



United States
Environmental Protection
Agency



State Brownfields and Voluntary Response Programs 2014



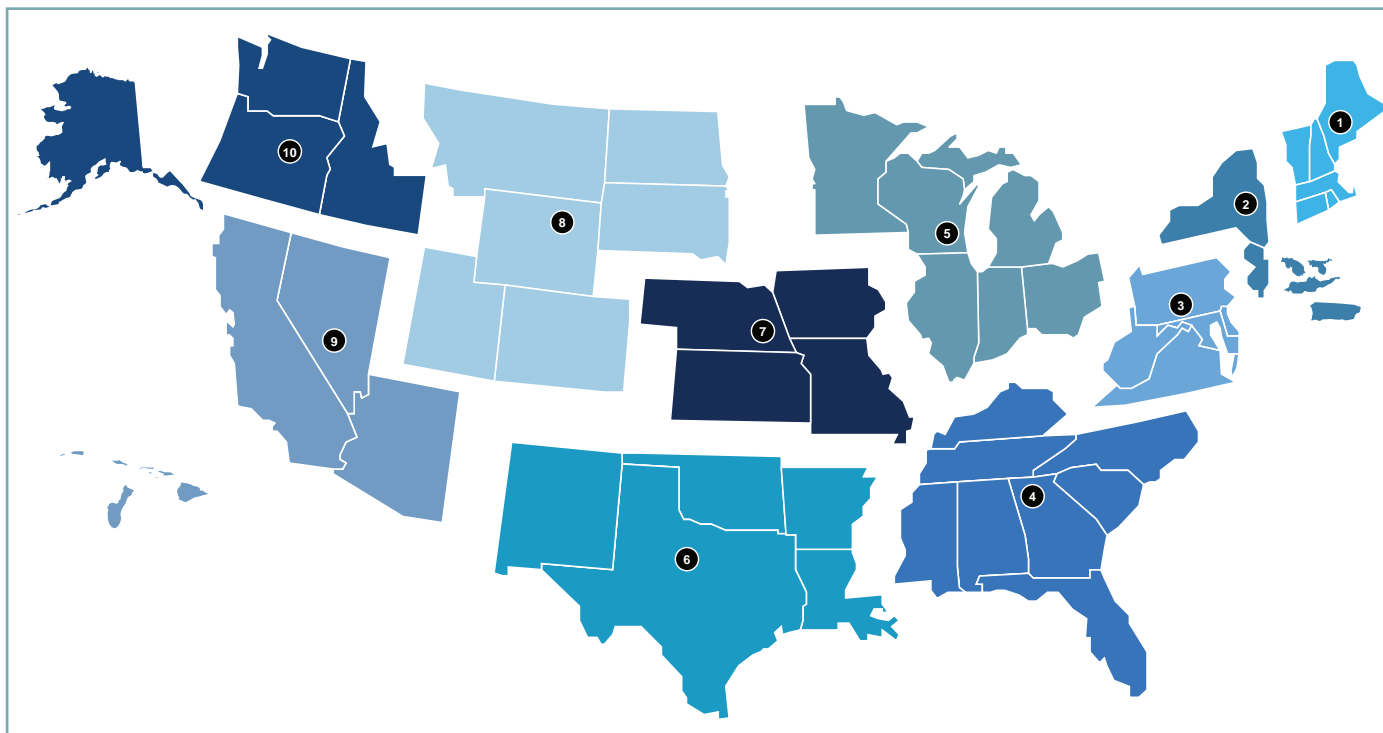
Foreword

“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:

The State Brownfields and Voluntary Response Programs Report explores the evolving landscape of state environmental, financial and technical programs designed to promote brownfields cleanup and reuse. This report 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 state programs emphasizes the states' essential role in brownfields cleanup. In the coming years—in times of heightened budgetary concerns and tight budgets—state programs will look to ensure that resources are committed for long-term monitoring and other property needs, continue to create incentives to assist in the cleanup and reuse of brownfield properties, and develop sustainability initiatives to incorporate sustainability into cleanup and end use decisions. States will continue to put many different approaches in place to meet these goals and address the diverse challenges of brownfields reuse. This report attempts to summarize those programs and approaches.

Elements in the Analysis

This update looks at several components of state brownfields and voluntary 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. This update includes information on financial programs directly available through state voluntary response programs, as well as other incentive programs applicable to brownfields reuse efforts. The report 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 section 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 and spur economic development.

EPA REGION 1

Department of Energy and Environmental Protection (DEEP) Brownfields and Voluntary Remediation Programs

79 Elm Street
Hartford, CT 06106-5127
www.ct.gov/deep

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

Brownfields: Mark Lewis
Brownfields Coordinator, Office
of Constituent Affairs and Land
Management
Mark.Lewis@ct.gov
860-424-3768

Program Overview

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

PROGRAM

Connecticut provides a variety of voluntary remediation and brownfields programs and incentives to expedite the cleanup and reuse of contaminated properties.

- **Funding Source(s) for the Program:** State funds (approximately 65%) and federal grants (approximately 35%).
- **Cost to enter program or fees for service:** Varies: Voluntary Remediation Program - \$3,250. Brownfields Remediation and Revitalization Program - 5% of the assessed value of the land (without improvements) with waivers available to municipalities or economic development agencies or on request of a municipality or economic development agency. Entry into most other programs is at no cost to the applicant.
- **Sites Enrolled in VCP:** As of June 2014, more than 530 sites in Voluntary Response Programs.
- **Sites Completed under VCP:** As of June 2014, more than 68 sites completed under Voluntary