination.

INSTITUTIONAL CONTROLS (IC)

The North Carolina brownfields process assumes that land use restrictions (LUR) will be an integral part of all brownfields agreements where site specific LURs are developed to coordinate with design footprints and run with the land. Annual LUR compliance updates are required by all brownfields agreements. Violation of a LUR is a reopener that subjects the violating party to complete cleanup of the site to state environmental standards.

Under the IHSB's VCP, LURs can be used in relation to restricted use soil remedies, ground water contamination that is deemed impracticable to correct, and where they may otherwise be a necessary part of a remedy. Perpetual reporting on the restrictive covenants is a requirement that runs with the land. The VCP does have reopeners if the Branch finds that false or incomplete information was provided on the site or if there is a violation of the restrictive covenants.

- **IC Tracking:** For the Inactive Hazardous Sites Program, sites with LURs are tracked in a database.
- **IC Oversight:** In the Inactive Hazardous Sites Program, LURs are part of the Remedial Action Plan (RAP).
- **IC Monitoring:** For both the IHSB's VCP and the Brownfields Program, owners must submit an annual certification that LURs are still in place and that the owner is in compliance with their requirements.

The following Web address is a direct link to the Brownfields Program's public database that maintains an inventory of sites, maps sites and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state.
http://portal.ncdenr.org/web/wm/bf/projectinventory

Program Highlights

The framework for the remediation and redevelopment of the former Ecusta Paper Mill in Brevard is complete and cleanup actions are underway. The Ecusta mill operated for 60 years and was the world's foremost maker of flax paper, employing thousands before it closed in 2002. The redevelopment framework is transforming this abandoned property into a 500-acre mixed use office/retail/residential redevelopment project. Assessment actions were conducted by numerous programs, including the EPA Region 4 Comprehensive Environmental Response Compensation and Liability Act Site Assessment Program and the North Carolina Superfund Section. The initial cleanup was conducted through a non-time critical removal action and overseen by an extended coordinated effort between cleanup programs at EPA Region 4 and NCDENR. Additional long-term remedy is being conducted through the NCDENR Inactive Hazardous Sites Branch under a voluntary administrative agreement. The entire reuse plan will also be under the umbrella of an NCDENR Brownfields Section 128(a) Response Program agreement, currently under development, which will address the protection of public health and the environment.

Other Land Programs

Underground Storage Tanks (UST) Program
http://portal.ncdenr.org/web/wm/ust

Superfund Program
http://portal.ncdenr.org/web/wm/sf

Dry-cleaning Solvent Cleanup Act (DSCA) Program
http://portal.ncdenr.org/web/wm/dsca

South Carolina

Brownfields/Voluntary Cleanup Program (VCP)

South Carolina Department of Health and Environmental Control (DHEC)
Bureau of Land and Waste Management
2600 Bull Street
Columbia, SC 29201
http://www.scdhec.gov/environment.htm

Contact(s): Robert Hodges
hodgesrf@dhec.sc.gov
803-896-4069

Program Overview

- Brownfields Program
- Cost to Enter the Program: Oversight Fees
- Liability Relief Provisions
- Tax Incentives

Program

South Carolina's Voluntary Cleanup Program (VCP), established in 1988, is a component of the hazardous substance cleanup program. In 1995, South Carolina's VCP was expanded and enhanced to incorporate a brownfields component. All sites are eligible to participate with the exception of National Priorities List (NPL) sites, and parties under enforcement action or permits.
http://www.scdhec.gov/environment/lwm/html/brownfields.htm

- **Funding Source(s) for the Program:** Federal grants
- **Cost to enter program or fees for service:** There is no application fee to enter into the VCP; however, private party responsible parties and non-responsible parties must pay oversight costs. The South Carolina Department of Health and Environmental Control (DHEC) provides oversight without charge to governmental entities and nonprofit agencies as long as sufficient funding is available through EPA's 128(a) State and Tribal Response Program grant.
- **Sites Enrolled in VCP:** As of November 2010, 315 sites are currently enrolled in the program.
- **Sites Completed under VCP:** As of November 2010, 102 sites completed cleanups under the program.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

- Through an EPA grant, DHEC administers a Brownfields Cleanup Revolving Loan Fund (RLF) of $4,250,000, which offers low interest loans to non-responsible parties for removal of contamination at brownfields redevelopment projects in the VCP.
- DHEC can perform a limited number of site-specific assessments of selected and EPA-approved sites that are publicly owned or have strong local government support for redevelopment.

INCENTIVES

For brownfield sites, financial incentives are available for non-responsible parties who have entered into the VCP.
http://www.sctax.org/NR/rdonlyres/5A9F1B8D-ED46-43A3-85C4-4C3C4768E385/0/TC20.pdf

LIABILITY RELIEF PROVISIONS

The VCP provides a Covenant Not To Sue (CNTS) for existing contamination, contribution protection, and third party liability protection for non-responsible parties.

Program Elements

METHODS/STANDARDS/CONTROLS

No formal Risk-Based Corrective Action (RBCA) process is in place for hazardous substances; the state generally uses the "EPA Regional Screening Levels for Chemical Contaminants at Superfund Sites" as remedial goals. Applicants can use Preliminary Remediation Goals (PRG) and Soil Screening Levels (SSL), background concentrations, and site-specific concentrations based on a site-specific risk assessment.

CONTAMINANTS COVERED

Under South Carolina's Brownfields/VCP law, hazardous substances, contaminants and pollutants, and petroleum and petroleum products are addressed. Asbestos and lead-based paint can be addressed if there is an environmental exposure. Polychlorinated biphenyls (PCBs) are included as hazardous substances. Petroleum is addressed through the VCP or the Underground Storage Tank (UST) program, depending on the source of the contamination.

INSTITUTIONAL CONTROLS (IC)

South Carolina has a long-term stewardship (LTS) program for its state voluntary, brownfields, state remediation, and Resource Conservation and Recovery Act (RCRA) programs. Sites where institutional controls have been implemented under the Brownfields Program are required to certify compliance with the Restrictive Covenant every year. DHEC performs inspections to ensure compliance with the Restrictive Covenant, as needed. The Restrictive Covenant clearly delineates the restrictions placed on the property and is noticed on the deed. Brownfields/VCP sites that are worked on during each year and that have determined land use controls are so noted on the Public Record.

- **IC Tracking:** South Carolina maintains a database that tracks institutional controls at cleanup sites.
- **IC Oversight:** Parties owning sites that are not cleaned up for unrestricted use as determined by comparison to the "EPA Regional Screening Levels for Chemical Contaminants at Superfund Sites" must enter into a Restrictive Covenant with DHEC.
- **IC Monitoring:** DHEC monitors compliance with Restrictive Covenants by annual certifications and by performing inspections.

The following Web address is a direct link to the state's public database that maintains an inventory of sites, maps sites and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state.
http://www.scdhec.net/environment/lwm/Databases/Public%20Record/public_record.htm

Program Highlights

The 18-acre Union Mill Property, located near the center of the City of Union, housed a textile mill from 1893 until it burned in 1998. Subsequent salvage and storage operations were reported to have resulted in releases of hazardous substances, including transformer oil, on the property. The City of Union and the South Carolina DHEC entered into a Voluntary Cleanup Contract for the Union Mill Property in 2003 prior to the city acquiring the property. An environmental assessment identified soil and pond sediment contamination from past industrial activities, salvage operations and the fire. After removal of contaminated soil and confirmation sampling conducted by the use of DHEC's Section 128(a) Response Program funding, the city sold a four-acre portion of the property to a private developer to build much needed affordable housing in the downtown area. In January 2009, the city completed cleanup of the remaining portions of the property, including: the installation of a permeable geotextile barrier over contaminated pond sediments, removal of limited areas of contaminated soil, and placement of clean soil cover in portions of the property. The property has land use restrictions and the city agreed to maintain the engineering controls and the use of the property is restricted. As a result of the cleanup, natural and stormwater drainage in the area has improved, greenspace for community enjoyment has been added and a commercial-use area with easy access to the center of the city has been designated for future use.

Other Land Programs

Underground Storage Tanks (UST) Program
http://www.scdhec.gov/environment/lwm/html/ust.htm

Dry Cleaning Program
http://www.scdhec.gov/environment/lwm/html/drycleaner.htm

Superfund Program
http://www.scdhec.gov/environment/lwm/html/superfund.htm

Tennessee

Voluntary Cleanup, Oversight, and Assistance Program (VOAP)

Tennessee Department of Environment and Conservation (TDEC)
Division of Remediation
4th Floor, L&C Annex
401 Church Street
Nashville, TN 37243-1538
http://www.tn.gov/environment/dor/voap

Contact(s): Andy Shivas
Andy.Shivas@tn.gov
615-532-0912

Program Overview

- Cost to Enter the Program: $750 plus additional charges
- Liability Relief Provisions
- Tax Incentives
- Tennessee Brownfields Redevelopment Toolbox

Program

The Voluntary Cleanup Oversight and Assistance Program (VOAP) offers people the opportunity to work proactively with state government to address necessary cleanup of a property to return it to productive use. In return for their efforts, participants can receive a No Further Action letter and a release of liability for areas where investigation and cleanup is conducted. The program is open to everyone with an interest in addressing contamination at a site.
http://www.tn.gov/environment/dor/voap

- **Funding Source(s) for the Program:** VOAP General Fund, State Remedial Action Fund, and federal grants
- **Cost to enter program or fees for service:** Participants are charged a $750 entry fee. Additional fees are charged per report or work product: Site Characterization—$2,000; Remedial Action—$2,500; Risk Assessment—$2,000; Voluntary Agreement or Consent Order—$3,000; Site Specific Ground Water Classification—$2,000; Remedy Requirement Institutional Controls—$500. Additionally, participants are charged a $3,000 annual assessment if they remain in the program longer than one year.
- **Sites Enrolled in VOAP:** As of December 2010, 135 sites are enrolled in the VOAP.
- **Sites Completed under VOAP:** As of November 2010, 110 sites have received No Further Action letters.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

Dry Cleaning Environmental Response Program Trust Fund (DCERPTF) can be used to clean up eligible active and abandoned dry cleaning sites. In order to utilize the fund, fees and deductibles are required by program participants.

INCENTIVES

Tax increment financing (TIF) can be used by local governments that have jurisdiction over any part of a brownfields project. In 2010, legislation was passed allowing for a tax credit at qualified brownfields properties.
http://state.tn.us/sos/acts/106/pub/pc1134.pdf

LIABILITY RELIEF PROVISIONS

Participants can receive a No Further Action (NFA) letter and release of liability under any statute administered by the Tennessee Department of Environment and Conservation (TDEC) for investigation, remediation, monitoring, and/or maintenance of contamination identified and addressed in a voluntary agreement or consent order. With certain conditions and limitations, liability protection may extend to successors in interest or in title to the participant, contractors conducting response actions at the site, developers, future owners, tenants, and lenders, fiduciaries, or insurers. Third party contribution protection may be provided if certain notice requirements are met.

TENNESSEE BROWNFIELDS REDEVELOPMENT TOOLBOX

The purpose of this Toolbox is to explain the brownfields process in straightforward terms, and provide rural and smaller city governments/entities/communities with a systematic, start-to-finish, guide to brownfields redevelopment.
http://tn.gov/environment/dor/toolbox

Program Elements

METHODS/STANDARDS/CONTROLS

EPA Region 9 Preliminary Remediation Goals (PRG) are used for initial screening. The criteria for selecting containment and cleanup actions, including monitoring and maintenance options to be followed under the VOAP, are identical to those under the hazardous substance cleanup program. No formal Risk-Based Corrective Action (RBCA) or comparable informal process is in place, but risk-based cleanups can be done via site-specific assessment with standards based on risk. Applicants can also request or develop standards based on future use.

CONTAMINANTS COVERED

Petroleum, asbestos and polychlorinated biphenyls (PCBs) are covered. Lead paint is covered if other hazardous substances are present. Statute covers hazardous substances, solid waste or any other pollutant.

INSTITUTIONAL CONTROLS (IC)

Tennessee has a long-term stewardship program for voluntary sites. The 2001 amendments to the VOAP allow for enforceable land-use restrictions.

- **IC Tracking:** Tennessee does have a tracking system for institutional controls.
- **IC Oversight and Monitoring:** The state reviews sites on a site-specific basis at least every five years. The results of the reviews are available to the public.

The following Web address is a direct link to the state's public database that maintains an inventory of sites, maps sites and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state.
http://www.tn.gov/environment/dor/pdf/promsite.pdf

Program Highlights

The Gulch, a 60-acre property just south of downtown Nashville, was a railroad industrial area since the 1800s equipped with a coal yard and paint shop. The Tennessee VOAP used Section 128(a) Response Program funding to address several key properties to complete Brownfields Voluntary Agreements. The property is now a mixed-use urban neighborhood that includes restaurants, shops, and urban living. Public transportation can be accessed within a quarter mile and more than 6,000 jobs are within a half mile. The Gulch was chosen to receive the prestigious international Leadership in Energy and Environmental Design (LEED) certification.



The Gulch in Nashville was a Former Railroad Industrial Area and is Now a Bustling Mixed-use Neighborhood

Other Land Programs

Underground Storage Tanks (UST) Program
http://tn.gov/environment/ust

EPA Region 5

Illinois

Brownfields Assistance Program and Site Remediation Program (SRP)

Illinois Environmental Protection Agency (IEPA)
Bureau of Land
1021 North Grand Avenue East
Springfield, IL 62794-9276
http://www.epa.state.il.us/land/cleanup-programs

Contact(s): Heather Nifong
Heather.Nifong@illinois.gov
217-785-4729

Program Overview

- Brownfields Program
- Cost to Enter the Program: User fees
- MOA with EPA Region 5 (April 1995)
- Liability Relief Provisions

Program

Brownfields Assistance Program – The Office of Brownfields Assistance manages the Brownfields grant and loan programs and offers technical support to communities through the services of its Brownfields representatives.
http://www.epa.state.il.us/land/brownfields/index.html

Site Remediation Program (SRP) – The SRP cleanup program provides Remediation Applicants (i.e., any persons seeking to perform investigative or remedial activities) the opportunity to receive IEPA review, technical assistance and No Further Remediation (NFR) determinations from the Illinois EPA.
http://www.epa.state.il.us/land/site-remediation/index.html

- **Funding Source(s) for the Program:** User fees, cost recovery, and federal grants
- **Cost to enter program or fees for service:** User fees based on personnel costs, overhead, travel, lab costs, etc. Fees on hazardous waste treatment/disposal fund state participation.
- **Sites Enrolled in VCP:** As of December 2010, 684 sites are currently in the program.
- **Sites Completed under VCP:** As of December 2010, 2,927 sites have completed cleanups under the program.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

- Municipal Brownfields Redevelopment Grant Program offers municipalities grants of up to $240,000 for investigation and cleanup of brownfields. Sites must be enrolled in the SRP and investigation/cleanup activities must be approved. The grant has a 70/30 match requirement.
- Brownfields Cleanup Revolving Loan Fund offers interest free loans up to $1 million per site to municipalities for brownfields cleanups. Sites must be enrolled in the SRP and investigation/cleanup activities must be approved. Municipality must own the site and demonstrate the site has no Comprehensive Environmental Response Compensation and Liability (CERCLA) liability.
- Brownfields Environmental Assessments – The Office of Site Evaluation provides municipalities with site-specific assessments funded by Illinois' Section 128(a) Response Program grant.

LIABILITY RELIEF PROVISIONS

The Site Remediation Program offers a No Further Remediation letter after cleanup meets the risk-based Tiered Approach to Correction Action Objectives (TACO).

Program Elements

METHODS/STANDARDS/CONTROLS

- Under TACO, the applicant has a choice of cleanup standards. Remediation objectives generated by TACO are risk-based, site-specific, and derived from Risk-Based Corrective Action (RBCA) and EPA Soil Screening Levels (SSLs).
- The state uses background levels, water quality criteria, Maximum Contamination Level/Maximum Contamination Level Goals (MCLs/MCLGs), ground water standards, soil standards, and land use based standards to establish cleanup objectives. In Tier 1 of TACO, site evaluators compare site sample analytical results to baseline remediation objectives, contained in "look-up" tables. These objectives are based on simple, conservative models. In Tier 2, site evaluators take into account the physical and chemical properties of the contaminants, site-specific soil and ground water parameters, and the application of institutional controls and engineered barriers. Tier 3 is used to address those situations that site evaluators choose not to handle or cannot handle under the first two tiers. These situations can range from simple sites where physical barriers limit remediation, to complex sites where alternative modeling or full-scale risk assessments are applied. Cleanup standards are based on relative risks to human health with a 10–6 carcinogenic risk goal.

CONTAMINANTS COVERED

Petroleum and all other hazardous substances are included. Institutional controls are allowed under TACO and may include engineered barriers, ground water restrictions, highway authority agreements, and land-use restrictions.

INSTITUTIONAL CONTROLS (IC)

Illinois assures the maintenance of land use controls through title searches, physical site inspections, and enforcement of any identified violations under the terms and conditions of the No Further Remediation letter.

SITE REMEDIATION PROGRAM DATABASE

The following Web address is a direct link to the state's public database that maintains an inventory of sites, maps sites, and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state.
http://epadata.epa.state.il.us/land/srp

Program Highlights

Working with the City of Blue Island, Illinois, EPA used Section 128(a) Response Program funds to conduct a site-specific brownfields assessment of vacant lands that are planned for expansion of the Blue Island community gardens project. The area identified for garden expansion lies immediately west of the Indiana Harbor Belt rail line and east of the Canadian National Rail lines. Analytic results from this environmental assessment will provide the information necessary to determine if fruits and vegetables grown on the property are safe for consumption. Blue Island, Illinois is a 4.5 square mile, 170-year-old city of 22,325 people located at the southwest corner of Chicago. Known as the historic heart of the Chicago Southland, Blue Island has been dominated by heavy industry food processing, oil refining, brick making and railroads.



Blue Island Community Gardens Project

Other Land Programs

Leaking Underground Storage Tanks (LUST) Program
http://www.epa.state.il.us/land/lust/index.html

Superfund Program
http://www.epa.state.il.us/land/cleanup-programs/cleanups-superfund.html

Indiana

Brownfields Program at Indiana Finance Authority (IFA) and Voluntary Remediation Program (VRP) at

Indiana Department of Environmental Management (IDEM)
Office of Land Quality

Indiana Brownfields Program
100 N. Senate Avenue, Rm. 1275
Indianapolis, IN 46204
Contact(s): Michele Oertel – moertel@ifa.in.gov – 317-234-0235

Voluntary Remediation Program
P.O. Box 6015
Indianapolis, IN 46206-6015
Contact(s): Richard Harris – raharris@idem.in.gov – 317-234-0966

Program Overview

- Brownfields Program & Voluntary Remediation Program (VRP)
- Cost to Enter the Program: Brownfields - $0 / VRP - $1,000
- VRP MOA with EPA Region 5 (December 1995)
- Liability Relief Provisions

Program

Indiana Brownfields Program – Mechanism for state to partner with communities to promote cleanup and redevelopment. The main goal is to help communities identify and mitigate environmental barriers that impede local economic growth by offering government assistance for the assessment, cleanup, and redevelopment or reuse of brownfield properties to revitalize communities. In 2005, the program was restructured under the Indiana Finance Authority (IFA) combining financial, legal, and technical resources/staff. http://www.in.gov/ifa/brownfields

Voluntary Remediation Program (VRP) – Main goal is to provide government approval for privately funded remediation projects, some of which may be considered brownfields. http://www.in.gov/idem/4127.htm

- **Funding Source(s) for the Program(s):** State General Fund, State Cleanup Fund, and federal grants/cooperative agreements
- **Cost to enter program or fees for service:** While 2007 legislation allows for fees, the Indiana Brownfields Program is free, and costs for services are currently not recovered from program participants. The VRP is funded through application fees of $1,000 (municipalities are exempt) per site and through applicant agreements to pay additional state costs. The VRP recovers costs for project administration, technical evaluation, confirmatory sampling, and travel.
- **Sites Enrolled in VCP:** As of December 2010, 995 Indiana Brownfields Program sites and 750 VRP applicants.
- **Sites Completed under VCP:** As of December 2010, for the Indiana Brownfields Program, an approximate total of 368 closure/liability interpretation letters (Comfort Letters , Site Status Letters, NFA Letters) and comment letters issued; 433 grants awarded; 29 loans closed (includes state Low-interest loans and 4 federal Revolving Loan Fund (RLF) loans).

  As of December 2010, 240 sites have successfully completed the VRP, and 320 sites remain active

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

A variety of financial assistance is available for brownfields reuse projects. Funding is not retroactive.
http://www.in.gov/ifa/brownfields/2366.htm#taxincentive

INCENTIVES

A variety of tax incentives are available to assist with brownfields reuse projects. This is the only type of “retroactive” funding.
http://www.in.gov/ifa/brownfields/2366.htm#taxincentives

LIABILITY RELIEF PROVISIONS

- The Indiana Brownfields Program offers Comfort Letters and Site Status Letters to address environmental liability issues, the highest forms of “comfort” or “closure” offered at this time. Sites remediated with federal or state brownfield funds may enter the IDEM VRP for a Certificate of Completion (COC) or Covenant Not to Sue (CNTS).
- The IDEM VRP offers the highest form of liability protection through a COC issued by IDEM, followed by a CNTS from the Governor’s office; contaminated sites that are not subject to enforcement action or considered an imminent threat to human health are eligible.

Program Elements

METHODS/STANDARDS/CONTROLS

- A risk-based process (Risk-Based Corrective Action-like) is in place. IDEM's Risk Integrated System of Closure (RISC) non-rule policy, which allows for consistent, risk-based standards among all IDEM cleanup programs (and the Indiana Brownfields Program), has been utilized since 2002.
- Indiana developed default risk-based closure criteria for soil and ground water and allows for site-specific risk assessments to determine alternative closure levels.
- In addition to risk-based numeric standards, both the Indiana Brownfields Program and VRP consider risk management practices in evaluating sites.

CONTAMINANTS COVERED

- Both programs cover hazardous substances and petroleum. Default closure standards have been developed for approximately 150 common constituents, excluding asbestos and polychlorinated biphenyls (PCBs).
- For the Indiana Brownfields Program, asbestos, lead paint, and PCBs are eligible under certain circumstances, as well as hazardous substances and petroleum.
- In the VRP, petroleum and PCBs are eligible; asbestos and lead paint are not.

INSTITUTIONAL CONTROLS (IC)

Both programs generally view ICs as acceptable. ICs are considered under IDEM's RISC when determining remediation-type activities. ICs may be approved on a site-by-site basis. Indiana Brownfields Program Comfort/Site Status Letters may indicate land-use restrictions as necessary. Land-use restrictions are enforced by IDEM through Environmental Restrictive Covenants. The most common type of IC approved by IDEM is an Environmental Restrictive Covenant; new legislation passed in 2009 requires IDEM to consider Environmental Restrictive Ordinances as an effective IC. IDEM also developed and maintains an Institutional Controls Registry to track Environmental Restrictive Covenants.

- **IC Tracking:** Tracked by individual programs (including Indiana Brownfields Program and VRP) through IDEM's Registry. A summary report from the registry is posted monthly at: http://www.in.gov/idem/5959.htm. The registry also has interactive features including a link to view the actual IC document using IDEM's Virtual File Cabinet.
- **IC Oversight and Monitoring:** Pending study committee outcome.

The following Web address is a direct link to the state's public database that maintains an inventory of sites, maps sites, and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state.
http://www.in.gov/idem/4472.htm

Program Highlights

The Indiana Brownfields Program is managing funds from a bankruptcy settlement for the Hannover Property in South Bend and is conducting technical oversight with its Section 128(a) Response Program funding for remediation, including "greener cleanup" activities. The Hannover Property was originally developed in 1941 as part of a larger manufacturing complex built for the Studebaker Corporation's jet engine manufacturing operations. In 2008 and 2009, a comprehensive subsurface investigation resulted in the completion of both vertical and horizontal delineation. A light non-aqueous phase liquid (LNAPL) free product jet fuel plume encompasses four acres of the property. The goal for the Indiana Brownfields Program is to issue a Comfort Letter verifying that contamination at the property is adequately addressed. This assistance should facilitate redevelopment and serves as a good case study for greener cleanup activities.

A major focus of sites in the VRP is the evaluation of the vapor intrusion (VI) exposure pathway. As IDEM's awareness of this pathway has increased, VI has been shown to be the pathway most likely to result in direct exposure, exceeding drinking water or direct contact with contaminated soil. Several VRP projects with potential VI problems have resulted in the installation of mitigation systems, and the recognition that a better understanding of this complicated exposure pathway is needed.

Other Land Programs

Leaking Underground Storage Tanks (LUST) Program
http://www.in.gov/idem/4997.htm

State Cleanup Program
http://www.in.gov/idem/4179.htm

Michigan

Brownfields Redevelopment Assessment Program and Cleanup and Redevelopment Program

Michigan Department of Environmental Quality (DEQ)
P.O. Box 30426
Lansing, MI 48909-7926
http://www.michigan.gov/deq/0,1607,7-135-3311_4109---,00.html

Contact(s): Susan Erickson
ericksons@michigan.gov
517-241-8707

Program Overview

- Brownfields Program
- Cost to Enter the Program: $750
- MOA with EPA Region 5 (July 1996)
- Liability Relief Provisions
- Tax Incentives
- Brownfields Redevelopment Authorities

Program

Michigan created options to overcome the obstacles of brownfields redevelopment, including cost-effective cleanup options, causation-based liability, liability protection for new owners, state funding for cleanups, and grants and loan programs. Innovative use of available federal, state, and local resources can be incorporated into redevelopment incentives to support expansion and to encourage new businesses to locate in Michigan.
http://www.michigan.gov/deq/0,1607,7-135-3311_4110---,00.html

- **Funding Source(s) for the Program:** State General Fund and federal grants
- **Cost to enter program or fees for service:** Fee of $750 to request Michigan Department of Environmental Quality (DEQ) review and determination of adequacy of Baseline Environmental Assessments (BEA).
- **Sites Enrolled in VCP:** As of November 2010, there were ongoing activities at 200 sites where the DEQ is paying for response activities prioritized based on threat to public health and the environment.
- **Sites Completed under VCP:** As of November 2010, DEQ provided oversight or assistance on more than 10,000 cleanup projects performed by liable parties.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

A variety of grants, loans, and technical assistance is available to assist with brownfields reuse projects.

- http://www.michigan.gov/documents/deq/MI_Brownfield_Financial_Incentives_brochure_April_2010_321825_7.doc
- http://www.michigan.gov/deq/0,1607,7-135-3311_4110_29262---,00.html
- http://www.michigan.gov/deq/0,1607,7-135-3311_4110_23244---,00.html

INCENTIVES

A variety of tax credits is available to assist with brownfields reuse projects.
http://www.michigan.gov/documents/deq/MI_Brownfield_Financial_Incentives_brochure_April_2010_321825_7.doc

LIABILITY RELIEF PROVISIONS

Completing a BEA and submitting it to DEQ prior to or within 45 days of purchase provides an exemption from liability for existing contamination. The BEA establishes the means to distinguish a new release from pre-existing contamination, and provides liability protection for the new owner for known and unknown contamination under certain parts of Michigan's environmental protection law. A BEA may not provide liability protection under other state and federal laws, including state regulated landfills and underground storage tanks, and sites regulated by the federal Resource Conservation and Recovery Act (RCRA), Comprehensive Response Compensation and Liability Act (CERCLA), and Superfund. Owners and operators of contaminated properties must use due care when redeveloping the property and may seek a determination from the DEQ on the adequacy of the BEA and associated Due Care Plan (Compliance Analysis).

BROWNFIELDS REDEVELOPMENT AUTHORITIES (OR SIMILAR)

Redevelopment tools are available to brownfields authorities such as tax increment financing, a list of established brownfields authorities and local contact information, and links to the updated brownfields legislation.
http://www.michigan.gov/deq/0,1607,7-135-3311_4110_23246---,00.html

Program Elements

METHODS/STANDARDS/CONTROLS

Risk-based standards in place for soils and ground water (although not a formal Risk-Based Corrective Action (RBCA)) in several land-use categories—residential, commercial and industrial, and limited uses with institutional controls. DEQ may also approve site-specific criteria.

CONTAMINANTS COVERED

The program does not exclude specific contaminants. A property is a "facility" if the contaminant concentration exceeds one or more residential criteria, as defined in Part 201, Environmental Remediation of the Natural Resources and Environmental Protection Act, PA 451 of 1994, as amended.

INSTITUTIONAL CONTROLS (IC)

Institutional controls are accepted and, with respect to cleanup grants to communities, encouraged as cost saving as well as protection action.

- **IC Tracking:** Privately-funded cleanups are not tracked by DEQ; however, state-funded cleanups are tracked and available on DEQ's website.
- **IC Oversight:** DEQ does not oversee private cleanups.
- **IC Monitoring:** DEQ does not monitor private cleanups. State-funded cleanups are monitored as necessary.

The following Web address is a direct link to the state's public database that maintains an inventory of sites, maps sites, and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state.
http://www.deq.state.mi.us/part201ss

Program Highlights

A reduction in state funding for brownfields cleanups in Michigan has DEQ looking for other ways to support redevelopment efforts in the state. Local tax increment financing, which reimburses developers for their cleanup costs, is often used in urban areas. In rural parts of the state, however, additional incentives are often necessary to make a redevelopment project viable. The Michigan DEQ was awarded an EPA Brownfields Assessment grant in October 2004 to conduct environmental assessments at seven sites in six rural communities to increase the likelihood of redevelopment. Together with township and village officials, DEQ's Remediation and Redevelopment Division staff identified sites with redevelopment potential and created a comprehensive assessment and cleanup plan culminating in a successful proposal. Work on the Phase I site assessments has already started at three properties in Arenac County, two properties in Berrien County, and one each in Saginaw and Tuscola counties. DEQ has supplemented the EPA grant with funding from the state's Clean Michigan Initiative bond fund to perform the necessary remedial activities.

Other Land Programs

Leaking Underground Storage Tank (LUST) Program
http://www.michigan.gov/deq/0,1607,7-135-3311_4109_4215---,00.html

Superfund Program
http://www.michigan.gov/deq/0,1607,7-135-3311_4109_4217---,00.html

Minnesota

Voluntary Investigation and Cleanup Program (VIC) and Petroleum Brownfields Program (PBP)

Minnesota Pollution Control Agency (MPCA)
Remediation Division
520 Lafayette Road
St. Paul, MN 55155
http://www.pca.state.mn.us/index.php/waste/waste-home.html

Contact(s): Barbara Jackson
barb.jackson@state.mn.us
651-757-2459 (PBP)

Hans Neve
hans.neve@state.mn.us
651-757-2608 (VIC)

Program Overview

- Brownfields Program
- Cost to Enter the Program: Oversight fees ($125 per hour)
- MOA with EPA Region 5 (May 1995)
- Liability Relief Provisions
- Minnesota Brownfields Redevelopment Toolbox
- Minnesota Brownfield Resource Guide

Program

The Minnesota Pollution Control Agency (MPCA) offers technical and financial assistance to parties involved with brownfield sites. The MPCA can also issue liability assurance letters through its Voluntary Investigation and Cleanup Program (VIC) and the Petroleum Brownfields Program (PBP).
http://www.pca.state.mn.us/index.php/waste/waste-and-cleanup/cleanup-programs-and-topics/cleanup-programs/voluntary-investigation-and-cleanup-vic/voluntary-investigation-and-cleanup-vic-program.html?menuid=&redirect=1
and
http://www.pca.state.mn.us/index.php/waste/waste-and-cleanup/cleanup-programs-and-topics/cleanup-programs/petroleum-brownfields-program.html?menuid=&redirect=1

- **Funding Source(s) for the Program:** State Cleanup Fund and federal grants
- **Cost to enter program or fees for service:** Hourly fee charged for MPCA and Minnesota Department of Agriculture (MDA) staff time on projects.
- **Sites Enrolled in VCP:** As of January 2011, 361 sites are active in MPCA VIC and 205 sites are active in PBP.
- **Sites Completed under VCP:** Over 3,000 sites are completed in MPCA VIC and approximately 2,700 sites are completed in PBP.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

A variety of grants, loans, and technical assistance is available to assist with brownfields reuse projects. Minnesota's Brownfield Resource Guide, prepared in partnership by Minnesota Department of Employment and Economic Development, Minnesota Pollution Control Agency, and Minnesota Brownfields, provides a summary of sources of funding in Minnesota, most of which is provided by sources other than the MPCA.
http://www.positivelyminnesota.com/Government/Financial_Assistance/Site_Cleanup_Redevelopment_Funding/Brownfields_Resource_Guide_2010.pdf

LIABILITY RELIEF PROVISIONS

MPCA offers liability assurances, including No Association Determinations, No Action Determinations, Off-site Source Determinations, and Certificates of Completion for sites in the VIC. In addition, MPCA offers Tank Removal Verification, Off-site Source Determinations, Site closure, and Closure Confirmation letters for petroleum brownfield sites.

BROWNFIELDS REDEVELOPMENT TOOLBOX

The purpose of this Toolbox is to explain the Brownfields process in straightforward terms, and provide rural and smaller city governments/entities/communities with a systematic, start-to-finish guide to Brownfields redevelopment.
http://www.pca.state.mn.us/index.php/view-document.html?gid=14046

Program Elements

METHODS/STANDARDS/CONTROLS

Minnesota uses a risk-based approach that considers planned property use. Minnesota employs surface water quality standards, ground water standards, and Maximum Contamination Level/Maximum Contaminant Level Goals (MCLs/MCLGs), in conjunction with risk assessments to determine cleanup levels. Minnesota has a tiered approach for providing risk-based guidance on acceptable soil concentrations (Soil Reference Values) for specific exposure categories. In order to calculate individual Soil Reference Values, a 10–5 risk level is used for carcinogens, and a Hazard Quotient of .2 is used for non-carcinogens. Site-specific risk assessments can also be done in order to select and apply cleanup values for sites.
http://www.pca.state.mn.us/index.php/waste/waste-and-cleanup/cleanup-programs-and-topics/topics/risk-based-site-evaluation-process-guidance-documents.html?menuid=&redirect=1

CONTAMINANTS COVERED

The MPCA Brownfield Programs (VIC and PBP) provide oversight of investigation and cleanup of releases to the environment of hazardous substances and petroleum contamination.

INSTITUTIONAL CONTROLS (IC)

Institutional controls are used for purposes such as managing residual contamination, maintaining response actions, and notifying future property owners of the presence of residual contamination. Minnesota had adopted the Uniform Environmental Covenants Act, Minn. Stat. Ch. 114E.
http://www.pca.state.mn.us/index.php/waste/waste-and-cleanup/cleanup-programs-and-topics/cleanup-programs/voluntary-investigation-and-cleanup-vic/institutional-controls-what-are-they-and-how-does-the-mpca-use-them.html?menuid=&redirect=1

The following Web address is a direct link to the state's public database that maintains an inventory of sites, maps sites, and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state.
http://www.pca.state.mn.us/pca/srs/remSearch.cfm?sType=VIC&CFID=1413929&CFTOKEN=80733773

Program Highlights

Success stories illustrating sites at which private and public development projects were cleaned up and (re)developed in partnership with the Voluntary Investigation and Cleanup Program (VIC) and Petroleum Brownfields Program (PBP) are posted on the MPCA website.
http://www.pca.state.mn.us/index.php/waste/waste-and-cleanup/cleanup-programs-and-topics/cleanup-programs/brownfields-success-stories.html

Other Land Programs

Agriculture Voluntary Investigation and Cleanup Program (AgVIC)
http://www.mda.state.mn.us/chemicals/spills/incidentresponse/agvic.aspx

Ohio

Voluntary Action Program (VAP) / Site Assistance and Brownfield Revitalization Program (SABR)

Ohio Environmental Protection Agency (OEPA)
Division of Emergency and Remedial Response
P. O. Box 1049
Columbus, OH 43216-1049
Contact(s): Amy Yersavich – amy.yersavich@epa.state.oh.us – 614-644-2924

Ohio Department of Development Office of Urban Development
77 South High Street, 26th Floor
Columbus, OH 43215-6130
Contact(s): William Murdock – william.murdock@development.ohio.gov – 614-995-2292

Program Overview

- Brownfields Program
- Cost to Enter the Program: Fee structure
- Liability Relief Provisions
- Tax Incentives
- Ohio Brownfields Redevelopment Toolbox

Program

Voluntary Action Program (VAP) – created to give companies a way to investigate possible environmental contamination, clean it up if necessary, and receive a promise from the State of Ohio that no more cleanup is needed.
http://www.epa.state.oh.us/derr/volunt/volunt.aspx

Site Assistance & Brownfield Revitalization Program (SABR) – serves as the contact for brownfields or contaminated sites not yet in any cleanup program (e.g., VAP, remedial response, Superfund, Resource Conservation and Recovery Act (RCRA) corrective action).
http://www.epa.state.oh.us/derr/SABR/sabr.aspx

Office of Urban Development (OUD) – assists communities in creating wealth from personal, business, and community successes. OUD works to identify the resources and financing necessary to assess, clean up, and redevelop brownfields.
http://development.ohio.gov/UD

- **Funding Source(s) for the Program:** Program fees and federal grants
- **Cost to enter program or fees for service:** Fee structure
  http://www.epa.state.oh.us/portals/30/vap/docs/2010%20VAP%20Fee%20Schedule%20rounded.pdf
- **Sites Enrolled in VCP:** As of December 2010, 422 No Further Action (NFA) letters were issued since the inception of the program in 1994.
- **Sites Completed under VCP:** As of December 2010, 309 properties have received a Covenant Not to Sue (CNTS) from Ohio EPA.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

A variety of grants, loans, and technical assistance are available to assist with brownfields reuse projects.
http://www.epa.state.oh.us/portals/30/vap/docs/Financial%20Assistance.pdf
http://www.epa.state.oh.us/portals/30/vap/docs/Technical%20Assistance.pdf

INCENTIVES

- Tax Abatement – upon issuance of a Covenant Not to Sue (CNTS) from the Director of the Ohio EPA for a remedy under the Voluntary Action Program, the Department of Taxation will grant a tax exemption to the property (ORC 5709.87).
  http://www.epa.state.oh.us/portals/30/vap/docs/tax%20Incentives.pdf
- Ohio Enterprise Zone Program
  http://development.ohio.gov/Business/ez

LIABILITY RELIEF PROVISIONS

A person undertaking a voluntary action contracts with consultants certified by Ohio EPA to perform investigation and cleanup activities in this program. Once the cleanup is done, the Agency-certified consultant, a certified professional (CP), and a laboratory also certified by Ohio EPA prepare a No Further Action (NFA) letter to demonstrate that proper investigation and cleanup activities were performed and that no further

action is needed. If the data show that the work was properly conducted, Ohio EPA can issue a Covenant Not to Sue (CNTS), which promises the volunteer that the State of Ohio will not require further investigation or cleanup of the property.
http://www.epa.ohio.gov/portals/30/vap/docs/fact1.pdf

OHIO BROWNFIELDS REDEVELOPMENT TOOLBOX

The purpose of this Toolbox is to explain the Brownfields process in straightforward terms, and provide rural and smaller city governments/entities/communities with a systematic, start-to-finish guide to Brownfields redevelopment.
http://www.epa.state.oh.us/portals/30/SABR/docs/Ohio%20Brownfield%20Toolbox.pdf

SMALL/RURAL COMMUNITY BROWNFIELD ASSISTANCE WEBSITE

This website allows individuals interested in knowing what state, federal, and private brownfield technical and financial assistance and incentives are available in each of Ohio's eighty-eight counties. Simply click on a county and information about incentives and assistance, with Web links and contact information, is listed in an easy to read and easy to print-out format. This website is frequently and consistently updated as new incentives are created and/or old incentives expire.
http://www.epa.ohio.gov/derr/sabr/Small_Rural_Community_Brownfield_Assistance.aspx

Program Elements

METHODS/STANDARDS/CONTROLS

In accordance with Ohio Revised Code Chapter 3746, the Ohio EPA developed the necessary rules with considerable input from a steering committee and technical subcommittees representing diverse interests, such as environmental advocacy groups, manufacturers, environmental consultants, cities and counties, bankers, and medical professionals.
http://www.epa.state.oh.us/derr/vap/rules/rules.aspx

CONTAMINANTS COVERED

Hazardous substances and/or petroleum. Sites contaminated with petroleum not from Underground Storage Tanks (USTs) are allowed entry into the VAP. In general, sites contaminated with polychlorinated biphenyls (PCBs) after 1978, and which exceed 50 parts per million (ppm), are excluded from the program without prior remediation/compliance. Sites containing asbestos and lead-based paint are eligible for the VAP.

INSTITUTIONAL CONTROLS (IC)

Ohio EPA audits at least 25% of the properties taken through the VAP. Engineering controls are maintained through Operations and Maintenance (O&M) Agreements. If the property's remedy relies on "activity and use limitations" (formerly known as use restrictions) to restrict property use, the volunteer must provide the CP a "proposed environmental covenant" that complies with ORC §5301.82. The proposed environmental covenant—with its activity and use limitations—is a remedy to support the CP's issuance of an NFA letter.

- **IC Tracking:** ICs are tracked through the division's database (pre-claims database).
- **IC Oversight and Monitoring:** OEPA inspects institutional controls (activity and use) every five years.

The following Web address is a direct link to the state's public database that maintains an inventory of sites, maps sites, and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state.
http://www.epa.state.oh.us/derr/SABR/brown_dtb/browndtb.aspx

OHIO'S BROWNFIELDS INVENTORY DATABASE

An up-to-date online database of the brownfield properties in the state of Ohio. Provides detailed property information. It also includes Google Maps support to allow you to use features such as pan, zoom, MAP Views Terrain/Satellite/Hybrid, and "Street-view." Advanced query grid tools allows you to filter, sort, group, and even export Brownfield data.
http://www.derr.epa.ohio.gov/Home.aspx

Program Highlights

While the Ohio EPA performs many targeted brownfields assessments to assist communities with redevelopment, Section 128(a) Response Program funds have been used for program enhancements to help communities market brownfields that are municipally owned. The Ohio EPA Site Assessment and Brownfields Revitalization program published the first Ohio Brownfield Inventory in March 2009, which identifies over 100 properties.

Other Land Programs

Federal Facilities
http://www.epa.state.oh.us/derr/ACRE/FFS/ffs.aspx

Remediation Program
http://www.epa.state.oh.us/derr/remedial/remedial.aspx

Wisconsin

Remediation and Redevelopment Program

Wisconsin Department of Natural Resources (WDNR)
101 South Webster Street, Box 7921
Madison, WI 53707-7921
http://dnr.wi.gov/org/aw/rr

Contact(s): Darsi Foss, *Brownfields and Outreach Section Chief*
darsi.foss@wisconsin.gov
608-267-67137

Program Overview

- Brownfields Program
- Cost to Enter the Program: Fee structure
- Financial Elements
- Liability Relief Provisions
- MOA with EPA Region 5
- Tax Incentives
- Brownfields Insurance Program

Program

The Wisconsin Department of Natural Resources' (WDNR) Remediation and Redevelopment Program provides technical and financial assistance and project oversight for local governments and private parties to clean up and redevelop brownfield sites. Customers work with project managers in the WDNR regional offices, with support from central office staff in Madison. All brownfields and voluntary cleanups are conducted in accordance with the Remediation and Redevelopment Program's comprehensive One Cleanup Program, following the Wisconsin Natural Resources Chapter 700 Administrative Code (Wis. Adm. Code) rule series for cleanup requirements; including federal Underground Storage Tank (UST), Resource Conservation and Recovery Act (RCRA) corrective actions and closures, Superfund sites, and non-federal cleanups. Wisconsin does not have separate regulatory, brownfields, or voluntary cleanup programs.

- **Funding Source(s) for the Program:** State fund, program fees, and federal grants
- **Cost to enter program or fees for service:** WDNR employs a fee structure for parties requesting technical and liability assistance, and case closure, in the cleanup and redevelopment of contaminated properties. These fees are based on the average amount of time necessary to perform reviews.
  http://dnr.wi.gov/org/aw/rr/Services_Fees/index.htm#fees
- **Sites Enrolled:** As of January 2011, more than 4,400 sites are being cleaned up in the traditional cleanup program, seeking closure letters. Approximately 125 active sites are in the Voluntary Party Liability Exemption (VPLE) process, seeking certificates of completion.
- **Sites Completed:** As of January 2011, more than 23,600 sites received close-out letters and 101 sites received Certificates of Completion (COC).

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

A variety of state and federal grants, loans, and technical assistance are available to assist with brownfields reuse projects.
http://dnr.wi.gov/org/aw/rr/financial/index.htm

INCENTIVES

A variety of tax incentives are available to assist with brownfields reuse projects.
http://dnr.wi.gov/org/aw/rr/financial/tax.htm

LIABILITY RELIEF PROVISIONS

Program offers two primary forms of end-relief after cleanup is completed:

- **Case closure letters** – Per Ch. NR 726 for the traditional cleanup process.
- **Certificates of Completion (COCs)** – By entering the Voluntary Party Liability Exemption (VPLE) process, a party can earn a COC, which provides the party an exemption from future liability for past contamination. The COC is transferable to new owners.

Wisconsin also offers liability exemptions for lenders, local governments, and off-site property owners (i.e., neighboring owners impacted by contamination migrating off-site).
http://dnr.wi.gov/org/aw/rr/Services_Fees/index.htm#two

Program Elements

METHODS/STANDARDS/CONTROLS

Wisconsin has a soil cleanup standard rule (NR 720, Wis. Adm. Code) that applies to all sites with soil contamination. The rule provides a responsible party (RP) several options for addressing soil contamination, including: 1) using table values for the limited number of compounds included in the rule; 2) developing site-specific soil cleanup standards using the methodology set out in the rule; or 3) utilizing performance standards (such as caps or covers) to ensure that soil contaminants do not pose a threat to human health or the environment.

Ground water must meet state enforcement standards or the RP must demonstrate that adequate source control measures have been taken, the plume is stable or receding, and that natural attenuation will bring the groundwater into compliance with standards within a reasonable period of time.

ONE CLEANUP PROGRAM

The WDNR and the U.S. Environmental Protection Agency (EPA) Region 5 operate under the One Cleanup Program Memorandum of Agreement (MOA) between the two agencies. The Memorandum is the first EPA-state MOA to address cleanup requirements across several environmental media, including the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), RCRA, Toxic Substances Control Act (TSCA) and leaking underground storage tanks (LUSTs). Wisconsin's program simplifies cleanups of contaminated sites under different regulatory programs by providing a single, consolidated approach rather than utilizing a range of separate programs with potentially conflicting approaches and cleanup standards.
http://dnr.wi.gov/org/aw/rr/cleanup/ocp.htm

CONTAMINANTS COVERED

All contaminants are included. Where federal requirements (e.g. RCRA, TSCA) apply, Wisconsin's One Cleanup Program clarifies state and federal roles.

INSTITUTIONAL CONTROLS (IC)/CONTINUING OBLIGATIONS

Closures with residual contamination and certain remedial action approvals include institutional controls or "continuing obligations," legal and engineering requirements needed by current/new property owner(s) to maintain certain safeguards. These obligations include properly handling excavated contaminated soil, obtaining state approval before constructing a water supply well, maintaining a pavement cap over a contaminated area and complying with other property-specific obligations defined by the state.

Three general situations where the state imposes property-specific continuing obligations are:

- when an engineering control requires long-term maintenance;
- when a building or other structure that inhibited full investigation of the contamination is removed and further investigation and cleanup becomes possible; and
- when the state imposes continuing obligations related to land use, such as industrial soil standards that are appropriate until the land use changes.

Continuing obligations are legally enforceable through a specific state law – not a site-specific deed instrument – and are applied to a site via the state's closure or remedial action plan approval. These documents are available to the public via the WDNR's online database.

- **IC Tracking:** Sites with ICs/continuing obligations are tracked using the following link:
  http://dnr.wi.gov/org/aw/rr/gis
- **IC Oversight:** Each state regulatory agency has oversight for its own continuing obligations.
- **IC Monitoring:** WDNR audits 50 properties with continuing obligations per year using its EPA Section 128(a) State Response Program funds. Each audit consists of a review of the state's file, an interview with the site owner, a visit to the property, a written summary, and ensuring return to compliance when necessary.

Program Highlights

In 2010, the City of Neenah in northeast Wisconsin celebrated a major brownfield success story, with the opening of the Plexus Corporation World Headquarters. The project was a public-private partnership to redevelop the site of the former Glatfelter Paper Mill in downtown Neenah. After the paper mill closed in 2006, city leaders teamed up with the WDNR and others to develop a new use for the property as a home for Plexus and an office park. Funding through WDNR grants – including a Brownfields Site Assessment grant ($97,000) and a Ready for Reuse grant ($429,469 supported through the American Recovery and Reinvestment Act) – and through Wisconsin Department of Commerce Brownfields Cleanup grants ($700,000) helped bolster the city's tax incremental financing district that officials created to spur redevelopment in the area. The result is a first-class corporate headquarters that kept Plexus and at least 375 jobs in downtown Neenah, created much-needed retail and office space, and established a new city park celebrating the community's rich papermaking history.

EPA Region 6

Arkansas

Brownfields Redevelopment Program

Arkansas Department of Environmental Quality (ADEQ)
Hazardous Waste Division
5301 Northshore Drive
North Little Rock, AR 72118-5317
http://www.adeq.state.ar.us/hazwaste

Contact(s): Terry Sligh, *Environmental Program Coordinator*
terry@adeq.state.ar.us
501-682-0867

Program Overview

- Brownfields Program
- Cost to Enter the Program: N/A
- MOA with EPA Region 6 (December 2000)
- Liability Relief Provisions

Program

The Arkansas Department of Environmental Quality (ADEQ) is administering its Brownfields Program to redevelop properties with either real or perceived hazardous substance contamination. ADEQ hopes to encourage the development of brownfields as a sustainable land use policy and to discourage the development of Greenfields or pristine properties in the State of Arkansas.
http://www.adeq.state.ar.us/hazwaste/bf/default.htm

- **Funding Source(s) for the Program:** Federal grants
- **Cost to enter program or fees for service:** A fee schedule has not been established for the Brownfields Program.
- **Sites Enrolled in VCP:** As of January 2011, 78 sites were enrolled in the Brownfields Program.
- **Sites Completed under VCP:** As of January 2010, 26 brownfield sites were completed.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

Arkansas Brownfields Program Section 128(a) Response Program Funding: This funding is available to municipalities, quasi-governmental organizations and nonprofits for Phase I and Phase II Environmental Site Assessments and minor site cleanup. ADEQ may spend up to $200,000 per site for environmental site assessments under EPA's Targeted Brownfield Assessment (TBA) Program. The state performs targeted site assessments to characterize the nature and extent of site contamination. This characterization is at no cost to an eligible program participant, and provides assistance in quantifying the need for and potential cost of cleanup.
http://www.adeq.state.ar.us/hazwaste/bf/default.htm#FinancialAssist

LIABILITY RELIEF PROVISIONS

The Implementing Agreement (IA) establishes cleanup liabilities and obligations for the abandoned site. The brownfields participant is not relieved of any liability for contamination later caused by the participant, or contamination not intended to be addressed in the IA, after acquisition of legal title to the brownfield site. A prospective purchaser of an abandoned site will not be responsible for paying any fines or penalties levied against any person responsible for contamination on the abandoned site prior to the IA with ADEQ.

Program Elements

METHODS/STANDARDS/CONTROLS

The state's cleanup standards are based on a risk management process. No single set of soil cleanup levels has been implemented and site-specific factors are considered when developing action levels. Cleanup goals may be met by reaching background metals concentrations, consulting EPA Region 6 Human Health Media Specific Screening Levels, performing a traditional human health risk assessment, or a combination of all three options when appropriate.

CONTAMINANTS COVERED

TBA funding may only be used at sites as authorized by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) of 1980, as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986. The site must be contaminated or suspected to be contaminated with hazardous substances.

INSTITUTIONAL CONTROLS (IC)

Arkansas does not have a system to monitor or enforce long-term stewardship and institutional controls. Institutional controls are listed in the Arkansas Record of Brownfields Projects, which is available on the website.

- **IC Tracking, Oversight and Monitoring:** Arkansas does not have a system to track, monitor, or enforce ICs.

The following Web address is a direct link to the state's public database that maintains an inventory of sites, maps sites, and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state.
http://www.adeq.state.ar.us/hazwaste/bf/brownfield.asp

Program Highlights

The cleanup of Argenta's Smarthouse Way, a 5.8-acre brownfields property in North Little Rock won the environmental category award in the American Council of Engineering Companies of Tennessee's 2009 Engineering Excellence competition. An environmental consulting firm performed the remediation for the nonprofit organization, Main Street, Argenta. The risk-based method cleanup included the removal of over 4,000 tons of contaminated soil. A total of 225 tons of polychlorinated biphenyls (PCBs)-contaminated soil was removed, hauled and deposited at a hazardous waste landfill. ADEQ used Section 128(a) Response Program funding to provide oversight and issue a Certificate of Completion.

Other Land Programs

Regulated Storage Tanks (RST) Program
http://www.adeq.state.ar.us/rst/default.htm

Louisiana

Voluntary Remediation Program (VRP) / Brownfields Initiative

Louisiana Department of Environmental Quality (DEQ)
P.O. Box 4314
Baton Rouge, LA 70821-4314
www.deq.la.gov/brownfields

Contact(s): Roger Gingles
brownfields@la.gov
225-219-3499

Program Overview

- Brownfields Program
- Cost to Enter the Program: $500
- MOA with EPA Region 6 (October 2004)
- Liability Relief Provisions
- Tax Incentives

Program

The Louisiana Voluntary Remediation Program (VRP) provides a mechanism by which property owners (or potential owners) or others can clean up contaminated properties and receive a release of liability for further cleanup of historical contamination at a site. This release of liability flows to future owners of the property as well.
www.deq.la.gov/brownfields

- **Funding Source(s) for the Program:** Federal grants (90%) and state cleanup fund (10%)
- **Cost to enter program or fees for service:** $500. Applicant must reimburse the Louisiana Department of Environmental Quality (DEQ) for the actual direct costs of oversight. Waivers for oversight costs are available to government and nonprofit VRP applicants as funding permits.
- **Sites Enrolled in VCP:** As of November 2010, 57 sites were enrolled in the program.
- **Sites Completed under VCP:** As of November 2010, 40 Certifications of Cleanups (COC) were issued, and 11 No Further Action (NFA) letters were issued.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

- Louisiana Brownfields Cleanup Revolving Loan Fund
  http://www.deq.louisiana.gov/portal/PROGRAMS/BrownfieldsandVoluntaryRemediationProgram/LouisianaBrownfieldsCleanupRevolvingLoanFund.aspx

INCENTIVES

Louisiana taxpayers are eligible to receive tax credits to remediate state-certified brownfield sites under legislation (S.B. 322) which became effective on July 1, 2005 and Act 392 of the 2007 Legislature which became effective on January 1, 2008. Each taxpayer is eligible to receive a 15% tax credit of the total investment to complete a remedial investigation and a 25-50% percent tax credit of the total investment made to complete a voluntary remediation action.

LIABILITY RELIEF PROVISIONS

Any person who is not otherwise a responsible person will not be liable for the discharge or disposal, or threatened discharge or disposal of the hazardous substance or waste if the person undertakes and completes a remedial action to remove or remedy discharges or disposals and threatened discharges or disposals of hazardous substances and wastes at a property, in accordance with a voluntary remedial action plan approved in advance by the DEQ following public notice and the opportunity for a public hearing in the affected community.
http://www.deq.louisiana.gov/portal/Portals/0/planning/regs/eqa.pdf

Program Elements

METHODS/STANDARDS/CONTROLS

10-4 to 10-6 and Hazard Index of 1; three tiers of Management Options under RECAP (a risk-based system in Louisiana).

CONTAMINANTS COVERED

No restrictions based on contaminants; petroleum, asbestos, lead paint, polychlorinated biphenyls (PCBs) are all covered. Asbestos and lead paint abatement sites where there is no release to the environment are not eligible for VRP participation (i.e., only indoor abatement site are eligible).

INSTITUTIONAL CONTROLS (IC)

Use restrictions for partial voluntary remedial actions.

- **IC Tracking:** Institutional controls are tracked through the general site management database.

The following Web address is a direct link to the state's public database that maintains an inventory of sites, maps sites, and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state.
http://www.deq.louisiana.gov/portal/LinkClick.aspx?fileticket=Y2QYdiziWh0%3d&tabid=269

Program Highlights

Louisiana DEQ used Section 128(a) Response Program funding to conduct clean up activities at several sites. Cleanups at the Mid City Redevelopment Alliance headquarters (Baton Rouge) (former car dealership and auto service) and the Volunteers of America of Northwest Louisiana (Shreveport) were completed in Summer 2010. A cleanup of a former gas station along the Enterprise Boulevard Corridor project (Lake Charles) is underway and should be completed this summer. A cleanup of a former gas station property, which will be the new Westwego Governmental Building Complex (Westwego, in the metro New Orleans area) is set to begin by late spring, as well as the cleanup of two properties in Shreveport. These two properties, the former City Hall Annex, which will become the new Greyhound Multi-Modal Terminal facility, and the former Central Fire Station, which will become the new headquarters for the Shreveport Arts Council, are to be funded by Section 128(a) Response Program funding. Louisiana DEQ has also funded 19 Targeted Brownfields Assessments in the last 12 months, including the former federal courthouse facility in Lafayette, the Mount Hermon Church property in New Orleans, and the historic African-American-operated Lincoln Theater property in Baton Rouge.

Other Land Programs

Underground Storage Tank (UST) Program
http://www.deq.louisiana.gov/portal/tabid/2674/Default.aspx

New Mexico

Voluntary Remediation Program (VRP)

New Mexico Environment Department (NMED)
Harold Runnels Building Room, N2250
1190 St. Francis Drive
P.O. Box 26110
Santa Fe, NM 87502
http://www.nmenv.state.nm.us

Contact(s): Dale Doremus, *Program Manager*
dale.doremus@state.nm.us
505-827-2754

Ross Muir. *VRP Team Leader*
ross.muir@state.nm.us
505-827-0078

Program Overview

- Cost to Enter the Program: $1,000 plus oversight fees
- MOA with EPA Region 6 (December 1999)
- Liability Relief Provisions

Program

On July 15, 1999, the New Mexico Environment Department (NMED) introduced the Voluntary Remediation Program (VRP), intended to promote the voluntary cleanup of contaminated properties. The VRP is intended to encourage redevelopment of contaminated sites (i.e., brownfields) by providing a streamlined, non-punitive remediation process.
http://www.nmenv.state.nm.us/gwb/NMED-GWQB-VoluntaryRemediationProgram.htm

- **Funding Source(s) for the Program:** Federal grants, Revolving Loan Fund (RLF) repayments and oversight fees
- **Cost to enter the VRP:** $1,000 application fee, and payment to NMED for oversight charges at the rate of $90/hour.
- **Sites Enrolled in VRP:** As of November 2010, there were 28 actives sites in the program.
- **Sites Completed under VRP:** As of November 2010, 47 sites completed cleanups through the program.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

The EPA-capitalized NMED Brownfields Revolving Loan Fund (RLF) provides low-interest loans that are available to private developers, nonprofits and municipalities, for site remediation activities. For Federal Fiscal Year 2010, NMED's Brownfields program received $1.84 million in American Recovery and Reinvestment Act (ARRA) RLF Funds. Targeted Brownfields Assessment (TBA) funds are available to for NMED to conduct Phase I and II assessments at municipally-owned sites and Phase III remediation planning. New Mexico brownfield sites are eligible for federal tax incentives and Leadership in Energy and Environmental Design (LEED) credits toward sustainable sites for brownfields redevelopment.
http://www.nmenv.state.nm.us/gwb/NMED-GWQB-GrantsandPlanning.htm
http://www.nmenv.state.nm.us/gwb/NMED-GWQB-Brownfields.htm

LIABILITY RELIEF PROVISIONS

The NMED Secretary issues a Certificate of Completion (COC) or a Conditional Certificate of Completion for a site, and provides a Covenant Not to Sue (CNS) to a purchaser or prospective purchaser of the site that did not contribute to the site contamination, for any direct liability, including future liability for claims based upon the contamination covered by the agreement and over which the department has authority. Except as may be provided under federal law or as may be agreed to by a federal government entity, the CNS shall not release or otherwise apply to claims by the federal government for claims based on federal law. Except as may be agreed to by another department or agency of the state, the CNS shall not release or otherwise apply to claims of any other office, department or agency of the state. Except as may be agreed to by a third party, the CNS shall not release or otherwise affect a person's liability to third parties. Liability protection for lenders exists.

Program Elements

METHODS/STANDARDS/CONTROLS

Remediation activities are subject to - 20.6.3.10 PERFORMANCE STANDARD AND ASSOCIATED REQUIREMENTS – and may be found at: http://www.nmcpr.state.nm.us/nmac/parts/title20/20.006.0003.htm

CONTAMINANTS COVERED

Does not restrict on the basis of contaminants.

INSTITUTIONAL CONTROLS (IC)

Regulations allow use of post completion monitoring, engineering controls, remediation systems, post closure care, or an affirmation of future non residential land use.

The following Web address is a direct link to the state's public database that maintains an inventory of sites, and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state.
http://www.nmenv.state.nm.us/gwb/NMED-GWQB-VoluntaryRemediationProgram.htm

Program Highlights

The Santa Fe Railyard is a 50-acre property with a history of mixed use, but had been mostly vacant for many years. In 1995, the City of Santa Fe purchased the property with the intent of redeveloping it. Plans called for use to include residential and retail areas and a park; however, development of the property was delayed by concerns about potential contamination. NMED helped facilitate redevelopment of the Santa Fe Railyard by performing a number of TBAs using Section 128(a) Response Program funding. NMED performed a Phase I investigation for the northern portion of the property to help the city identify any environmental problems that might have required additional evaluation. As a result of the Phase I, NMED prepared a Phase II sampling plan to assess soils across the property. The sampling plan was completed and the property received a COC in February 2006 and a CNS in March 2006.

Other Land Programs

Petroleum Storage Tank Bureau
http://www.nmenv.state.nm.us/ust/ustbtop.html

Superfund Program
http://www.nmenv.state.nm.us/gwb/NMED-GWQB-SuperfundOversight.htm

Oklahoma

Brownfields Program

Oklahoma Department of Environmental Quality (DEQ)
Land Protection Division
P.O. Box 1677
Oklahoma City, OK 73101-1677
http://www.deq.state.ok.us/lpdnew
Contact(s): Rita R. Kottke, *Brownfields Program Manager* – rita.kottke@deq.ok.gov – 405 -702-5157

Oklahoma Corporation Commission (OCC)
Oil and Gas Conservation Division
P.O. Box 52000
Oklahoma City, OK 73152-2000
http://www.occeweb.com/og/brownfields.htm
Contact(s): Patricia Billingsley, *Brownfields Manager* – P.Billingsley@occemail.com – 405-522-2758

Program Overview

- Brownfields Program (DEQ and OCC)
- Cost to Enter the Program: Oversight fees (DEQ and OCC)
- MOA with EPA Region 6 (April 1999) (DEQ)
- Liability Relief Provisions
- Tax Incentives

Program

The Oklahoma Department of Environmental Quality (DEQ) Brownfields Program provides a means for private parties and government entities to voluntarily investigate and, if warranted, clean up properties that may be contaminated by pollution. The brownfield process includes a Memorandum of Agreement and Consent Order (MACO) for Site Characterization as well as a Consent Order for Remediation. http://www.deq.state.ok.us/lpdnew/brownfindex.html

The Oklahoma Corporation Commission's (OCC) Voluntary Cleanup and Brownfields Programs provide a means for private parties, public, and governmental entities, and nonprofits to voluntarily investigate and, if necessary, clean up properties that may be contaminated with petroleum, produced water/brine, gasoline, diesel, or other deleterious wastes from oil and gas exploration and production (Oil and Gas E&P) or from leaking underground petroleum storage tank (PST) sites. This program also issues state Petroleum Eligibility letters. http://www.occeweb.com/og/brownfields.htm

- **Funding Source(s) for the Program:** Federal grants; State Cleanup Funds (OCC)
- **Cost to enter program or fees for service:** Oversight fees (DEQ); None (OCC)
- **Sites Enrolled in VCP:**
  DEQ – As of December 2010, 23 sites were currently enrolled in the program.
  OCC – As of December 2010, our current cumulative Brownfields Inventory List has 422 inspected and qualified sites, of which 382 have been referred to OERB for cleanup. Seven sites are currently enrolled in the OCC program for a cleanup.
- **Sites Completed under VCP:**
  DEQ – As of December 2010, 6 Brownfields Certificates of No Action Necessary have been issued. Nine Brownfields Certificates of Completion have been issued.
  OCC – As of December 2010, two sites have completed the OCC Brownfields Program and been given Certificates of Completion, plus 191 Brownfields-eligible sites have had an OERB cleanup completed or are scheduled for a cleanup.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

- DEQ provides Targeted Brownfield Assessments (TBA) to public entities and nonprofit groups. Low interest loan programs are available for cleanup. Public and private entities may obtain low interest loans from EPA's Revolving Loan Fund (RLF) grant. Also, municipalities may be eligible to receive Clean Water State Revolving Fund (CWSRF) for the remediation of brownfield sites if contamination of the sites potentially impacts water quality.
- OCC provides no-cost Electromagnetic (EM) sites surveys to public and private entities enrolled in the program, and refers governmental and nonprofit owned sites to EPA for TBAs. It also inspects and refers sites to the Oklahoma Energy Resources Board for a funded oil and gas site assessment and cleanup, and eligible PST sites to the state Petroleum Storage Tank Indemnity Fund.

INCENTIVES

Oklahoma Sales Tax Code exempts state sales tax on machinery, fuel, chemicals, and equipment used in cleanup projects.
http://www.deq.state.ok.us/lpdnew/Brownfields/taxincennew2004.pdf

LIABILITY RELIEF PROVISIONS

For completed brownfields actions, once the Certificate of Completion (COC) or Certificate of No Action Necessary has been issued, DEQ and OCC are prohibited from assessing administrative penalties or pursuing civil actions associated with the contamination that was the subject of the agreement against any lender, lessee or successor or assign if that person is in compliance with any post-certification conditions or requirements as specified in the agreement, Certificate of No Action Necessary, or COC.

Program Elements

METHODS/STANDARDS/CONTROLS

Risk-Based Corrective Action (RBCA)-type processes in place. Brownfields Programs feature a risk-based system based on the proposed future use of the site to determine if cleanup is needed and if so, provide cleanup goals for the chemicals of concern. DEQ uses a three-tiered approach: 1) sampling data is compared to screening levels; 2) if data are higher than screening levels, state will generate conservative default cleanup levels using EPA Risk Assessment Guidelines for Superfund (RAGS)-based methodology; or 3) applicants may choose to do a risk assessment with state oversight to determine adequate cleanup goals. OCC requires sites to follow either the Oil & Gas Division's risk based Pollution Abatement Environmental (Guardian) Guidance, or the Petroleum Storage Tank Division's risk based ORBCA guidance.

CONTAMINANTS COVERED

- The State Legislature broadened the definition of brownfield sites by opening it up to all sites affected by pollution. However, the DEQ Brownfields Program will refer applicants to other agencies if the issues indicate that another agency could better serve the applicant.
- The OCC Brownfields Program is focused on helping entities redevelop land that is contaminated with substances relating to oil and gas exploration and production or that derives from leaking USTs. This includes crude oil, saline produced water/brine, gasoline, and diesel.

INSTITUTIONAL CONTROLS (IC)

Institutional controls (IC) are allowed if they adequately protect the public. DEQ has authority to implement land use controls, if necessary. DEQ is working to implement an IC geographic information system (GIS) database to accurately track the ICs in the state.

- **IC Tracking:** DEQ internally tracks active and completed sites, and sites scheduled for completion in the next year are added to the Brownfield Public Record. When the certificate is issued the site is entered into the IC database.
- **IC Oversight:** DEQ oversees the project from site characterization to any required after-action, long-term monitoring. Participants must reimburse DEQ for its oversight costs.
- **IC Monitoring:** If long-term monitoring is required at a site, a plan must be in place for long-term management, including a plan for payment of associated expenses and a contingency plan if contamination does not diminish over time.

The following Web address is a direct link to the state's public database that maintains an inventory of sites, maps sites, and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state.
http://www.deq.state.ok.us/lpdnew/Brownfields/PublicRecordBrownfields.pdf

Under the OCC Brownfields Program, institutional controls are one of the many choices that can be made at a site in order to protect the public. The public record is at: http://www.occeweb.com/og/brownfields/bfpub.htm; the inventory site list is available upon request.

Program Highlights

Oklahoma City broke ground for the development of a new fire station on a former oilfield brownfield in the Bricktown neighborhood. Subsequent to oil and gas well drilling, the 1.5-acre property served as storage for horse carriages and equipment and was a steel manufacturing facility. The Oklahoma Corporation Commission recently completed cleanup at the property by using Section 128(a) Response Program funding to inspect the site and make an agreement with OERB for a funded cleanup to remove petroleum contaminated soil left by abandoned oil wells; the soil was recycled to the County Commissioners for road building material. The large abandoned metal building on the property has been broken down and recycled. The new fire station now being built will be the first Leadership in Energy and Environmental Design (LEED) certified building constructed with city funds. The station will include a reflective roof, recycled material and enhancements designed for low energy consumption.

Other Land Programs

Petroleum Storage Tank Program (OCC)
http://www.occeweb.com/ps/abcs.html

Superfund Program (DEQ)
http://www.deq.state.ok.us/lpdnew/sfindex.html

Texas

Voluntary Cleanup Program

Texas Commission on Environmental Quality (TCEQ)
MC 221
P.O. Box 13087
Austin, TX 78711-3087
http://www.tceq.state.tx.us/remediation/vcp/vcp.html
Contact(s): Bill Shafford, *VCP-CA Manager* – Bill.Shafford@tceq.texas.gov – 512-239-6651

Program Overview

- Brownfields Program (TCEQ and RRC)
- Cost to Enter the Program: $1,000 plus oversight fees (TCEQ and RRC)
- Liability Relief Provisions (TCEQ and RRC)
- Tax Incentives (TCEQ and RRC)

TCEQ Brownfields Site Assessment Program

MC 221
P.O. Box 13087
Austin, TX 78711-3087
http://www.tceq.state.tx.us/remediation/bsa/bsa.html
Contact(s): Christine Whitney, *Brownfields Program Manager* – Christine.Whitney@tceq.texas.gov – 512-239-0843

Voluntary Cleanup Program (VCP) and Brownfields Response Program (BRP)

Railroad Commission (RRC) of Texas
P.O. BOX 12967
Austin, TX 78711-2967
http://www.rrc.state.tx.us/environmental
Contact(s): Aimee Beveridge, *Voluntary Cleanup Program Manager* – aimee.beveridge@rrc.state.tx.us – 512-463-7995

Program

The Texas Commission on Environmental Quality (TCEQ) in close partnership with EPA and other federal, state, local redevelopment agencies, and stakeholders, is facilitating cleanup, transferability and revitalization of brownfields through the development of regulatory, tax, and technical assistance tools.
http://www.tceq.state.tx.us/remediation/vcp/vcp.html and http://www.tceq.state.tx.us/remediation/bsa/bsa.html

In order to encourage redevelopment at abandoned oil and gas facilities, the Railroad Commission of Texas (RRC) offers assistance to private landowners and land developers through the VCP and governments, nonprofit organizations, tribes, and universities through its Brownfields Response Program (BRP).
http://www.rrc.state.tx.us/environmental/environsupport/voluntarycleanup.php
http://www.rrc.state.tx.us/environmental/environsupport/brownfield/index.php

- **Funding Source(s) for the Program:** State remediation fund and federal grants
- **Cost to enter program or fees for service:** $1,000 application fee; applicant must reimburse TCEQ for the direct costs of oversight.
- **Sites Enrolled in VCP:**
  TCEQ – As of November 2010, the VCP received 2,093 applications representing dry cleaners, manufacturing facilities, shopping centers, warehouses, auto-related businesses, and other commercial and industrial enterprises.
  RRC – As of November 2010, 100 sites were entered into the VCP and BRP.
- **Sites Completed under VCP:**
  TCEQ – As of November 2010, 1,427 sites were issued Final Certificates of Completion (COC).
  RRC – As of November 2010, 8 brownfields certificates and 42 VCP certificates have been granted.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

- The Petroleum Storage Tank Remediation (PSTR) Fund is supported by a fee on gasoline and other fuels at bulk distribution facilities. The state uses this fund to reimburse responsible parties for the costs of corrective actions of releases from aboveground or underground storage tanks.

- Under the Brownfields Site Assessment Program, TCEQ will direct the completion of a limited number of federally funded site assessments for qualifying local governments and nonprofit groups in Texas.
- The Dry Cleaning Program is supported by fees on dry cleaning solvents and dry cleaning facilities. The program will perform corrective action of releases from dry cleaning facilities.
- The RRC offers state-funded cleanup assistance for qualified sites under its BRP.

INCENTIVES

Some local governments within the state offer ad valorem property tax abatements to attract brownfields cleanup and redevelopment. Senate Bill 1596 and House Bill 1239 of the 75th Texas Legislative Session added Section 312.211 to the Texas Tax Code. This section allows municipal or county taxing authorities to provide property tax relief for the development or redevelopment of certain brownfields properties that are located within a reinvestment zone and have been cleaned up through the programs.

LIABILITY RELIEF PROVISIONS

After completion of the cleanup, parties will receive a COC from TCEQ or RRC, which states that all non-responsible parties are released from all liability provided by Chapter 91 Subchapter O, Texas Natural Resources Code.

Program Elements

METHODS/STANDARDS/CONTROLS

The Texas Risk Reduction Program (TRRP) follows a Risk-Based Corrective Action process (RCBA) that allows for the use of engineering and institutional controls. All TCEQ and RRC sites are evaluated using the TRRP rule. A VCP applicant may use state developed cleanup levels or site-specific data to develop site-specific cleanup levels.
http://www.tceq.state.tx.us/remediation/standards

CONTAMINANTS COVERED

Both the TCEQ and RRC programs address all contaminants in soil and groundwater. RRC jurisdiction is limited to contamination associated with oil and gas extraction while the TCEQ jurisdiction includes all other solid, industrial and hazardous waste.

INSTITUTIONAL CONTROLS (IC)

Institutional controls must be placed on a property record for a site that uses commercial/industrial risk-based standards, and for any property that relies on the use of physical control (e.g., cap or remediation system) to prevent exposure. The following Web address is a direct link to the state's public database that maintains an inventory of sites, maps sites, and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state.
http://www.tceq.state.tx.us/remediation/vcp/vcp.html#Database
http://www.rrc.state.tx.us/environmental/environsupport/voluntarycleanup.php

Program Highlights

Crestview Station in Austin was a former chemical research facility that processed components for soaps, foams and glues until 2005. The property was identified as a prime location for a high-density, mixed use project and transit-oriented development. In 2005, the property applied to the Texas VCP—funded by a Section 128(a) Response Program grant—to facilitate assessment and cleanup of known and suspected areas where waste materials were buried. Cleanup consisted of the excavation and disposal of approximately 20,000 cubic yards of buried waste products and impacted soils, and ground water monitoring and an institutional control addressed a benzene plume in one small area. The 71-acre Crestview Station redevelopment project includes 500 single-family homes, 600 apartments, recreational fields, and 150,000-square feet of retail and office space built around a Capitol Metro rail stop. Property values have increased and new jobs were created as a result.

Other Land Programs

Petroleum Storage Tanks (PSTs) Program (TCEQ)
http://www.tceq.state.tx.us/nav/permits/pst_cert.html

Dry Cleaner Remediation Program (TCEQ)
http://www.tceq.state.tx.us/remediation/dry_cleaners

Superfund Program (TCEQ)
http://www.tceq.state.tx.us/remediation/superfund

Abandoned Mine Lands Reclamation Program (RRC)
http://www.rrc.state.tx.us/programs/mining/aboutaml.php

EPA Region 7

Iowa

Brownfield Redevelopment Program and Land Recycling Program (LRP)

Iowa Department of Natural Resources (DNR)
Wallace State Office Building
502 E. 9th Street
Des Moines, IA 50319
http://www.iowadnr.gov/land/consites/index.html

Contact(s): Mel Pins, *Program Coordinator*
mel.pins@dnr.iowa.gov
515-281-8489

Program Overview

- State Response Program
- Cost to Enter the Program: $750 plus oversight fees
- MOA with EPA Region 7 (June 2004)
- Liability Relief Provisions
- Tax Incentives through IDED

Program

The Iowa Land Recycling Program (LRP) was established in 1997 and the Brownfield Redevelopment Program was established in 2004. The goal of the programs is for communities and other stakeholders in economic development to work together in a timely manner to prevent, assess, safely clean up, and sustainably reuse brownfields in Iowa.
http://www.iowadnr.gov/land/consites/brownfields/index.html

- **Funding Source(s) for the Program:** Federal grants (69%), oversight fees (26%), and state cleanup fund (5%)
- **Cost to enter program or fees for service:** There is an initial $750 application fee, and reimbursement of actual state oversight costs is capped at $7,500.
- **Sites Enrolled in VCP:** As of November 2010, 38 sites were enrolled in the program.
- **Sites Completed under VCP:** As of November 2010, 54 sites completed the program.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

- The Hazardous Waste Remedial (HWR) Fund may be used for administration, site investigation, emergency response, removals, remedial actions, operations and maintenance, Comprehensive Environmental Response Compensation and Liability Act (CERCLA) match, studies and design, and grants to local governments. Seventy-five percent of the Fund must be used for remediation at non-CERCLA sites and for CERCLA cost share.
- Iowa's CERCLA 128(a) State and Tribal Response Program grant focuses on small and rural communities in the state; grant funds can be used for Phase I ("due diligence") and Phase II environmental site assessments and small-scale cleanups at brownfield sites.

INCENTIVES

A variety of tax credits and resources are available through the Iowa Department of Economic Development (IDED) to assist with brownfields reuse projects.
http://www.iowalifechanging.com/Business/brownfields_resources.aspx

LIABILITY RELIEF PROVISIONS

Offers No Further Action (NFA) certification that is transferable to new owner.

Program Elements

METHODS/STANDARDS/CONTROLS

- State uses statewide, background, and site-specific standards. Site-specific standards are risk based.
- Cleanup decisions are made on a site-by-site basis. State regulations do provide cleanup goals for ground water and surface water. State cleanups may use promulgated Ground Water Action Levels based on lifetime health advisories, negligible risk levels, and Maximum Contamination Levels (Admin. Code §567.133), but these are not usually used for hazardous site cleanups. Risk assessment is used to determine applicable cleanup levels if ground water contamination exceeds action levels. There is no established risk range set out in state policy. Under the voluntary program detailed regulations are being developed to set out cleanup levels. Such cleanups will use risk assessment, background levels, ground water standards, and soil standards per state law. https://programs.iowadnr.gov/riskcalc/pages/standards.aspx

CONTAMINANTS COVERED

Any contaminant that has appropriate toxicity information available, and is not being addressed under separate authority.

INSTITUTIONAL CONTROLS (IC)

Statutorily based environmental protection easement is required for use with non-residential standards. May be possible to move the point of compliance with standards outside of area with an institutional control or appeal to a less restrictive standard with an institutional control. Use of an institutional control may not be allowed to address free product or "gross contamination."

The following Web address is a direct link to the state's public database that maintains an inventory of sites, maps sites, and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state. https://programs.iowadnr.gov/contaminatedsites/pages/search.aspx

Program Highlights

The DNR developed an innovative and valuable database of historic aerial photos of the entire state, designed to assist potential purchasers, developers, and others interested in past site activities and the environmental history of properties. Historic aerial photos are an extremely valuable key to understanding what potential environmental conditions may exist at a property. Beginning in 2004, DNR used Section 128(a) Response Program grant funding to begin acquiring copies of aerial photos from known sources including accessing scattered collections in state and federal archives. DNR then converted the photos into electronic images, rectifying the electronic images for accurate inclusion in geographic information systems (GIS), and loading the converted electronic photomaps into an easy-to-use, web-based, publicly accessible GIS. DNR completed the photo conversion and integration of more than 12,000 historic prints, creating a complete mosaic of GIS images of the State of Iowa. The historic aerial photo database is an integral part of environmental due diligence research in Iowa and notably improved the public's ability to find and access records of value for environmental assessment and cleanup decision making, particularly in small, rural, and environmental justice communities.

Other Land Programs

Underground Storage Tanks (USTs) Program
http://www.iowadnr.gov/land/ust/index.html

Kansas

Voluntary Cleanup and Property Redevelopment Program (VCPRP)
Brownfields Targeted Assessment Program
Environmental Use Control Program

Kansas Department of Health and Environment (KDHE)
Bureau of Environmental Remediation - Remedial Section
1000 SW Jackson, Suite 410
Topeka, KS 66612-1367
http://www.kdheks.gov/remedial/index.html

Contact(s): Rick Bean, *Chief, Remedial Section*
rbean@kdheks.gov
785-296-1675

Jerry Lineback, *Unit Leader, Voluntary Cleanup Unit*
jlineback@kdheks.gov
785-296-2546

Deanna Ross, *Unit Leader, Restoration and Long-Term Stewardship Unit*
dross@kdheks.gov
785-296-8064

Doug Doubek, *State Response & Property Redevelopment Unit Brownfields Program*
ddoubek@kdheks.gov
785-291-3246

Program Overview

- Voluntary Cleanup and Property Redevelopment Program (VCPRP)
- Cost to Enter the VCPRP Program: $200 plus oversight fees
- MOA with EPA Region 7 (March 2001)
- Liability Relief Provisions
- Brownfields Program
- Environmental Use Control Program

Program

Under the Voluntary Cleanup and Property Redevelopment Program (VCPRP), developers and buyers who perform successful cleanups of contaminated properties that are within established criteria will be granted a “No Further Action” determination by the department, satisfying the regulated community’s need for protection from potential future liabilities. Adjacent property owners who did not contribute to the contamination could also receive protection from the department through such determinations. The VCPRP works in conjunction with the State Brownfields Program and the Environmental Use Control Program.
http://www.kdheks.gov/remedial/vcp/index.html
http://www.kdheks.gov/brownfields/index.html

- **Funding Source(s) for the VCPRP Program:** Oversight fees and federal grants
- **Cost to enter program or fees for service:** VCPRP applications must be submitted with $200 nonrefundable application fee; initial deposit, not to exceed $5,000 is required to cover Kansas Department of Health and Environment’s (KDHE) oversight costs including cost of labor associated with review of documents, studies and test results, collection of split samples, laboratory analysis, and other costs. There are also costs to participate in the Environmental Use Control Program depending on the category of the site.
- **Sites Enrolled in VCP:** As of January 2011, 352 properties were active in either investigation or cleanup.
- **Sites Completed under VCP:** As of January 2011, the VCPRP issued 217 No Further Action letters and 2,246 acres had been remediated.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

- Brownfields Targeted Assessment Program
  http://www.kdheks.gov/brownfields/targeted_assess_prog.html
- Brownfields Cleanup Revolving Loan/Grant Program
- Kansas Agricultural Remediation Fund was created in July 2000 to assist in the investigation and remediation of qualifying properties with agricultural-related contaminants. The program provides direct reimbursement up to $200,000, and low-interest loans up to $300,000.

LIABILITY RELIEF PROVISIONS

Under KSA 65-34,169 and KAR 28-71-10, stakeholders performing cleanup of contaminated properties that meet the criteria in the law (low to medium priority sites with minimal risk) can receive a No Further Action determination from KDHE to provide some protection from potential liabilities. Adjacent property owners who did not contribute to the contamination may also receive protection from KDHE through such determinations.

Program Elements

METHODS/STANDARDS/CONTROLS

Environmental Use Controls Program (same as institutional controls).
http://www.kdheks.gov/remedial/vcp/vcprprevised05manual.htm

CONTAMINANTS COVERED

All contaminants and pollutants covered including lead, asbestos and polychlorinated biphenyls (PCBs).
http://www.kdheks.gov/remedial/vcp/vcprprevised05manual.htm

INSTITUTIONAL CONTROLS (IC)

Use environmental use controls.

- **IC Tracking:** All ICs are tracked and a part of a computerized database for public viewing.
- **IC Oversight:** All ICs are enforceable by KDHE pursuant to the statute.
- **IC Monitoring:** All ICs are inspected on a regular basis to ensure compliance.

The following Web address is a direct link to the state's public database that maintains an inventory of sites, maps sites and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state.
http://www.kdheks.gov/remedial/isl_disclaimer.htm

Program Highlights

Seimens Energy evaluated several properties across the United States to select a new location for a $50 million dollar wind energy manufacturing facility. An ideally-located 109-acre lot located in Hutchinson, Kansas was identified. Environmental assessments conducted at the property indicated the potential for ground water contamination to have migrated underneath the property from several known up gradient source areas. In cooperation with the City of Hutchinson, Seimens Energy enrolled the property in the VCPRP. Based on findings it was concluded by VCPRP staff that the property was impacted by two separate upgradient sources, both participating in a state enforcement cleanup program. The VCPRP issued Seimens a Class I – No Further Action Determination based on the impacted adjacent landowner provision of the VCPRP regulations. Subsequently, Seimens Energy chose the Hutchinson property as the location for their manufacturing facility. The 300,000-square foot facility employees 300 green-collar jobs and is the first major wind turbine facility in Kansas. Kansas ranks third in the United States for wind energy resource potential.

Other Land Programs

Storage Tanks Program
http://www.kdheks.gov/tanks/index.html

Superfund Program
http://www.kdheks.gov/ars/superfund_unit.html

Drycleaning Program
http://www.kdheks.gov/ars/index.html#drycl

Missouri

Brownfields / Voluntary Cleanup Program (BVCP)

Missouri Department of Natural Resources (MoDNR)
Hazardous Waste Program
P.O. Box 176
Jefferson City, MO 65102-0176
www.MissouriBrownfields.com

Contact(s): Jim Belcher
jim.belcher@dnr.mo.gov
573-526-8913

Program Overview

- Brownfields Program
- Cost to Enter the Program: $200 plus oversight fees
- MOA with EPA Region 7 (September 1996)
- Liability Relief Provisions
- Tax Incentives

Program

First established by the state legislature in 1994, Missouri's Brownfields/Voluntary Cleanup Program (BVCP) is administered by the Hazardous Waste Program's Brownfields/Voluntary Cleanup Section to provide state oversight for voluntary cleanups of properties contaminated with hazardous substances.
www.MissouriBrownfields.com

- **Funding Source(s) for the Program:** Federal grants and oversight fees
- **Cost to enter program or fees for service:** The application fee is $200 and up to $5,000 initial deposit is made toward the costs. Oversight costs are charged on an hourly basis. After completion or withdrawal, any remaining deposit balance is refunded. The average cost per site is $3,000.
- **Sites Enrolled in VCP:** As of January 1, 2011, 1,087 sites have been enrolled since program establishment in 1994. Approximately 114 applications are processed annually and there are typically 275-300 active projects.
- **Sites Completed under VCP:** As of January 1, 2011, 611 certificates of completion have been issued.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

- Missouri's Drycleaning Environmental Response Trust (DERT) Fund provides for the investigation, assessment and cleanup of dry cleaning facility sites. Only chlorinated solvent contamination is to be addressed. Eligible sites will have eligible costs reimbursed after a $25,000 deductible up to $1,000,000 per site. The DERT fund is managed by the Missouri Department of Natural Resources (MoDNR) as part of the BVCP Section.
- Missouri's Petroleum Storage Tank Insurance Fund (PSTIF) covers insured and other eligible petroleum sites with either underground or above ground storage tanks. The fund will reimburse cleanup costs up to $1,000,000 per incident after a $10,000 deductible.
- The Environmental Improvement and Energy Resources Authority (EIERA) may provide loans and sub-grants to support cleanup activities for sites contaminated with petroleum, hazardous and controlled substances, as well as mine-scarred lands. Any public (except the state) or private entity may be eligible for loans to pay for the cleanup of brownfields properties. Sub-grants are limited to political subdivisions and nonprofit corporations.

INCENTIVES

The Missouri Department of Economic Development (DED) may issue tax credits for up to 100% of the cost of remediating a brownfields property. The purpose of the Brownfield Redevelopment Program is to provide financial incentives for the redevelopment of commercial/industrial sites that are contaminated with hazardous substances and have been abandoned or underutilized for at least three years. The tax credit may also include up to 100% of the costs of demolition that are not directly part of the remediation activities. The demolition may occur on an adjacent property if the project is located in a municipality which has a population less than 20,000 and other conditions are met. The amount of the credit available for demolition not associated with remediation cannot exceed the total amount of credits approved for remediation, including demolition required for remediation.
http://www.missouridevelopment.org/topnavpages/Research%20Toolbox/BCS%20Programs/Brownfield%20Redevelopment%20Program.html

LIABILITY RELIEF PROVISIONS

Certificate of Completion is issued by the state. Any interested party can apply with a property owner's permission. Includes risk-based cleanup criteria, tied to future land use, and institutional and/or engineering control provisions.

Program Elements

METHODS/STANDARDS/CONTROLS

The Hazardous Waste Program administers two Risk-Based Corrective Action (RBCA) process:

- The RBCA Process for Petroleum Storage Tanks is applicable to releases from regulated petroleum storage tanks.
- The Missouri Risk-Based Corrective Action (MRBCA) process applies to releases from sources other than regulated petroleum storage tanks and is available at the following link.
  http://www.dnr.mo.gov/env/hwp/mrbca/mrbca.htm

CONTAMINANTS COVERED

The BVCP addresses petroleum, asbestos, lead-based paint, Comprehensive Environmental Response Compensation and Liability Act (CERCLA) hazardous substances, polychlorinated biphenyls (PCBs), and controlled substances contamination.

INSTITUTIONAL CONTROLS (IC)

The BVCP recognizes that not all properties can be cleaned up to unrestricted use standards, as desirable as that would be. There are projects where the intended end use does not require the cleanup level to meet unrestricted use and the economics of doing so would prohibit the cleanup and redevelopment. Under the MRBCA guidance, the site remediation can be complimented by institutional and/or engineering controls. The most used institutional control is a restrictive covenant that is associated with and considered part of the property legal description. The covenant addresses restrictions of property usage. The covenant also documents the engineering controls in place and the cautions associated with working near or on the controlling feature. Covenants are developed and filed in the property chain-of-title in accordance with the Missouri Environmental Covenants Act.

MoDNR is developing a long-term-stewardship system (LTS) to document and track the continued enforcement of institutional controls. The BVCP is providing the leadership for the LTS program, but it will ultimately address all remediated sites in Missouri regardless of which program provides oversight.

- **IC Tracking:** Sites with LTS controls are listed on the BVCP website.
- **IC Oversight and Monitoring:** Annual inspection visits by a BVCP project manager are required. LTS site owners are required to notify the BVCP prior to transferring the property to a new owner.

The following Web address is a direct link to the state's public database that maintains an inventory of sites, maps sites, and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state.
http://www.dnr.mo.gov/env/hwp/docs/sitestatuslist.xls

Program Highlights

MoDNR BVCP used Section 128(a) Response Program funding to host its 6th Annual Brownfields Conference on June 21, 2010. The Brownfields Conference provided a platform to celebrate the positive effects—economic, environmental and aesthetic—the BVCP has provided to Missouri through cleanup of over 600 sites, and the continued positive effects the program will have in the future. Almost 200 participants from seven states attended. Attendees included city and community representatives, consultants, state and federal agency staff, and other stakeholders. The conference focused on providing essential information on the identification, remediation, and redevelopment of contaminated properties in Missouri.



Attendees at Missouri's 6th Annual Brownfields Conference

Other Land Programs

Petroleum Storage Tanks Program
http://www.dnr.mo.gov/env/hwp/tanks/tanks.htm

Superfund Program
http://www.dnr.mo.gov/env/hwp/sfund/spf.htm

Nebraska

Voluntary Cleanup Program (VCP)

Nebraska Department of Environmental Quality (NDEQ)
1200 N Street, Suite 400
P.O. Box 98922
Lincoln, NE 68509
http://www.deq.state.ne.us

Program Overview

- Cost to Enter the Program: $5,000
- MOA with EPA Region 7 (November 2006)
- No Further Action Determinations

Contact(s): Mike Felix, *Section Supervisor, Remediation Section*
mike.felix@nebraska.gov
402-471-3388

Tom Buell, *Unit Supervisor, Superfund/VCP Unit*
thomas.buell@nebraska.gov
402-471-3388

Charlene Sundermann, *VCP/Brownfields Coordinator*
charlene.sundermann@nebraska.gov
402-471-3388

Program

The Nebraska Voluntary Cleanup Program (VCP) was established by the Remedial Action Plan Monitoring Act (RAPMA) in 1995, as amended in 2004 and 2008. The VCP is a fee-based cleanup program for property owners, potential property buyers, facility owners, local governments, and other parties interested in voluntarily cleaning up contaminated properties under state oversight. The VCP utilizes a streamlined, results-based approach to environmental cleanup to facilitate the redevelopment and reuse of brownfield sites and provide an alternative approach to more traditional federal cleanup programs such as Superfund or the Resource Conservation and Recovery Act (RCRA) programs.
http://www.deq.state.ne.us

- **Funding Source(s) for the Program:** Federal grants and application fee and initial deposit
- **Cost to enter program or fees for service:** Application fee of $2,000 and initial deposit of $3,000.
- **Sites Enrolled in VCP:** As of November 2010, 10 sites are active in the voluntary cleanup program.
- **Sites Completed under VCP:** As of November 2010, nine sites have successfully completed cleanup requirements under the voluntary cleanup program and have received “No Further Action” (NFA) letters from Nebraska Department of Environmental Quality (NDEQ).

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

NDEQ’s Section 128(a) assessment program, funded through EPA, can help communities receive free environmental site assessments. These environmental assessments are the initial investigations conducted prior to entering into the VCP.

LIABILITY RELIEF PROVISIONS

None

Program Elements

METHODS/STANDARDS/CONTROLS

The VCP developed a comprehensive guidance document that outlines the overall cleanup process and information requirements for the preparation and submittal of a remedial action plan. Full characterization of the nature and extent of contamination must be completed before applying to the program. The remedial action plan must consist of an investigation report which presents a conceptual site model based on a thorough investigation, and a remedial action work plan which outlines the plan for cleaning up the site. The comprehensive guidance document also includes a three-tiered remediation goals protocol that considers human health risks, ground water use, and future land use. The VCP Guidance is currently being revised to include evaluation of the indoor air pathway due to vapor intrusion from soil and ground water sources. The guidance document includes the development of remediation goals for soil gas and ground water that would be protective of indoor air quality.

If at the completion of all cleanup activities, the applicant has remitted all applicable fees, has met the provisions and the objectives agreed to with NDEQ, and has complied with all state and federal environmental standards and substantive requirements, NDEQ may issue a letter stating that no further action need be taken at the site related to the contamination for which the remedial action was conducted.

CONTAMINANTS COVERED

Hazardous substance, pollutant or contaminant, petroleum, asbestos, lead-based paints, and polychlorinated biphenyls (PCBs) are all covered.

INSTITUTIONAL CONTROLS (IC)

Institutional controls in accordance with the Nebraska Uniform Environmental Covenants Act are recommended.

- **IC Tracking:** Institutional controls are tracked as part of the Public Record required by the federal Section 128(a) funding.
- **IC Oversight:** NDEQ reviews and approves remedial action plans and performs oversight of implementation of the remedial action, including the implementation of institutional controls.
- **IC Monitoring:** NDEQ performs periodic monitoring of ongoing long-term operation, maintenance and monitoring activities, including monitoring of institutional controls.

Current information on the Public Record and IC tracking system can be found at:
http://www.deq.state.ne.us/SuperFun.nsf/Pages/VCPPR

In the future, the VCP will be partnering with the Nebraska Department of Natural Resources (NDNR) to map institutional control areas in the state. This will aid water well drillers with critical information to prevent installation of domestic water wells in contaminated areas. When completed, this information will be available on the NDNR's website at:
http://dnrdata.dnr.ne.gov/wellscs/Menu.aspx

Program Highlights

NDEQ used Section 128(a) Response Program funding to form a new partnership with the Nebraska Public Power District (NPPD) to promote brownfields redevelopment. Nebraska is served entirely by public power and NPPD is the state's largest electric utility. Twice a year, NPPD hosts video conferences with economic development experts from its Economic Development Team and Nebraska Department of Economic Development to present information about resources for community growth and development. NPPD provides the facility, technology and resources across the state, and encourages small rural communities and their economic development leaders to participate. This mutually beneficial relationship continues to evolve as both organizations include the other in outreach efforts. When NDEQ's Brownfields Program organizes workshops, NPPD is encouraged to present and participate. In addition, NPPD facilitated the Brownfields Program's technical session at the Nebraska Economic Development Association 2010 Fall Conference. Since the start of the partnership, nearly a dozen rural communities have used NDEQ's Brownfields Program to clean up properties for economic redevelopment.

Other Land Programs

Petroleum Remediation Program
http://www.deq.state.ne.us

Superfund Program
http://www.deq.state.ne.us/SuperFun.nsf

EPA Region 8

Colorado

Voluntary Cleanup and Redevelopment Program (VCP)

Colorado Department of Public Health and Environment (CDPHE)
Hazardous Materials and Waste Management Division
4300 Cherry Creek Drive South
Denver, CO 80246-1530
http://www.cdphe.state.co.us/HM/index.htm

Contact(s): Dan Scheppers, *Remedial Programs Manager (Brownfields and Voluntary Cleanup)*
303-692-3398

Fonda Apostolopoulos, *Voluntary Cleanup and Redevelopment Program*
303-692-3411

Doug Jamison, *Colorado Brownfields Revolving Loan Fund*
303-692-3404

Barbara Nabors, *State Incentives for Redevelopment of Contaminated Land in Colorado*
303-692-3402

Program Overview

- Brownfields Program
- Brownfields Revolving Loan Fund
- Cost to Enter the Program: $2,000 plus $85/hour
- MOA with EPA Region 8 (April 1996)
- Liability Relief Provisions
- Colorado Brownfields Foundation

Program

The Colorado Department of Public Health and Environment (CDPHE) established the Voluntary Cleanup and Redevelopment Program (VCP) in 1994 to provide public and private property owners with the resources to facilitate cleanups as well as assurances against regulatory enforcement.
http://www.cdphe.state.co.us/HM/rpbrownfields.htm

- **Funding Source(s) for the Program:** VCP fees (80%) and federal grants (20%)
- **Cost to enter program or fees for service:** Application fee is $2,000. Hourly review fee is $85.
- **Sites Enrolled in VCP:** As of November 2010, there have been approximately 650 applications. Approximately 50 applications are processed each year.
- **Sites Completed under VCP:** N/A

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

- **Colorado Brownfields Revolving Loan Fund** – Encourages the cleanup of unused or underused contaminated properties. The Fund offers financing with reduced interest rates, flexible loan terms, and flexibility in acceptable forms of collateral.
http://www.cdphe.state.co.us/HM/rpbrownfields.htm#loan
- **Targeted Brownfields Assessments** – The state performs targeted site assessments to characterize the nature and extent of site contamination. This characterization is at no cost to the property owner, and provides assistance in quantifying the need for and potential cost of cleanup. Sites are eligible if they are not on the National Priorities List (NPL) or under enforcement or other action by a government agency. For a private party to be eligible there must be a clear public benefit. Determinations on which sites will be assessed are done on a priority basis.

INCENTIVES

The Colorado Brownfields Revolving Loan fund can provide sub-grants to local governments to pay for cleanup of contaminated properties and facilitate redevelopment of those properties.

LIABILITY RELIEF PROVISIONS

Colorado statute provides that CDPHE will actively pursue a determination by EPA that a property in the VCP not be addressed under the federal act and no further federal action will be taken with respect to the property at least until the voluntary cleanup plan is completely implemented.

Colorado statute provides that voluntary cleanup plans are not enforceable against a property owner (unless the owner fails to implement the plan after initiating a voluntary cleanup). In addition, information provided by a property owner to support a voluntary cleanup plan or no action petition does not give CDPHE an independent basis to seek penalties from the property owner pursuant to state environmental statutes or regulations.

BROWNFIELDS REDEVELOPMENT AUTHORITIES (OR SIMILAR)

The Colorado Brownfields Foundation (CBF) is a 501(c)(3) Colorado nonprofit corporation that provides technical assistance for financing, redeveloping and reusing brownfield sites. CBF is an approved Colorado Enterprise Zone Contribution Project.
http://www.coloradobrownfieldsfoundation.org

Program Elements

METHODS/STANDARDS/CONTROLS

No formal Risk-Based Corrective Action or comparable/informal process is in place; VCP applicants choose from various cleanup standards or perform risk assessments. State allows risk-based closures.

CONTAMINANTS COVERED

Hazardous substances and solid wastes including petroleum contaminants, asbestos, lead paint, and methamphetamine derived contaminants are all covered.

INSTITUTIONAL CONTROLS (IC)

While Colorado does not have enforcement authority under its state Superfund program, the most recent amendments to the Hazardous Waste Sites Act authorize the use of environmental covenants that run with the land (Colorado Revised Statutes (CRS) §§ Sec. 25–15–317 through 327). CDPHE may use environmental covenants under the VCP if the owner requests it, however it is not compulsory. If the property owner fails to comply with an environmental covenant, CDPHE may issue an order requiring compliance and may request that the Attorney General bring a suit to enforce the terms of the covenant.

- **IC Tracking:** Colorado is required to maintain an inventory of all sites and facilities at which hazardous substances have been disposed of in the state under the 2001 amendments to the Hazardous Waste Sites Act. As of July 1, 2001 the state is tracking institutional controls at state cleanup program sites, Resource Conservation and Recovery Act (RCRA) cleanup sites, federal facility sites, and VCP sites through the database. The primary users of the system are state officials, with local governments as secondary users. The database will eventually be made available to the public. Colorado is required to create and maintain a registry of all environmental covenants, including any modifications or terminations of the covenants under the 2001 amendments to the Hazardous Waste Sites Act.
- **IC Oversight and Monitoring:** Colorado's long-term stewardship provisions include monitoring, institutional controls and enforcement

The following Web address is a direct link to the state's public database that maintains an inventory of sites, maps sites, and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state.
http://www.cdphe.state.co.us/HM/hmmapapps.htm

Program Highlights

Once the largest indoor shopping center in the Mountain West, Lakewood's Villa Italia Mall began to decline in the 1990s. By 1999, 50%of the property was vacant. As a large tract of land in a historical community center, Villa Italia was ripe for redevelopment, but environmental obstacles blocked rebuilding. Dry cleaners and auto shops on the 104-acre site contaminated the ground water and soil. Buildings contained asbestos and hazardous materials. Environmental remediation work had an estimated cost of $5 million. The environmental cleanup—which would clear the way for redevelopment—required a multi-pronged funding effort. A $1.95-million Colorado Brownfields Revolving Loan Fund loan helped pay for assessment and cleanup. Negotiations with responsible parties collected $2.5 million. Lakewood secured a $110,000 federal grant. In addition, a creative cleanup remedy using carbohydrates to increase bacteria respiration and the breakdown of solvents was injected into the ground water cut cleanup costs. The 22-block redevelopment has an estimated $500 million price tag, financed by the developer and bonds from area Metropolitan Districts. Tax increment financing and a public improvement fee are helping pay back the bonds. Further, green building practices enabled the developer to recycle 90% of material from the former mall and save money on energy-efficient operations. Fully complete, the site will create over 2,000 jobs and 1,300 residences. The buildings have designs for flexible use, fostering a business climate that mirrors the new ground water conditions: sustainable and full of life. What speaks most to its success, however, is its central role in Lakewood's revamped sense of community.

Other Land Programs

Superfund Program
http://www.cdphe.state.co.us/hm/rpgen.htm

Montana

Montana Department of Environmental Quality (DEQ) Brownfields
Remediation & Permitting and Compliance Divisions
P.O. Box 200901
Helena, MT 59620-0901
http://deq.mt.gov/Rem/default.mcpx
http://deq.mt.gov/pcd/default.mcpx

Contact(s): Jason Seyler (Hazardous Substance Brownfields)
jseyler@mt.gov
406-841-5071

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406-841-5053

Becky Holmes (Hazardous Waste Brownfields)
rholmes@mt.gov
406-444-2876

Program Overview

- Brownfields Programs
- Funding Availability
- Voluntary Cleanup Program Elements
- Program Highlights

Program

The Montana Department of Environmental Quality's (DEQ) Brownfields programs are separated into the following three sections: Site Response, Leaking Underground Storage Tanks (LUST)/Brownfields, and Hazardous Waste. Additional information regarding each program can be found at:
http://deq.mt.gov/Brownfields/MTBrownfieldsPrograms.mcpx

Site Response Section
DEQ's Site Response Section (SRS) administers the Montana State Superfund and Voluntary Cleanup Programs (VCP). The SRS is part of the Hazardous Waste Site Cleanup Bureau in DEQ's Remediation Division. SRS personnel work on both State Superfund and Voluntary Cleanup sites. SRS uses Brownfields funding to enhance its State Superfund and Voluntary Cleanup Programs.

LUST/Brownfields Section
DEQ's LUST/Brownfields Section (LBS) administers a portion of the state's petroleum cleanup program through the authority of the Montana Underground Storage Tank Act. LBS is part of the Hazardous Waste Site Cleanup Bureau in DEQ's Remediation Division. Montana's Underground Storage Tank Act requires compliance with the Montana Underground Storage Tank Rules that include the requirements for release reporting, investigation, confirmation, abatement measures, and corrective action.

Hazardous Waste Section
DEQ's Hazardous Waste Section (HWS) administers the State's Hazardous Waste Program. The HWS is part of the Waste and Underground Tank Management Bureau in DEQ's Permitting and Compliance Division. The Hazardous Waste Act requires compliance with hazardous waste regulations for generators of hazardous waste and permitted treatment, storage and disposal facilities. The HWS also oversees remediation when releases of hazardous waste or hazardous constituents occur at hazardous waste generator sites, as well as permitted facilities.

The HWS also keeps a list of hazardous waste facilities where cleanup activities have taken place or are in progress. Cleanups at these facilities were triggered by permitting requirements, discovery of hazardous waste spills during DEQ inspections, complaints, or self-reporting by handler.

- **Funding Source(s) for DEQ's Brownfields Program:** Federal grants
- **Cost to enter program or fees for service:** There are no costs to participate in the Brownfields program. All applicants entering into the voluntary cleanup program must agree to reimburse the state for all administrative costs. Cost recovery is based on actual cost; there is no standard fee.
- **Sites Completed under VCP:** As of February 2011, 31 sites have been "closed" under the VCP process by DEQ.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

- Information on available grants can be found at: http://deq.mt.gov/Brownfields/Grants.mcpx
- Montana Assessment grants are discussed at: http://deq.mt.gov/Brownfields/TargetedBA.mcpx
- Loans available through state Board of Investments program may apply to brownfield sites.
- Controlled Allocation of Liability Act and orphan share fund offers reimbursement for expenditures beyond applicant's responsibility from an orphan share fund; level depends on available funding.

INCENTIVES

Participation in the voluntary cleanup program includes enforcement stays, liability protection, and a streamlined process with short review times. Additional information on the VCP can be found at: http://deq.mt.gov/StateSuperfund/vcra.mcpx

LIABILITY RELIEF PROVISIONS

Program offers closure letters; program can be used by any interested person with the property owner's permission to address all or a portion of a site.

Program Elements

METHODS/STANDARDS/CONTROLS

Cleanup levels for the VCP may be based upon proposed use, which includes the potential of implementing institutional controls.

CONTAMINANTS COVERED

All contaminants covered by the VCP, but must represent a release or threat of release to the environment. Under the Brownfields program, threats to public health and the environment can be addressed.

INSTITUTIONAL CONTROLS (IC)

For the VCP, institutional controls allowed as appropriate.

Program Highlights

The Montana DEQ used Section 128(a) Response Program funding to develop Montana's Petroleum Brownfields Guidance Document. The guidance document explains the petroleum brownfields eligibility determination process and contains a copy of Montana's new Petroleum Brownfields Eligibility Determination Form that must be completed and returned to Montana DEQ by any applicant requesting petroleum Brownfields funding.
http://deq.mt.gov/LUST/Brownsfields/Petro_BF_Final_Guidance_09-25-09.pdf

North Dakota

Brownfields Program

North Dakota Department of Health
Division of Waste Management
918 East Divide Avenue, 3rd Floor
Bismarck, ND 58501-1947
http://www.ndhealth.gov/WM

Contact(s): Curtis Erickson
cerickso@nd.gov
701-328-5166

Derek Hall
dahall@nd.gov
701-328-5166

Program Overview

- Brownfields Program
- Cost to Enter the Program: $0
- Liability Relief Provisions

Program

The Division of Waste Management Brownfields Program is application based, and cities, counties, or local development groups may apply for assistance. The concept of the Brownfields Program is to take contaminated or potentially contaminated, underdeveloped, or unproductive property and convert it into productive real estate.
http://www.ndhealth.gov/WM/Brownfields

- **Funding Source(s) for the Program:** Federal grants
- **Cost to enter program or fees for service:** At this time, the state does not charge any fees.
- **Sites Enrolled in Program:** As of January 2011, 6 sites were active in the program.
- **Sites Completed under Program:** As of January 2011, 26 sites have completed cleanups, and 45 sites have completed assessments through the program.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

The state is using Section 128(a) State and Tribal Response Program grant funds to conduct site assessments at petroleum sites and contamination removal activities at sites requiring contamination removal.
http://www.ndhealth.gov/WM/Publications/ApplicationGuidelineForTargetedBrownfieldsAssessmentAssistanceInNorthDakota.pdf

LIABILITY RELIEF PROVISIONS

The Department offers closure letters and No Further Action (NFA) letters. The Department may also give site specific responsibility exemptions or regulatory assurances provided certain activities are conducted.

Program Elements

METHODS/STANDARDS/CONTROLS

Cleanup standards or goals are site specific.

CONTAMINANTS COVERED

The program does not restrict on basis of contaminants.

INSTITUTIONAL CONTROLS (IC)

Various institutional controls allowed, based on individual sites, future use, location, etc.
http://www.ndhealth.gov/wm/EnvironmentalCovenantsInstitutionalControls.htm

- **IC Tracking:** The Department, by law, is required to maintain a record of all institutional controls established.
- **IC Oversight:** The Department conducts oversight activities at all voluntary cleanup sites and has the authority to access any site.
- **IC Monitoring:** The Department has the authority to conduct monitoring at any site.

The following Web address is a direct link to the state's public database that maintains an inventory of sites, maps sites and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state.
http://www.ndhealth.gov/WM/Publications/BrownfieldsSitesInNorthDakota.pdf

Program Highlights

The North Dakota Brownfields Program used Section 128(a) Response Program funding to clean up four buildings on three brownfield sites located in Walhalla. The abatement of several thousand square feet of asbestos containing floor tile, linoleum, insulation, and stucco was conducted in September 2010. Demolition of the buildings followed the abatement and will see all three sites returned to the city tax rolls as economically developable properties. The three sites were ceded to the city due to delinquent property taxes and were considered a public safety and health hazard.

Other Land Programs

Underground Storage Tanks (UST) Program
http://www.ndhealth.gov/WM/UndergroundStorageTankProgram

South Dakota

Brownfields Revitalization and Economic Development Program

South Dakota Department of Environment and Natural Resource (DENR)
Ground Water Quality Program
Joe Foss Building
523 East Capitol Avenue
Pierre, SD 57501-3181
http://denr.sd.gov

Contact(s): Kim McIntosh, *Brownfields Coordinator*
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Program Overview

- Brownfields Program
- Cost to Enter the Program: $0
- Liability Relief Provisions

Program

The Ground Water Quality Program created the Brownfields Program to assist with the redevelopment of brownfields in South Dakota. By investigating and cleaning up a brownfield property and taking care of the site's possible health or environmental risks, communities can reuse local land to produce jobs, increase the tax base, or add other benefits such as a park or residential area.
http://denr.sd.gov/des/gw/Brownfields/Brownfields.aspx

- **Funding Source(s) for the Program:** Federal grants
- **Cost to enter program or fees for service:** The state does not charge parties to enter into the brownfields program or have fees for staff services.
- **Sites Enrolled in VCP:** As of November 2010, the program had assisted in funding assessment or cleanup work on 39 brownfields projects.
- **Sites Completed under VCP:** As of November 2010, over 9,000 sites have received completion or closures letters through the state's program.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

The state is using Section 128(a) State and Tribal Response Program funding to conduct assessment of its brownfield sites. These sites may include mine scarred lands, petroleum sites, and sites impacted by solvents, heavy metals, or controlled substances.

LIABILITY RELIEF PROVISIONS

Legislation (SDCL Chapter 74:05:12) was passed to establish additional liability provisions for sites designated as brownfield sites by the state.

Program Elements

METHODS/STANDARDS/CONTROLS

The state will use existing ground water and soil standards as well as site-specific risk based data. The state will also consider EPA Region 3 and EPA Region 5 Risk-Based Concentrations when determining the need for a cleanup action.

CONTAMINANTS COVERED

The state regulates hazardous substances, hazardous wastes, toxic substances, petroleum, pesticides, metals, and other substances considered regulated substances under South Dakota Codified Law (SDCL) Chapter 34A–12.

INSTITUTIONAL CONTROLS (IC)

The state allows the use of institutional controls (IC) on brownfield sites, spills or releases both in the assessment and remediation phase of the project. The state's database (http://denr.sd.gov/spills) contains information on each site and provides a mechanism to track long-term institutional controls.

- **IC Tracking:** Institutional controls are recorded on deed notices and environmental covenants are tracked by the Department of Environment and Natural Resources' (DENR) database.
- **IC Oversight:** Oversight is provided on all assessment and cleanup projects.
- **IC Monitoring:** South Dakota does not perform field monitoring of ICs.

The following Web address is a direct link to the state's public database that maintains an inventory of sites, maps sites, and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state.
http://www.sddenr.net/env_events

Program Highlights



Falls Park Was Expanded All the Way to Downtown Sioux Falls Through This Project

For years, an approximately 26-acre area located between downtown Sioux Falls and Falls Park (a recreational city park) had been passed over for redevelopment due to contamination uncertainties. The property was used for more than a half-century for lead-acid battery storage and scrap metal salvaging, and included a rail yard and a roundhouse. An EPA Brownfields Assessment Pilot awarded to Sioux Falls in 1996 confirmed the presence of heavy metals and organic chemicals, and helped the city to resolve land acquisition issues and develop a cleanup plan. The city performed a detailed environmental investigation of the entire project area through the Assessment Pilot and Showcase Community Funding. The DENR used Section 128(a) Response Program funding to assist the city in developing and implementing a cleanup plan. The city leveraged a more than $900,000 cleanup effort that involved the removal of contaminated soil and capping of selected areas. Modifications to newly-expanded Falls Park continue as part of the Falls Park Master Plan and most recently included the completion of a decorate archway, gazebos, an outdoor sculpture garden, and additional landscaping. Two declining historic warehouse buildings were rehabilitated in anticipate of the city's "Phillips to the Falls" project, and since then four additional historic buildings have been rehabilitated with the intent of additional private development occurring. The revitalization generated by this project has increased retail and office uses in the north end of Sioux Falls' downtown district.

Other Land Programs

Storage Tanks Program
http://denr.sd.gov/des/gw/tanks/TankSection.aspx

Superfund Program
http://denr.sd.gov/des/gw/Superfund/Super_Fund.aspx

Utah

Voluntary Cleanup Program (VCP) / Brownfields

Utah Department of Environmental Quality (UDEQ)
Division of Environmental Response and Remediation (DERR)
195 North 1950 West, First Floor
Salt Lake City, UT 84116
http://www.environmentalresponse.utah.gov

Contact(s): Duane Mortensen, *Superfund Branch Manager*
dmortensen@utah.gov
801-536-4100

Bill Rees, *VCP/Brownfields Section Manager*
Brees@utah.gov
801-536-4167

Program Overview

- VCP/Brownfields Program
- Cost to Enter the Program: $2,000
- Enforceable Written Assurance (EWA) application fee: $500 and costs in excess of the fee are reimbursable
- Liability Relief Provisions

Program

The Utah State Legislature passed the Voluntary Release Cleanup Program statute in 1997. This legislation created the Voluntary Cleanup Program (VCP) under the Utah Department of Environmental Quality (UDEQ). The purpose of this program is to encourage the voluntary cleanup of sites where there has been a contaminant release threatening public health and the environment, thereby removing the stigma attached to these sites which blocks economic development. The voluntary cleanup of sites will hopefully clear the pathway for returning properties to beneficial use. UDEQ also provides assistance to communities and other stakeholders struggling with brownfields issues. An enforceable written assurances (EWA) is a tool to manage brownfields prior to and after purchase of property.
http://www.superfund.utah.gov/vcp.htm

- **Funding Source(s) for the Program:** State general fund (5%) and federal grants (95%)
- **Cost to enter VCP or fees for service:** A $2,000 application fee and an environmental assessment are required at time of application. The fee is used to cover UDEQ costs for eligibility assessment and review of the environmental assessment. Any monies remaining from the application fee are applied towards oversight. UDEQ and the applicant must enter into a voluntary cleanup agreement before UDEQ can review work plans and reports. The agreement provides for reimbursement of UDEQ oversight costs by the VCP applicant.
- **Sites Enrolled in VCP:** As of December 2010, 71 applications had been received by the program.
- **Sites Completed under VCP:** As of December 2010, 35 Certificates of Completion (COC) and 2 no further actions (NFA) were issued; 34 projects are active in site characterization, remedial action, and site management; 1 site was ineligible; and 15 projects were terminated or withdrew from the program.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

Federal grants and loans are available to assist with brownfields reuse projects. When funding is available, the state performs Targeted Brownfields Assessments for eligible applicants.
http://www.environmentalresponse.utah.gov/financialassistance.htm

LIABILITY RELIEF PROVISIONS

The VCP offers a COC with limited liability relief for non-responsible parties, future owners and lenders. The Utah Hazardous Substance Mitigation Act was amended in 2005 to expressly allow the Executive Director to issue EWAs to bona fide prospective purchasers. This term is defined by the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and incorporated in the Hazardous Substances Mitigation Act. UDEQ will not bring an enforcement action under the Hazardous Substances Mitigation Act against the holder of an EWA, provided the holder continues to satisfy the ongoing obligations and reasonable steps associated with the written assurance. Since December 2010, UDEQ has received 54 EWA applications and issued 45 EWAs under the Brownfields Program.

Program Elements

METHODS/STANDARDS/CONTROLS

A VCP applicant has a choice of cleanup standards including background levels, generic risk-based levels, site-specific risk based levels not relying on institutional controls, site specific risk-based levels relying on institutional controls, and others based on consultation with UDEQ. A VCP applicant may perform a site-specific risk assessment.

CONTAMINANTS COVERED

The program does not restrict on basis of contaminants.

INSTITUTIONAL CONTROLS (IC)

Institutional controls may be allowed as part of a cleanup strategy—use and review is decided on a case-by-case basis.

- **IC Tracking:** Institutional controls and conditions of closure are defined in the COC. Institutional controls may also be defined in an environmental covenant developed in accordance with the Uniform Environmental Covenant Act. The COC and covenant are recorded on the property title upon successful completion of a voluntary cleanup. Recorded COCs and covenants are included on the Division of Environmental Response and Remediation's (DERR) Web page to augment the public record.
- **IC Oversight:** UDEQ reviews and accepts all proposed remedies under the VCP prior to implementation. A site management plan may be necessary to manage engineering and/or institutional controls.
- **IC Monitoring:** The UDEQ actively manages post-remediation sites to ensure the remedy remains protective of human health and the environment.

The following Web addresses are direct links to the state's public database that maintains an inventory of sites, maps sites, and/or tracks institutional controls. The links also provide additional information regarding contaminated sites in the state.
http://www.superfund.utah.gov/docs/VCPsiteslist.pdf
http://www.enviromap.utah.gov
http://www.superfund.utah.gov/vcpic.htm

Program Highlights

Artspace, a nonprofit group, purchased the former Utah Barrel and Scrap site in downtown Salt Lake City in November 2007. Artspace addressed the contaminated soil and ground water under an EWA and the VCP. Artspace received a COC in May 2009, completed construction, and opened the Artspace Commons facility for commercial and residential use in October 2010. The building has many features that contribute to a certification by the nonprofit U.S. Green Building Council. This includes the use of recycled materials, solar photovoltaic window awnings, and water reduction features. Approximately 350 construction jobs and 35 permanent jobs were created as a result of this project.



***Artspace Site** Before*



***Artspace Site** After*

Other Land Programs

Underground Storage Tanks (UST) Program
http://www.undergroundtanks.utah.gov

Leaking Underground Storage Tanks (LUST) Program
http://www.undergroundtanks.utah.gov/lust.htm

Methamphetamine Cleanup
http://www.superfund.utah.gov/meth_cleanup.htm

Superfund Program
http://www.superfund.utah.gov

Wyoming

Voluntary Remediation Program (VRP) / Brownfields Assistance

Wyoming Department of Environmental Quality (DEQ)
122 W. 25th Street
Herschler Building
Cheyenne, WY 82002
http://deq.state.wy.us/shwd

Program Overview

- Brownfields Assistance Program
- Cost to Enter the Program: $500 plus oversight fees
- MOA with EPA Region 8 (March 2002)
- Liability Relief Provisions

Contact(s): Jerry Breed, *VRP Program Manager*
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307-777-5617

Vickie Meredith, *Brownfields/Orphan Sites Program Supervisor*
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307-335-6948

Program

Enacted in the 2000 session of the Wyoming Legislature, the Voluntary Remediation of Contaminated Sites Law sets out a process that can be used by owners of contaminated sites, or by potential developers to reach decisions quickly about required remedial activities and put contaminated sites back into productive reuses. Beginning in 2005, the Wyoming Department of Environmental Quality (DEQ) created a Brownfields Assistance Program to help local governments facilitate investigation and cleanup of brownfields. http://deq.state.wy.us/volremedi/index.asp

- **Funding Source(s) for the Program:** Federal grants
- **Cost to enter program or fees for service:** $500 application fee covers the first 10 hours of oversight. Additional oversight is billed at a rate of $50/hour.
- **Sites Enrolled in VCP:** As of January 2011, 154 sites were in the program; 7 sites have been provided Brownfields Assistance.
- **Sites Completed under VCP:** As of January 2011, 73 sites had complete cleanups through the program.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

A variety of technical assistance is available to assist with brownfields reuse projects.
http://deq.state.wy.us/volremedi/brownfields.asp

LIABILITY RELIEF PROVISIONS

DEQ has three types of liability assurances: Covenants Not to Sue, Certificates of Completion, and No Further Action letters.
http://deq.state.wy.us/volremedi/incentives.asp

Program Elements

METHODS/STANDARDS/CONTROLS

Voluntary remediation standards; site-specific, risk-based standards; considerations in choice of remedy; alternate standards for soil or water; point of compliance; contamination from source not on site; alternate remediation standards for site contaminated from source not on site; and supplemental requirements.

CONTAMINANTS COVERED

All contaminants are eligible in the program.

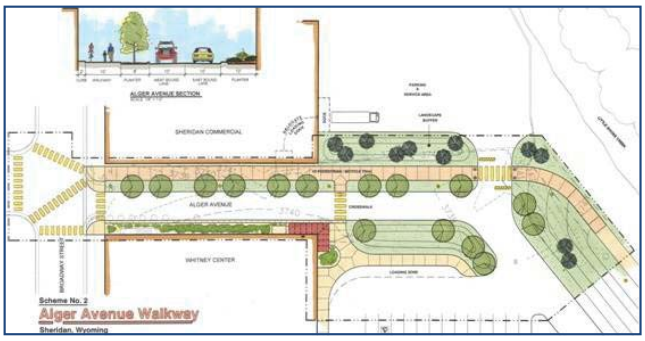
INSTITUTIONAL CONTROLS (IC)

The program uses institutional controls.

- **IC Tracking:** Conducted as part of remedy agreement performance criteria; publicly available on Voluntary Remediation Program (VRP) website.
- **IC Oversight:** Conducted as part of remedy agreement performance criteria.
- **IC Monitoring:** Conducted as part of remedy agreement performance criteria.

The following Web address is a direct link to the state's public database that maintains an inventory of sites, maps sites, and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state.
http://deq.state.wy.us/volremedi/sitelist.asp

Program Highlights



Artist Rendering of Pedestrian Area Near Sheridan's Trail System Along Little Goose Creek

Wyoming used its Section 128(a) Response Program funding to clean up a former brownfields property that will be redeveloped into a pedestrian area which provides community access to the City of Sheridan's trail system along Little Goose Creek. The site, located adjacent to Sheridan's central business district, was historically used by various owners as a bulk fueling station. The site ceased operations in the 1980s. The bulk fueling station was dismantled in 2003. Upon completion of a Phase II Environmental Site Assessment in 2003, the property was entered into Wyoming's VRP. Additional investigations were conducted in 2005, at which time it was determined that both ground water and soil exceeded cleanup levels. Because of the public benefits that would result from the cleanup and redevelopment of the site, in January 2007, $200,000 in cleanup assistance was awarded by the VRP Brownfields Assistance Program. Cleanup at the former site included the removal of soils impacted by petroleum, the installation of a wind powered passive soil venting system, the application of an oxygen release compound, and monitoring of contaminated ground water pursuant to a remedy agreement. Engineering and institutional controls have also been implemented to control exposures to impacted soils and ground water until cleanup objectives are met. The remediation supported by this Brownfields Assistance project have provided public benefits including but not limited to: protection of a nearby creek and human exposures to pollutants; increased property values, thus increasing property tax revenue; and the leveraging of at least $323,000 in non-governmental funds for the redevelopment of a property important to the vitality of the downtown Sheridan area.

Other Land Programs

Storage Tank Program
http://deq.state.wy.us/shwd/stp/index.asp

Hazardous Waste and Corrective Action
http://deq.state.wy.us/shwd/HW/index_hw.asp

EPA Region 9

American Samoa

Brownfields Response Program

American Samoa Environmental Protection Agency (AS-EPA)
P.O. Box PPA
Utulei Office Building
Pago Pago, American Samoa 96799
http://asepa.gov

Contact(s): Matt Vojik, Technical Services Manager
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684-633-2304

Program Overview

- CERCLA 128(a) State Response Program
- Brownfields Program
- Pacific Island Brownfields Response Team

Program

The American Samoa State Response Program works to identify, evaluate, and address site-specific sources of environmental contamination in American Samoa (AS). By establishing enforcement authorities, enhancing public awareness, providing technical assistance, and coordinating with local partners, AS-EPA facilitates environmental response actions and encourages sustainable planning and reuse of potentially contaminated properties.
http://asepa.gov/site-assessment-remediation.asp

- **Funding Source(s) for the Program:** Federal grants
- **Cost to enter program or fees for service:** N/A
- **Sites Enrolled in VCP:** N/A
- **Sites Completed under VCP:** N/A

Financial Elements

FINANCIAL ELEMENTS

At this time all program funding is provided under Section 128(a) of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA). On November 29, 2010, American Samoa signed a Department of Defense State Memorandum of Agreement (DSMOA) and officially become the 53rd participant of the DSMOA Program. The Cooperative Agreement and Joint Execution Plans are currently under development.

Program Elements

AS-EPA works to enhance the four elements of a State Response Program as defined under CERCLA Section 128(a). The program integrates the objectives of various environmental branches that include hazardous materials, emergency response, solid waste, Underground Storage Tank/Aboveground Storage Tank, public outreach, land use management, geographic information systems, engineering, and environmental law. AS-EPA also participates on the Pacific Islands Brownfields Response Team, formed in collaboration with the State Response Programs of Guam, Hawaii, and the Commonwealth of Northern Mariana Islands to address the unique environmental and programmatic challenges inherent to the Pacific Islands.

CONTAMINANTS COVERED

There are no exclusions under the program.

INSTITUTIONAL CONTROLS (IC)

Institutional controls are determined on a case-by-case basis.

Program Highlights

In early 2008, AS-EPA responded to petroleum releases from an underground electrical vault near the Satala Powerplant of the American Samoa Power Authority (ASPA). ASPA conducted an environmental investigation in late 2008 that linked subsurface petroleum contamination to historical industrial activities in the area. In 2009, the facility was severely damaged in a tsunami and currently operates on stand-by generators. ASPA and AS-EPA are working closely with EPA to conduct a preliminary assessment and facilitate efforts to stabilize and redevelop the site for permanent power generation facilities.



AS EPA Staff Conducting Assessment Activities

Other Land Programs

Hazardous Materials
http://asepa.gov/hazardous-materials.asp

Arizona

Voluntary Remediation Program / Brownfields Assistance Program

Arizona Department of Environmental Quality (ADEQ)
Waste Programs Division
1110 W. Washington Street
Phoenix, AZ 85007
http://www.azdeq.gov/environ/waste/index.html

Contact(s): Tom Di Domizio, *Voluntary Remediation Program (VRP) Manager*
didomizio.thomas@azdeq.gov
602-771-4229

Juli Boles, *Brownfields Program Manager*
boles.juli@azdeq.go
602-771-4170

Program Overview

- Brownfields Program
- Cost to Enter the Program: $2,000 application fee plus additional fees
- Liability Relief Provisions
- Brownfields Redevelopment Toolbox

Program

Through Arizona Department of Environmental Quality's (ADEQ) Voluntary Remediation Program (VRP), property owners, prospective purchasers, and other interested parties investigate or clean up a contaminated site in cooperation with ADEQ. VRP results in a streamlined process for program participants who work with a single point of contact at ADEQ to address applicable cross-program remediation efforts. ADEQ reviews these voluntary remedial actions and provides a closure document for successful site remediation that is accepted by all relevant ADEQ programs.
http://www.adeq.state.az.us/environ/waste/cleanup/brownfields.html

- **Funding Source(s) for the Program:** Program fees and federal grants
- **Cost to enter program or fees for service:** Effective February 9, 2001, the VRP interim fee rules:
  - Establish a $2,000 non-refundable application fee.
  - Establish an hourly VRP oversight rate of $110 per hour.
  - Provide for an initial deposit of $4,000, to be submitted with the participant's work plan or request for a No Further Action (NFA) determination.
  - Provide for additional deposits of $4,000, if an account drops below $1,000.
  - Provide small businesses with the opportunity to pay the application fee in installments under an agreement with the department.
- **Sites Enrolled in VCP:** As of November 2010, 92 sites were in the program.
- **Sites Completed under VCP:** As of November 2010, 152 sites completed cleanups through the program.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

Site Assessment and Cleanup Grants – Through an EPA grant, funds are provided to perform environmental site investigation and cleanup activities if needed, for a qualifying brownfield property. The program is available to municipalities, prospective purchasers, and parties who would not be found liable for any existing contamination at the property. Information discovered during an investigation will be considered a public record and will be made available for review at ADEQ.

LIABILITY RELIEF PROVISIONS

Prospective Purchaser Agreement (PPA). If the purchaser of the property did not contribute to the contamination at the site, potential Water Quality Assurance Revolving Fund (WQARF) and state Comprehensive Environmental Response Compensation and Liability Act (CERCLA) liability may be avoided through a written agreement with ADEQ. Pursuant to Arizona Revised Statutes (ARS) §49-285.01, ADEQ may enter into a PPA, which provides a written release and covenant not to sue for any potential WQARF liability for existing contamination, if certain statutory conditions are met. Although this statute also refers to providing immunity from contribution claims, which can only be provided through a court decree, ADEQ lacks the independent authority to prevent other parties from pursuing claims.

ARIZONA BROWNFIELDS REDEVELOPMENT TOOLBOX

The purpose of this Toolbox is to explain the brownfields process in straightforward terms, and provide rural and smaller city governments/ entities/communities with a systematic, start-to-finish, guide to brownfields redevelopment.
http://www.azdeq.gov/environ/waste/cleanup/download/bftoolbox.pdf

Program Elements

METHODS/STANDARDS/CONTROLS

The remedies for cleanups are selected on a site-by-site basis. With orphan sites, the state uses Maximum Contamination Level/Maximum Contaminant Level Goals (MCLs/MCLGs), and aquifer standards, which are equivalent to both water quality criteria and ground water standards. If responsible parties are conducting cleanup they may reach agreement with the state whereby the parties use a risk-based cleanup standard. The state applies risk assessment for: carcinogens/non-carcinogens (10-6 to 10-4 Hazard Index of less than or equal to 1); background levels; aquifer standards; MCLs/MCLGs; soil standards; and chemical specific health-based standards. Soil remediation standards may be site-specific (10-6 to 10-4 for carcinogens, Hazard Index of less than 1) or off-the-shelf (based on 10-6 for known carcinogens and 10-5 for others). The state uses the same standards for Resource Conservation Recovery Act (RCRA) and Leaking Underground Storage Tanks.

CONTAMINANTS COVERED

- The following contaminants are covered under the program: hazardous substances that are mixed with petroleum products; hazardous wastes as defined in the definition of hazardous substance in CERCLA and including those listed under RCRA; hazardous wastes that are ignitable, corrosive, reactive, or toxic.
- Crude oil and its fractions are excluded.

INSTITUTIONAL CONTROLS (IC)

Arizona has a long-term stewardship program for the state voluntary and brownfields cleanup programs that includes monitoring, institutional controls, review and reevaluation, and declaration of environmental use restriction (DEUR) that run with the land.

- **IC Tracking:** The program maintains a database that tracks institutional controls (IC) and will be made available to the public via the ADEQ website. The database tracks both the implementation and monitoring of ICs at state cleanup program, VRP, brownfields, and federal facility sites. The primary users of this database are internal staff, property owners and consultants.
- **IC Oversight and Monitoring:** The program provides oversight, review, reevaluation, and monitoring of ICs.

The following Web address is a direct link to the state's public database that maintains an inventory of sites, maps sites and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state.
http://www.azdeq.gov/databases/deursearch.html

Program Highlights

Due to unprecedented growth, the City of Show Low developed a plan to expand city facilities and infrastructure. Included in the plan was the construction of a new library. ADEQ used Section 128(a) Response Program funding to conduct Phase I and Phase II environmental site assessments (ESA) at the new library location. The results of the Phase II ESA revealed petroleum-related contamination on property. After the removal of contaminated soil, construction began in 2009 and the new library opened in August 2010. The 20,000-square foot library offers a 50% increase in capacity with a second phase designed to accommodate future expansion. A 150-foot clerestory window brings daylight deep into the main hall while other sustainable features include the use of low-VOC and recycled-content finishes, high-efficiency plumbing and mechanical equipment, and regional materials, such as Arizona stone.



The New City of Show Low Public Library

Other Land Programs

Underground Storage Tanks (UST) Program
http://www.azdeq.gov/environ/waste/ust/index.html

Hazardous Waste Program
http://www.azdeq.gov/environ/waste/hazwaste/index.html

Superfund Program
http://www.azdeq.gov/environ/waste/sps/index.html

California

Brownfields and Environmental Restoration Program

California Department of Toxic Substances Control (DTSC)
700 Heinz Avenue
Berkeley, CA 94710
http://www.dtsc.ca.gov/SiteCleanup

Contact(s): Barbara Cook, P.E.
bcook@dtsc.ca.gov
510-540-3825

Program Overview

- Brownfields Program
- Cost to Enter the Program: Cost recovery
- Liability Relief Provisions
- Financial Assurance and Insurance for Redevelopment Program (FAIR)
- Registered Environmental Assessor Program

Program

Two regulatory bodies within the California Environmental Protection Agency (Cal/EPA) oversee the cleanup of brownfields in California, the Department of Toxic Substances Control (DTSC) and the Regional Water Quality Control Boards (Water Boards). DTSC generally oversees the cleanup of hazardous substance releases, while the Water Boards generally oversee the cleanup of petroleum and other hazardous materials that could potentially affect water quality. While there is overlap in implementing these programs, the Water Boards generally address brownfields cleanups using their Spills, Leaks, Investigations and Cleanup Program (SLIC) or their Leaking Underground Storage Tank (LUST) Cleanup Fund Program.
http://www.dtsc.ca.gov/SiteCleanup/Brownfields and http://www.calepa.ca.gov/Brownfields

- **Funding Source(s) for the Program:** State Accounts and reimbursements (80%), federal grants (20%)
- **Cost to enter program or fees for service:** DTSC is obligated to recover its costs and does this through voluntary cleanup agreements, reimbursement agreements, contracts, and settlements.
- **Sites Enrolled in VCP:** As of November 2010, DTSC and Water Boards staff conduct and oversee cleanup on an average of 1,500 sites at any given time. Site-specific information can be found at: http://www.envirostor.dtsc.ca.gov/public and http://www.geotracker.swrcb.ca.gov
- **Sites Completed under VCP:** As of November 2010, DTSC staff issued either certifications or no further action decisions on over 425 voluntary cleanup sites.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

A variety of grants, loans and technical assistance is available to assist with brownfields reuse projects.
http://www.dtsc.ca.gov/SiteCleanup/Brownfields/Loans_Grants.cfm and http://www.waterboards.ca.gov/water_issues/programs/ustcf

LIABILITY RELIEF PROVISIONS

Liability relief programs include:

- California's Lender Liability law (Health and Safety Code (HSC) 25548-25548.7) exempts lenders from liability under state and local laws and ordinances (but not from common law liability) provided they do not participate in the management of the property and did not directly contribute to the release or potential release of hazardous substances on the property. Lenders acquiring property through a foreclosure or its equivalent, must make a good faith effort to sell the property.
- California Land Reuse and Revitalization Act (AB389)
  http://www.dtsc.ca.gov/SiteCleanup/Brownfields/index.cfm#CP_JUMP_13327
- Prospective Purchaser Agreements and Liability Relief
  http://www.dtsc.ca.gov/SiteCleanup/Brownfields/index.cfm#CP_JUMP_13318
- Redevelopment Agency Oversight Agreement (Polanco Act)
  http://www.dtsc.ca.gov/SiteCleanup/Brownfields/index.cfm#CP_JUMP_13297
- Site Designation Committee
  http://www.dtsc.ca.gov/SiteCleanup/Brownfields/index.cfm#CP_JUMP_13297

REGISTERED ENVIRONMENTAL ASSESSOR PROGRAM

DTSC certifies Registered Environmental Assessors to be qualified to conduct various environmental assessment and small site cleanup activities. http://www.dtsc.ca.gov/REA/index.cfm

Program Elements

METHODS/STANDARDS/CONTROLS

The state publishes chemical-specific toxicity factors that are useful in assessing potential risks and hazards from chemicals at sites. Cal/EPA developed screening levels for hazardous substances typically found at brownfield sites to assist developers and local governments in estimating the costs and extent of cleanup. DTSC follows EPA guidance for risk assessments and uses the federal risk management range with 10-6 as the point of departure. Water Boards develop Basin Plans which set cleanup requirements for ground water and surface water within each basin. Recent legislation (AB 422) requires DTSC and the Water Boards to evaluate the potential for migration of chemicals into indoor air.

CONTAMINANTS COVERED

DTSC generally regulates hazardous substances, consistent with the federal definition. Petroleum releases from non-underground storage tank releases may also be addressed. DTSC's Schools Team also addresses naturally-occurring chemicals. The Water Boards regulate hazardous materials which include petroleum hydrocarbons.

INSTITUTIONAL CONTROLS (IC)

The state allows institutional controls (IC), monitors and enforces cleanups, and completes audits. Institutional controls include well drilling restrictions, easements, restrictive covenants, reversionary interests, deed restrictions, and notices placed on deeds. As mandated by state law, DTSC and the Water Board maintain a list of deed-restricted properties that is available on the Internet.
http://www.envirostor.dtsc.ca.gov/public/deed_restrictions.asp
http://www.waterboards.ca.gov/water_issues/programs/deed_restrict

- **IC Tracking:** Institutional controls used by DTSC to notify the public include posting sites, publishing notices in newspaper, creating mailings for local residents, and maintaining the EnviroStor database. The state has a process outlined in statute to remove a deed restriction if a site is remediated to unrestricted use.
- **IC Oversight:** DTSC is currently utilizing the TerradexTM LandWatch system to give early notification of potential activities on properties subject to land use restrictions implemented as part of a final remedy for a site under DTSC oversight.
- **IC Monitoring:** In addition to deed restrictions, DTSC's regulations also require financial assurance for sites that are not cleaned to levels appropriate for unrestricted use. DTSC also requires the periodic review of site conditions to ensure that site conditions have not changed and that the remedy is still effective.

Program Highlights



Artist Rendering of New LEED Residential Development in of San Francisco

DTSC loaned $1.6 million in American Recovery and Reinvestment Act (ARRA) funds to the Martin Building Company to accelerate cleanup at a former scrap iron and metal yard located in the Central Waterfront District of San Francisco to construct residential development. The company used ARRA funds to remove lead-contaminated soil and properly dispose of it at a permitted landfill. It leveraged the funds to obtain financing to construct the project. The residential development will consist of over 180 new rental housing units (39 designated as below market rate), space for restaurants and retail businesses, easy access to public transportation, underground parking, onsite subsidized day care and several "pocket plazas." The development will be built according to LEED gold certification criteria and has created about 200 construction jobs.

Other Land Programs

Voluntary Cleanup Program
http://www.dtsc.ca.gov/SiteCleanup/Brownfields/index.cfm#CP_JUMP_13298

Expedited Remedial Action Program
http://www.dtsc.ca.gov/SiteCleanup/Brownfields/index.cfm#CP_JUMP_13299

Private Site Management Program
http://www.dtsc.ca.gov/SiteCleanup/Brownfields/index.cfm#CP_JUMP_13335

Underground Storage Tanks (UST) Program
http://www.waterboards.ca.gov/water_issues/programs/ust

Commonwealth of the Northern Mariana Islands

Brownfields Program

Commonwealth of the Northern Mariana Islands (CNMI)
Division of Environmental Quality (DEQ)
Site Assessment and Remediation Branch
P.O. Box 501304
Saipan, MP 96950
http://www.deq.gov.mp

Contact(s): Ray Masga, *Brownfields Coordinator*
raymasga@deq.gov.mp
670-664-8500

Program Overview

- Brownfields Program
- Site Assessment Request Form
- Pacific Islands Brownfields Response Team

Program

The Commonwealth of the Northern Mariana Islands (CNMI) Division of Environmental Quality's (DEQ) Site Assessment and Remediation (SAR) branch protects public health and the environment by ensuring the assessment and cleanup of sites contaminated by hazardous substances. This branch is responsible for the assessments and cleanup of site contamination, as a result of the release of hazardous substances, which includes reviewing and approving of all remedial action work plans (including sampling, analysis and quality assurance plans); implementing the Site Discovery, Preliminary Assessment and Site Inspection program, and the Section 128(a) State and Tribal Response Program; and coordinating with the US Army Corps of Engineers with Formerly Used Defense Site activities.
http://www.deq.gov.mp/section.aspx?secID=8

- **Funding Source(s) for the Program:** Federal grants
- **Cost to enter program or fees for service:** N/A
- **Sites Enrolled in VCP:** N/A
- **Sites Completed under VCP:** N/A

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

- CNMI DEQ is using Section 128(a) Response Program grant funds to develop and enhance its State Response Program by establishing program guidance documents, policies and regulations. Section 128a is also used to provide training to staff for capacity building and professional development. Some funding is used to conduct site stabilization activity to minimize or prevent hazardous substance and/or petroleum release.
- EPA Brownfields Hazardous Substance Assessment Grant ($200,000) and EPA Brownfields Petroleum Assessments grant ($200,000). Both funding sources are used for conducting Phase I and Phase II Environmental Site Assessments (ESA).

PACIFIC ISLANDS BROWNFIELDS RESPONSE TEAM

The Pacific Islands Brownfields Response Team (PIBRT) was created to establish regional support for the development and enhancement of Response Programs under Section 128(a) of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA). The PIBRT represents collaboration between American Samoa EPA, Guam EPA, CNMI DEQ, and the Hawaii Department of Health. Team members seek to enhance their respective Response Programs through cooperation, coordination and leveraging of resources. PIBRT also hopes to bring greater recognition and attention to the unique challenges and accomplishments of Response Programs the Pacific Islands.

Program Elements

METHODS/STANDARDS/CONTROLS

CNMI DEQ prepared a Environmental Screening Levels (ESLs) document in 2005 (updated March 2009). The CNMI DEQ ESLs is modeled after the Hawaii Department of Health EALs and the California Environmental Protection Agency ESLs.
http://www.deq.gov.mp/article.aspx?secID=8&artID=133

CONTAMINANTS COVERED

Hazardous substance (including explosives constituents) and petroleum products.

INSTITUTIONAL CONTROLS (IC)

Institutional controls are allowed under the program as prescribed under the Harmful Substance Cleanup Regulations (Part 200 §65-40-220).

The following Web address is a direct link to CNMI's public record that maintains an inventory of sites, maps sites and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in CNMI.
http://www.deq.gov.mp/article.aspx?secID=8&artID=96

Program Highlights

The CNMI DEQ used Section 128(a) Response Program funding to create a Site Assessment Request Form for the public to request environmental site assessments on potential brownfields properties. The site assessment request forms are used as a preliminary screening tool to determine site eligibility for the use of Section 128(a) Brownfields funding to conduct ASTM E 1527-05 Phase I and Phase II ESAs. Upon completion and submission of the forms, properties are reviewed by the CNMI DEQ Response Program staff for preliminary eligibility. The applicant is then contacted by DEQ staff upon completion of the review. The use of the forms has increased public awareness regarding brownfields issues, enabled DEQ staff to inventory and review potential brownfields properties, and streamlined the brownfields assessment process.
http://www.deq.gov.mp/article.aspx?secID=8&artID=179

In FY 2010, CNMI DEQ developed its mission, vision, and structure of its State Response Program (SRP). The agency continues to work further towards developing and enhancing its SRP. In FY 11, CNMI DEQ will complete the development of its Voluntary Response Program (VRP) guidance document and its VRP regulations.



Public Meeting with Land Owners to Educate Them about the Assessment Program

Other Land Programs

Pesticides and Storage Tanks Program
http://www.deq.gov.mp/section.aspx?secID=7

Toxic Waste Management Program
http://www.deq.gov.mp/section.aspx?secID=11

Guam

Guam Environmental Assessment & Remediation (GEAR) Program

Guam Environmental Protection Agency (Guam EPA)
P.O. Box 22439 GMF
Barrigada, GU 96913
http://epa.guam.gov

Contact(s): Roland Gutierrez, *Program Manager*
Roland.Gutierrez@epa.guam.gov
671-475-1658/9

Program Overview

- Brownfields Program

Program

Guam EPA's Brownfield Program mission is to discover, assess, and address all potentially contaminated sites and to ensure protection of human health and the environment by encouraging public participation in decision-making and applying appropriate enforcement actions when necessary. It is our goal to identify and evaluate the risks posed by these properties and find solutions so that reuse and redevelopment is possible. We intend to accomplish these goals through public education, outreach and local partnerships with private and government agencies.

- **Funding Source(s) for the Program:** Federal grants
- **Cost to enter program or fees for service:** N/A
- **Sites Enrolled in VCP:** N/A
- **Sites Completed under VCP:** N/A

Financial Elements

- Section 128(a) Response Program Grant - $352,000 for Brownfields Site Assessment and Cleanup (2009)
- $430,000 for Brownfields Site Assessment and Cleanup (2010)
- Section 104(k) Grant - $200,000 for Hazardous Substance Site Assessment and $200,000 for Petroleum Site Assessments (2006 – 2011)

ASSESSMENT AND CLEANUP FUNDING

- Guam EPA is using Section 128(a) Response Program funds to conduct site assessment and cleanup activities.
- EPA Brownfields Hazardous Substance Assessment Grant ($200,000) and EPA Brownfields Petroleum Assessments Grant ($200,000).

Program Elements

Under Section 128(a) State and Tribal Response Program funding, Guam EPA is in the process of establishing program guidelines, legal authorities, and public awareness necessary to address contaminated properties.

CONTAMINANTS COVERED

The program covers hazardous substances, petroleum, lead-based paint, and asbestos.

Program Highlights

Guam EPA's first redevelopment of a previous contaminated brownfields site into a multi-recreational sports complex has come to its final construction stage after the successful removal of approximately 8,998 tires, the placement of 1,180 linear feet of rubber bumpers, and conducting a series of environmental assessments. Based on the analyses of soil sampled during Phase II assessment, any possible petroleum and hazardous substances from the disposal and reclamation of white goods and automobile batteries have been identified and removed accordingly and replaced with clean soil. The grand opening for the water park was held on December 1, 2010 and the rest of the multi-recreational facilities are in their final stage of construction. The success story was shared at the National Brownfields Conference in 2011.



New Water Park Redeveloped on Former Brownfields Property

Other Land Programs

Underground Storage Tank (UST) Program
http://guamepa.net/Guam_Underground_Storage_Tank_Regulations_(Draft_Final_v._02DEC10)[1].pdf

Hawaii

State Cleanup Program

Hazard Evaluation and Emergency Response (HEER) Office
Hawaii Department of Health (DOH)
919 Ala Moana Boulevard, Room 206
Honolulu, HI 96814
http://hawaii.gov/health/environmental/hazard/vrp.html

Contact(s): Fenix Grange
fenix.grange@doh.hawaii.gov
808-586-4249

Program Overview

- Fast Track Cleanups
  - Cost: Oversight fees
- Voluntary Response Program
  - Cost: $1,000 plus oversight fees
  - Liability Relief Provisions

Brownfields Cleanup and Redevelopment

Office of Planning
Department of Business Economic Development and Tourism
P.O. Box 2359
Honolulu, HI 96804-2359
http://www.hawaii.gov/dbedt/gis/brownfields

Contact(s): Ruby Edwards
redwards@dbedt.hawaii.gov
808-587-2817

Mary Alice Evans
maevans@dbedt.hawaii.gov
808-587-2802

Program

The State of Hawaii State Cleanup Program provides two targeted cleanup programs for brownfields to encourage voluntary investigation and cleanup of properties that may be contaminated. The Voluntary Response Program (VRP) offers purchasers exemption from future liability related to contamination addressed under the VRP, providing technical guidance, timely oversight, and regulatory assurance of completed cleanups. The VRP is used successfully by property owners, prospective purchasers, developers, and lenders.
http://hawaii.gov/health/environmental/hazard/vrp.html

Fast Track Cleanups (FTC) offer landowners or other private parties the alternative to conduct an expedited voluntary investigation or cleanup under a simple agreement with the Hazard Evaluation and Emergency Response (HEER). While still adhering to the State Contingency Plan (SCP), FTC offers a fundamentally different approach from traditional SCP cleanups by placing a greater burden of technical justification on the participant, with less intermediate regulatory review and approval of multiple work plans and other interim report submittals. The focus of FTC is to streamline and expedite the assessment, cleanup, and closure process at low and medium priority sites.

- **Funding Source(s) for the State Cleanup Programs:** Federal grants, State of Hawaii Brownfields Cleanup Revolving Loan Fund, and State Environmental Response Revolving Fund
- **Cost to enter VRP program or fees for service:** $1,000 application fee per request, $100 per hour oversight charge (applied to a required $5,000 deposit).
- **Sites Enrolled in VRP:** As of November 2010, 28 sites were enrolled in the program.
- **Sites Completed under VRP:** As of November 2010, 12 sites were completed cleanup through the program.
- **Fees for service for Fast Track and traditional SCP cleanups:** Hourly oversight charge.
  Note: Many brownfields redevelopments continue to be investigated and cleaned up under the traditional state cleanup program.
- **Sites Enrolled in State Program:** As of November 2010, 348 low and medium priority sites were enrolled.
- **Sites Completed under State Program:** During FY 2010, 24 low and medium priority sites completed cleanup.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

- Potential sources of leveraged state funds for the State of Hawaii Brownfields Cleanup Revolving Loan Fund include the Hawaii Capital Loan Program, Hawaii Innovation Development Program, Community-Based Economic Development Loan Program, and the nonprofit Hawaii Community Loan Fund.
- County-administered Community Development Block Grants may also be leveraged.
- Coalition partners work through existing planning and redevelopment programs to identify additional funding sources for brownfields cleanup.

LIABILITY RELIEF PROVISIONS

The Hawaii Environmental Response Law, HRS 128D states that a defendant may avoid liability where the real property on which the facility concerned is located was acquired by the defendant after the disposal or placement of the hazardous substance on, in, or at the facility, and either: 1) at the time the defendant acquired the facility the defendant did not know and had no reason to know that any hazardous substance which is the subject of the release or threatened release was disposed on, in, or at the facility; 2) the defendant is a government entity which acquired the facility through involuntary transfer or acquisition; or 3) the defendant acquired the facility by inheritance or bequest. Additional protections against future liability for contaminants remediated under a VRP agreement are available under HRS 128E, the Voluntary Response Program. The Hawaii Environmental Response Law was amended in 2009 to add a definition for "bona fide prospective purchasers" consistent with federal law and to limit liability for bona fide prospective purchasers who knowingly purchase contaminated property.

Program Elements

METHODS/STANDARDS/CONTROLS

Hawaii uses a compilation of Environmental Action Levels (EAL) prepared by an in-house scientist. The EALs cover all environmental hazards, not just human health. The VRP requires that cleanup for carcinogens be to a cancer risk level of 10-6.
http://hawaii.gov/health/environmental/hazard/statutes.html and http://hawaii.gov/health/environmental/hazard/eal2005.html

CONTAMINANTS COVERED

Over 150 common contaminants are covered, including petroleum compounds, solvents, metals, pesticides, dioxins, Polychlorinated Biphenyls (PCBs), PAHs, etc. Asbestos and lead-based paint are evaluated separately.

INSTITUTIONAL CONTROLS (IC)

Institutional controls (IC) allowed, primarily after active remediation has been conducted.

- **IC Tracking, Oversight, and Monitoring:** Hawaii has an IC tracking system, and provides oversight through closure documents and environmental covenants that reference ICs. Hawaii does not monitor ICs.

The following Web address is a direct link to the state's public database that maintains an inventory of sites, maps sites and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state.
http://hawaii.gov/health/environmental/hazard/records.html

Program Highlights

In an effort to promote cleanup and reuse of contaminated properties, the Hawaii State Legislature, working with the DOH HEER Office and brownfields stakeholders, enacted changes to the Hawaii Revised Statutes Chapter 128D, also known as the State of Hawaii Environmental Response Law. The changes set forth conditions under which innocent contiguous property owners and "bona fide prospective purchasers" are not held liable for damages or costs related to contamination of real property not owned or operated by the property owner or purchaser. HEER drafted a bill after receiving input about inconsistencies between state and federal environmental laws from brownfields stakeholders. At the 2007 and 2008 Brownfields Forums, uncertainty about potential state enforcement actions under 128D was identified as a significant roadblock to investment in the redevelopment of contaminated properties. The Forums and other HEER activities related to drafting of the bill were funded through its Section 128(a) Response Program grant. The bill was signed into law and became effective in 2009. The law provides opportunity for voluntary environmental cleanup, encourages urban redevelopment, brings private cleanup funds to vacant or unused contaminated properties, and does not restrict the ability of DOH to pursue polluters or previous owners or operators of the property.

Other Land Programs

Underground Storage Tank (UST) Program
http://hawaii.gov/health/environmental/waste/ust/index.html

Nevada

Brownfields Program/ Voluntary Cleanup Program (VCP)

Nevada Division of Environmental Protection (NDEP)
Bureau of Corrective Actions
901 S. Stewart Street
Carson City, NV 89701
http://ndep.nv.gov/bca

Contact(s): Jeff Collins, *Brownfields Supervisor*
jrcollins@ndep.nv.gov
775-687-9381

David Friedman, *Brownfields Project Manager*
dfriedman@ndep.nv.gov
775-687-9385

Program Overview

- Brownfields Program
- Cost to Enter the Program: Cost based on type/size of property
- Liability Relief Provisions

Program

Nevada's Brownfields Program aims to reach for opportunities to create partnerships that improve Nevadans' lives and the quality of their communities, and to be acknowledged as an agency that maximizes opportunities through the creative and efficient use of resources. The Nevada State legislature passed the Voluntary Cleanup Program (VCP) in 1999. The VCP provides relief from liability to owners who undertake cleanups of contaminated properties under the oversight of the Nevada Division of Environmental Protection (NDEP).
http://ndep.nv.gov/bca/brownfld.htm

- **Funding Source(s) for the Program:** Federal grants
- **Cost to enter program or fees for service:** Depends on type of property. Residential property fee is $400. Commercial property: less than 1 acre ($500); 1–25 acres ($1,000); 26–100 acres ($1,600); more than 100 acres ($2,000).
- **Sites Enrolled in VCP:** As of November 2010, one site was enrolled in the program.
- **Sites Completed under VCP:** As of November 2010, one site had completed cleanup through the program.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

- NDEP is using Section 128(a) State and Tribal Response Program grant funds to conduct site assessment and cleanup activities. http://ndep.nv.gov/bca/brownfield_state-grant.htm
- Nevada also operates a $2,000,000 Revolving Loan Fund targeted for cleanups conducted by private land owners and developers. http://ndep.nv.gov/bca/brownfld_loans.htm

LIABILITY RELIEF PROVISIONS

The VCP provides liability relief to: 1) current owners of contaminated sites; 2) prospective purchasers; 3) financial entities who hold an evidence of title to protect a security interest; or 4) a government entity which has received a parcel of real property through default. The 2003 State Legislative Session resulted in the adoption of liability relief provisions for bona fide prospective purchasers and innocent landowners modeled on the federal Brownfields Law.
http://ndep.nv.gov/bca/liability.htm

Program Elements

METHODS/STANDARDS/CONTROLS

Actions under the state VCP must be in compliance with the state's environmental professional certification program. Sampling at brownfields assessments and cleanups must be conducted consistent with a project-specific Quality Assurance Plan (QAPP) that is approved by EPA Region 9 and meets Tier III data quality requirements with independent data verification. This is achieved by following the Region 9-approved State of Nevada Brownfields Program QAPP.
http://ndep.nv.gov/bca/brownfield_qa_plan07.htm

CONTAMINANTS COVERED

Asbestos, lead paint and polychlorinated biphenyls (PCBs) are all covered under the program. Petroleum is covered under the program only if the site does not qualify for reimbursement under the state's Petroleum Fund.

INSTITUTIONAL CONTROLS (IC)

Institutional controls are utilized in NDEP No Further Action letters.

- **IC Tracking, Oversight, and Monitoring:** NDEP is currently developing an IC tracking, oversight, and monitoring program.

The following Web address is a direct link to the state's public database that maintains an inventory of sites, maps sites, and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state.
http://ndep.nv.gov/bca/brownfld.htm

Program Highlights

The State of Nevada Brownfields Program attended the Nevada Association of Counties annual conference held November 17-19, 2010 in Reno. State Brownfields staff had the opportunity to meet with county officials and stakeholders to promote the Brownfields program and explain how it has helped municipalities throughout the state and how it can help their communities. New projects have been approved for Clark, Lincoln, Washoe, White Pine, and Nye Counties. A number of public and private organizations from across the state also participated in this unique event that brought municipal officials together for meetings and a chance to "catch-up" on the latest happenings. The exhibition floor was lively and engaging with numerous displays and well-informed experts ready to educate participants about their services.



Nevada Brownfields Program Outreach Material at the Nevada Association of Counties Annual Conference

Other Land Programs

Petroleum Program
http://ndep.nv.gov/bca/fundhome.htm

Superfund Program
http://ndep.nv.gov/bca/spfdhome.htm

EPA Region 10

Alaska

Contaminated Sites Program (CSP) / Brownfields Program

Alaska Department of Environmental Conservation (DEC)
Division of Spill Prevention and Response
610 University Avenue
Fairbanks, AK 99709-3643
http://dec.alaska.gov/spar/csp

Contact(s): John Carnahan, *Brownfields Coordinator*
John.Carnahan@alaska.gov
907-451-2166

Program Overview

- Brownfields Program
- Cost to Enter the Program: No fee
- Liability Relief Provisions
- Tax Incentives
- Brownfields Redevelopment Toolbox

Program

The Alaska Department of Environmental Conservation's (DEC) Contaminated Sites Program (CSP) has developed resources to assist tribes, villages, cities, borough governments, and state agencies in identifying and assessing their brownfield sites. When appropriate, DEC's Reuse and Redevelopment (R&R) Program assists eligible applicants in applying for EPA Brownfields Program assistance and grants. The CSP provides technical assistance, performs site assessments, conducts cleanups, maintains a publicly accessible contaminated sites database, and tracks institutional controls (IC). The program objectives are to enable economic redevelopment of properties that are underutilized as a result of real or perceived environmental conditions, while providing adequate oversight and protection to human and ecological receptors. The program dedicates staff resources to work with government agencies, tribes, responsible parties, land owners, EPA, and developers to effectively facilitate environmental remedies commensurate with site conditions, leading to the reuse of contaminated properties.
http://www.state.ak.us/dec/spar/csp/brownfields.htm

- **Funding Source(s) for the Program:** Federal grants
- **Cost to enter program or fees for service:** There are no fees to enter program; however, the CSP is mandated to conduct cost recovery from responsible parties for oversight costs and any associated contracting services for site-specific activities.
- **Sites Enrolled in VCP:** As of November 2010, 156 sites were assigned to CSP status.
- **Sites Completed under VCP:** As of November 2010, 99 closures were recorded through the CSP.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

The R&R Program provides limited assessment or cleanup services to eligible applicants through its DEC Brownfield Assessment program, which targets conditionally eligible brownfield sites that may be in public, private, or state ownership.
http://dec.alaska.gov/spar/csp/reuse.htm#2
http://dec.alaska.gov/spar/csp/reuse.htm#services

INCENTIVES

Alaska municipalities may provide that the tax increment from taxes levied on property in an improvement area may be used to pay principal and interest on bonds issues for the improvements in that area.

LIABILITY RELIEF PROVISIONS

The principal tool for clarifying liability is the prospective purchaser agreement (PPA). PPAs have been negotiated for specific sites that meet appropriate criteria. A PPA is a legal instrument that must be negotiated through the Attorney General's office.

ALASKA BROWNFIELDS REDEVELOPMENT TOOLBOX

The purpose of this Toolbox is to explain the brownfields process in straightforward terms, and provide rural and smaller city governments/entities/communities with a systematic, start-to-finish, guide to brownfields redevelopment.
http://dec.alaska.gov/spar/csp/brownfields.htm#tools

Program Elements

METHODS/STANDARDS/CONTROLS

Responsible person shall propose soil cleanup levels for approval, shall base those cleanup levels upon an estimate of the reasonable maximum exposure expected to occur under current and future site conditions, and shall develop those cleanup levels.
http://touchngo.com/lglcntr/akstats/aac/title18/chapter075/section340.htm

CONTAMINANTS COVERED

All contaminants are covered except asbestos and lead paint are excluded at this time; however, sites must be of a low- to medium-risk nature to be addressed through brownfields program oversight.

INSTITUTIONAL CONTROLS (IC)

DEC will, after consultation with each landowner of the site, determine whether the use of an IC is necessary, on a site-specific basis, if the Department determines that controls are required to ensure:

- Compliance with an applicable cleanup level
- Protection of human health, safety or welfare, or the environment
- Integrity of site cleanup activities or improvements

Institutional controls may include: 1) installation and maintenance of physical measures, such as fences and signs, to limit an activity that might interfere with cleanup or result in exposure to a hazardous substance at the site; 2) implementation and maintenance of engineering measures, such as liners and caps, to limit exposure to a hazardous substance; 3) restrictive covenants, easements, notices of environmental contamination placed on an official property record, or other measures that would be examined during a routine title search, and that limit site use or site conditions over time or provide notice of any residual contamination; and 4) a zoning restriction or land use plan by a local government with land use authority.

- **IC Tracking:** The ability to both manage and track long-term oversight for contamination that poses limited risk to human health and the environment is an objective for the program. An institutional controls database and compliance tracking tools to accomplish this are in development at this time.
- **IC Oversight and Monitoring:** DEC's IC tracker was developed to help with oversight and monitoring of sites for which ICs have been established. Currently, DEC is tracking ICs on 1,464 sites; approximately 300 of which are active sites where the controls have been established to protect human health and the environment during ongoing cleanup actions.

The following Web address is a direct link to the state's public database that maintains an inventory of sites, maps sites, and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state.
http://www.dec.state.ak.us/spar/csp/search

Program Highlights

The Alaska Forum on the Environment (AFE) is Alaska's largest environmental conference, bringing together participants from a broad range of disciplines and organizations. The 2010 AFE was held February 8-12, 2010 and included 80 breakout sessions, including many brownfields related topics. As part of the AFE, the Alaska DEC State Response Program hosted an all-day workshop, co-sponsored by the Alaska Forum, for state and tribal brownfields response program coordinators that focused on brownfields activity funding.

Other Land Programs

Leaking Underground Storage Tanks (LUST) Program
http://dec.alaska.gov/spar/csp/leaking.htm

Idaho

Brownfields Revitalization and Environmental Site Response Program / Voluntary Cleanup Program (VCP)

Department of Environmental Quality (DEQ)
Waste Management and Remediation Division
1410 N. Hilton
Boise, ID 83706
http://www.deq.idaho.gov/waste/prog_issues.cfm

Program Overview

- Brownfields Program
- Cost to Enter the Program: $250 Application Fee and $2,500 Oversight Fee
- Liability Relief Provisions
- Tax Incentives
- Environmental Insurance

Contact(s): Aaron Scheff, *Brownfields Response Program Manager*
aaron.scheff@deq.idaho.gov
208-373-0420

Bruce Wicherski, *VCP Program Manager*
bruce.wicherski@deq.idaho.gov
208-373-0426

Program

Idaho's Land Remediation Act, or Voluntary Cleanup Program (VCP), is found in Idaho Code 39-7201 et seq., and Department of Environmental Quality's (DEQ) rules implementing the Act are located at IDAPA 58.01.18. The VCP allows for the remediation of hazardous substances and petroleum contaminated sites absent an enforcement action. Under the Program, DEQ and the participant enter into a Voluntary Remediation Agreement under which DEQ and the public review and comment on the proposed Cleanup Work Plan. Once approved by DEQ, the participant conducts the cleanup and DEQ reviews the results. If the cleanup is successful, DEQ issues a Certificate of Completion (COC), DEQ and the participant negotiate a Covenant Not to Sue (CNTS), lender liability protections are provided, and the site owner is afforded a property tax exemption for up to seven years related to the increase in property value due to the cleanup. In 2004, DEQ established its Brownfields Revitalization and Environmental Site Response Program. This Program facilitates the reuse of brownfield sites and works to develop Web tools, authorities and guidance aimed at improving the efficiency of all DEQ remediation programs. DEQ is also a member of a seven-member coalition called the Reuse Idaho Brownfield Coalition (RIBC). RIBC is composed of DEQ and Idaho's six economic development districts, and manages a $3,000,000 EPA Brownfield Cleanup Revolving Loan Fund (RLF).
http://www.deq.idaho.gov/Applications/Brownfields/index.cfm?site=brownfields.htm

- **Funding Source(s) for the Program:** Federal grants
- **Cost to enter program or fees for service:** Participants must pay to DEQ two fees under the VCP: 1) a $250 application fee; and 2) an initial $2,500 fee for DEQ oversight costs related to review of the remediation work plan and site activities conducted thereunder.
- **Sites Enrolled in VCP:** As of January 2011, 21 sites were participating in the VCP.
- **Sites Completed under VCP:** As of January 2011, 6 sites were completed under the VCP.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

- **The Community Reinvestment Pilot Initiative** – DEQ reimburses a private party 70% of its 'certified cleanup costs,' up to $150,000 per site. With this structure, the Pilot's benefit caps at a $215,000 cleanup as follows: DEQ reimburses 70% (up to $150,000) and the private party is responsible for the remaining 30% ($65,000).
- RIBC RLF low interest loans and sub-grants for financing cleanup of Idaho brownfields.
http://www.deq.idaho.gov/Applications/Brownfields/index.cfm?site=brownfields.htm#grant

INCENTIVES

Voluntary Cleanup Program Tax Incentives – Sites are eligible for a property tax exemption (not to exceed seven years) that amounts to 50% of the remediated land value. The exemption may be granted only if the CNTS is in full force and effect for the entire period of exemption, and the site remains in the possession of the owner for the entire exemption period.

LIABILITY RELIEF PROVISIONS

COC and CNTS are available under Idaho's VCP. After receiving a COC, a party can receive a CNTS for any claim for environmental remediation under state law resulting from or based upon the release or threatened release of a hazardous substance or petroleum that is the subject of the approved voluntary remediation work plan. The CNTS extends to any current or future owner or operator of the site or portion thereof who did not cause, aggravate or contribute to the release or threatened release.

ENVIRONMENTAL INSURANCE

Idaho's Petroleum Storage Tank Fund provides underground storage tank (UST) site owners with environmental insurance of $1,000,000 per tank for $100 per year, with a $10,000 deductible.

Program Elements

METHODS/STANDARDS/CONTROLS

Participants in DEQ remediation programs, including the VCP, choose between cleaning to established state standards or cleaning to site-specific standards developed using DEQ's Risk Evaluation Manual and Software, or another DEQ-approved risk evaluation methodology.

CONTAMINANTS COVERED

DEQ's Risk Evaluation Manual and Software includes the 185 contaminants most frequently encountered in Idaho, with the ability to add additional contaminants on a site-specific basis. Evaluation and cleanup of petroleum release sites is specifically addressed using the *Standards and Procedures for Application of Risk Based Corrective Action at Petroleum Release Sites* (IDAPA 58.01.24) which can be found at http://adm.idaho.gov/adminrules/rules/idapa58/0124.pdf. Guidance to implement these rules is currently being developed.

INSTITUTIONAL CONTROLS (IC)

Both the VCP and DEQ's Risk Evaluation Manual authorize the use of activity and use limitations, implemented through the use of environmental covenants, when conducting site cleanups under DEQ oversight. The Idaho Legislature enacted the Uniform Environmental Covenants Act in 2006 to facilitate this process. DEQ developed a model environmental covenant for use under both of these programs.

- **IC Tracking:** Idaho tracks institutional controls through deed restrictions.
- **IC Oversight and Monitoring:** Idaho provides oversight to participants in the VCP when they are conducting and determining appropriate cleanup levels and cleanups.

The following Web address is a direct link to the state's public database that maintains an inventory of sites, maps sites, and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state.
http://www.deq.idaho.gov/Applications/WDI/?CFID=1646846&CFTOKEN=91450357

Program Highlights

The Bayhorse Townsite and Mine is located in the mountains of central Idaho on Bayhorse Creek, a tributary of the Salmon River. Active mining operations for zinc and took place between the 1880s and the 1980s. These operations occurred primarily in five areas across an 800-acre property. After mining operations ceased these areas contained varying degrees of mine waste as well as an abundance of historical mining structures, including the Bayhorse Townsite. Thanks to the efforts of the Idaho DEQ response program, the Idaho Department of Parks and Recreation (IDPR), and EPA Brownfields Program, the Bayhorse Mine is now home to a historical park and part of the Land of the Yankee Fork recreation area. DEQ used Section 128(a) Response Program grant funding to assess the levels of metals contamination on the property, provided technical assistance to complete the assessment, and developed a risk assessment and cleanup alternatives for areas in the park. The IDPR acquired the mining properties and, through receipt of three EPA Brownfields Cleanup grants, is cleaning up the areas of the park which will be open to the public. IDPR and DEQ are coordinating closely with the U.S. Forest Service (USFS) and EPA to complete a removal action on adjacent USFS and IDPR land not covered by the Brownfields Cleanup grants.

Other Land Programs

Underground Storage Tanks (UST) Program
http://www.deq.idaho.gov/waste/prog_issues/ust_lust/index.cfm

Oregon

Brownfields Program / Voluntary Cleanup Program (VCP)

Oregon Department of Environmental Quality (ODEQ)
811 SW 6th Avenue
Portland, OR 97204
http://www.oregon.gov/DEQ/LQ

Contact(s): Annette Dietz, *Cleanup Program Coordinator*
dietz.annette@deq.state.or.us
503-229-6258

Gil Wistar, *Brownfields Coordinator*
wistar.gil@deq.state.or.us
503-229-5512

Program Overview

- Brownfields Program
- Cost to Enter DEQ Voluntary Cleanup Program: $2,500 plus oversight fees
- Liability Relief Provisions
- Brownfields Redevelopment Authorities

Program

The Voluntary Cleanup Program (VCP) has two pathways: the Voluntary Cleanup Pathway (VCP) and the Independent Cleanup Pathway. The Voluntary Cleanup Pathway provides ongoing project support from an Oregon Department of Environmental Quality (ODEQ) project manager for No Further Action (NFA) determinations, preliminary assessment review, soil cleanup standards, report/document review, operable unit approach where a section of the site may be redeveloped while cleanup is still occurring on other sections, technical assistance and regulatory guidance, negotiated scope of work, budget estimates for ODEQ oversight costs, Prospective Purchaser Agreements (PPA), and public participation. The Independent Cleanup Pathway (ICP), in which an ODEQ project manager reviews site activities after they are completed and a report is prepared, is an alternative to the Voluntary Cleanup Pathway for sites ranked low or medium priority for further investigation or cleanup.
http://www.deq.state.or.us/lq/cu/brownfields/index.htm and http://www.deq.state.or.us/lq/cu/voluntarycu.htm

- **Funding Source(s) for the Program:** Cost recovery from project participants and federal grants.
- **Cost to enter program or fees for service:** PPA application requires $2,500 deposit to ODEQ to begin formal negotiation of the agreement. No deposit for VCP required with Intent to Participate Form, but $5,000 deposit when project manager is assigned. ICP requires a $1,500 deposit. Once projects become active, ODEQ charges VCP and ICP participants on an hourly basis for project oversight.
- **Sites Enrolled in VCP:** As of January 2011, 1,405 sites entered the VCP since its inception in 1991.
- **Sites Completed under VCP:** As of January 2011, 797 sites received No Further Action letters through the VCP.
- **PPAs:** From 1996 through January 2011, ODEQ issued 117 PPAs.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

A variety of grants and loans are available to assist with brownfields reuse projects.

- EPA capitalized the Oregon Coalition Brownfields Cleanup Fund with $2,850,000; the fund is primarily a low-interest loan program available to eligible communities or private sector applicants for cleanup/non-time-critical removals. Limited grant assistance is available to eligible communities or nonprofit entities following financial review. The Oregon Business Development Department (OBDD) serves as lead agency and fund manager on behalf of a coalition of partners.
- State-funded Brownfields Redevelopment Fund managed by OBDD provides a direct loan program to both public and private entities seeking financial assistance for assessment through cleanup of brownfield sites. Limited technical assistance grants are available to public entities to either complete Phase I or II environmental site assessments on publicly-owned sites or that are undertaking integrated planning activities involving brownfields properties.
- State Special Public Works Fund, managed by OBDD, provides technical assistance grants and loans to municipalities for site assessments and cleanup on publicly-owned industrial brownfields properties seeking certification through the state's Industrial Lands Certification Program.
- The Oregon Capital Access Program, managed through OBDD, offers loan portfolio insurance for environmental actions and brownfields redevelopment projects.

- The Oregon Dry Cleaner Fund is administered by ODEQ and pays for assessment and cleanup at qualifying dry cleaner sites. To manage limited funding, sites are prioritized based on human health and environmental threat.

LIABILITY RELIEF PROVISIONS

Oregon DEQ's VCP issues NFAs for sites demonstrated not to present unacceptable risk to human health or the environment. A PPA is a legally binding agreement between ODEQ and a prospective purchaser, which limits the purchaser's liability to ODEQ for environmental cleanup of the property in return for a commitment by the purchaser to undertake and/or fund site activities that provide a "substantial public benefit." The PPA is authorized through state statute and administrative rule to provide liability protection. It does not provide liability protection from the federal government or from any activities which may result in additional contamination after the property is purchased.

BROWNFIELDS REDEVELOPMENT AUTHORITIES (OR SIMILAR)

The Center for Creative Land Recycling (CCLR) in San Francisco provides technical assistance to communities in Oregon and other western states that are tackling brownfields redevelopment projects. Formed in 1997, CCLR is a nonprofit agency offering pro-bono technical assistance to support land recycling and brownfields redevelopment. http://www.cclr.org

Program Elements

METHODS/STANDARDS/CONTROLS

Applicant has a choice of approach (i.e., removal or institutional controls), to protect public health and the environment. The same standard of site-specific acceptable risk, which includes protection of ecological receptors, must always be met.

CONTAMINANTS COVERED

Petroleum products (including methane), hazardous waste, lead paint, polychlorinated biphenyls (PCBs), and Comprehensive Environmental Response Compensation and Liability Act (CERCLA) contaminants can be addressed through the VCP.

INSTITUTIONAL CONTROLS (IC)

In Oregon, institutional or engineering controls are used when risks of exposure to hazardous substances can be blocked effectively by having legal or administrative measures in place. Typically, institutional controls (IC) will be an element in the Record of Decision, the Consent Order, or other decision document. http://www.deq.state.or.us/lq/cu/controls.htm

- **IC Tracking:** Properties with institutional controls remain on ODEQ's public Environmental Cleanup Site Information (ECSI) database, Confirmed Release List, and Inventory – as long as the institutional control remains in effect.
- **IC Oversight and Monitoring:** Monitoring and periodic review will be part of the institutional control to ensure that it is working. The extent and frequency of monitoring and periodic reports will vary with the project. There may be a certain amount of random monitoring of the IC (e.g., due diligence inquiries prior to property transfers), but periodic review by ODEQ should be a part of the IC and the selected remedy.

The following Web address is a direct link to the state's public database that maintains an inventory of sites, maps sites and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state.
http://www.deq.state.or.us/lq/ECSI/ecsiquery.asp?listtype=lis&listtitle=Environmental+Cleanup+Site%20Information+Database

Program Highlights

The future site of the City of Independence's civic center is a property the city acquired from Pacific Power and Light in the 1980s. The property had been a water storage and distribution facility. In 2008, before starting construction on the civic center, the city tested soil for foundation work and discovered some oil contamination. In 2009, ODEQ used Section 128(a) Response Program funding to assist with determining the source of the contamination. Prior to field work, ODEQ consulted with local tribal groups regarding the potential for tribal artifacts to be present along the Willamette River. Once consultation was complete and analysis performed, it was revealed that most of the oil and other chemicals detected were at safe levels, but some compounds in the ground water exceeded safe levels for drinking water. ODEQ's no-further-action determination in June 2009 included a provision that wells on the property be sealed to prevent use of contaminated ground water. In collaboration, the city, state and local tribes were able to leverage resources to ensure protection of human health and the environment. The $8.1 million bid to build the center came in under the estimate and no artifacts were uncovered.

Other Land Programs

Tanks Program
http://www.deq.state.or.us/lq/tanks/index.htm

Orphan Sites Program
http://www.deq.state.or.us/lq/cu/orphans.htm

Dry Cleaning Program
http://www.deq.state.or.us/lq/cu/drycleaner/index.htm

Washington

Voluntary Cleanup Program (VCP)

Department of Ecology (Ecology)
P.O. Box 47600
Olympia, WA 98504-7600
http://www.ecy.wa.gov/programs/tcp/cleanup.html
Contact(s): Nnamdi Madakor, P.G., P.HG, *VCP Statewide Coordinator* – 360-407-7244

Ecology Brownfield Program

Department of Ecology (Ecology)
P.O. Box 47600
Olympia, WA 98504-7600
http://www.ecy.wa.gov/programs/tcp/brownfields/brownfields_hp.html
Contact(s): John Means, *Brownfields Program Manager* – 360-407-7188
Jessica Brandt, *Brownfields Program Planner* – 360-407-7336

Brownfields Redevelopment Loan Fund

Department of Commerce
P.O. Box 42525
Olympia, WA 98504
http://www.cted.wa.gov
Contact(s): Dan Koroma, *Brownfields Coordinator* – 360-725-4062

Program Overview

- Brownfields Program
- Cost to Enter the Program: Oversight fees
- Liability Relief Provisions
- Tax Incentives

Program

The development of Washington's brownfields program began with the adoption of the Model Toxics Control Act (MTCA), a citizen-mandated law originally enacted through a voter's initiative that governs cleanup of hazardous waste sites in Washington. Cleanup standards under MTCA include appropriate cleanup levels for industrial sites. The brownfields program itself is not defined by statute or rule, however, Washington State has a cooperative approach to brownfields cleanup and redevelopment. In addition to assistance, parties conducting cleanups can seek private consultants, the state provides technical assistance, grants, and a revolving loan program.
http://www.ecy.wa.gov/programs/tcp/cleanup.html http://www.ecy.wa.gov/programs/tcp/brownfields/brownfields_hp.html

- **Funding Source(s) for the Program:** Federal grants and state grants
- **Cost to enter program or fees for service:** For the Voluntary Cleanup Program (VCP), monthly billing of charges incurred by Ecology during the previous month based on hourly rates of staff used to provide services.
- **Sites Enrolled in VCP:** As of November 2010, 4,504 sites have entered the program.
- **Sites Completed under VCP:** As of November 2010, 1,495 sites have cleanups in progress and 1,714 No Further Action (NFA) determinations have been issued.

Financial Elements

ASSESSMENT AND CLEANUP FUNDING

A variety of grants, loans and technical assistance are available to assist with brownfields reuse projects.
http://www.ecy.wa.gov/programs/tcp/paying4cu/paying4cu.html

INCENTIVES

- Tax abatements
- Business and Occupation (B&O) tax credit for research and development of environmental technologies
- Federal Brownfields Tax Incentive

- Tax credits (certain business expansions)

LIABILITY RELIEF PROVISIONS

- **Covenants Not to Sue** – Under state law, and subject to certain conditions and limitations, when ownership or operation of property is transferred, any Covenant Not To Sue and contribution protection given to the prior owner apply equally to successor owners and operators.
- **Lender Liability Exemption** – State law grants lenders an exemption from liability, subject to certain conditions and limitations, while they hold an ownership interest in a facility, primarily to protect a security interest.

Program Elements

METHODS/STANDARDS/CONTROLS

Applicant has a choice of cleanup standards, including risk-based standards, although they are not based on Risk-Based Corrective Action.
http://www.ecy.wa.gov/programs/tcp/policies/pol_main.html

CONTAMINANTS COVERED

The program does not restrict on basis of contaminants.

INSTITUTIONAL CONTROLS (IC)

Institutional controls are necessary as part of the cleanup if:

- Hazardous substances remain at the site at concentrations that exceed cleanup levels.
- Conditional points of compliance are established to measure compliance with cleanup levels.
- Cleanup levels are established based on land or resource uses that are not the uses that require the most protective cleanup levels (e.g., industrial land use).
- The department determines such controls are necessary to protect human health and the environment or the integrity of the cleanup.

Washington has sustainable land use planning requirements defined through the Growth Management Act such as urban growth boundaries.

- **IC Tracking:** Institutional controls are tracked in the Integrated Site Information System Web reporting database.
- **IC Oversight:** When institutional controls are necessary, environmental covenants are usually used to impose those controls on a parcel of real property.
- **IC Monitoring:** Confirmation monitoring and five year reviews are also used and may provide a basis for reopeners in a Consent Decree or a basis for rescinding a VCP NFA opinion for a site.

The following Web address is a direct link to the state's public database that maintains an inventory of sites, maps sites and/or tracks institutional controls. This link also provides additional information regarding contaminated sites in the state.
http://www.ecy.wa.gov/programs/tcp/sites/SiteLists.htm

Program Highlights

In 2010 Ecology's Brownfield program published the "Guide to Leveraging Brownfield Redevelopment for Community Revitalization" and conducted Brownfield Planning Workshops to provide an opportunity for training and leadership on the cleanup and redevelopment of brownfields. The economy, appearance and property values of many communities are hindered by the presence of derelict or under-utilized properties. The cleanup and redevelopment of these properties is an important strategy for revitalizing our communities, creating jobs, and protecting the environment. In a typical workshop, attendees hear about how other communities have succeeded or struggled with economic revitalization. In this workshop, participants played the role of decision-maker and learn by doing. Workshops were composed of an interactive small group planning session to address cleanup and redevelopment of a typical brownfield. Participants were provided with a guidebook with basic information to lead a redevelopment planning process and make key decisions. Experts in the fields of economics, environmental science, land use and contamination regulation, and funding support participants the exercise. The planning process is simulated, but the case study is a real property. In this simulation, participants walk through the major planning steps and gain information and experience so they can promote and lead successful revitalization projects in their communities.

Other Land Programs

Underground Storage Tanks (USTs) Program
http://www.ecy.wa.gov/programs/tcp/ust-lust/tanks.html



United States Environmental Protection Agency

Office of Solid Waste and Emergency Response

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www.epa.gov/brownfields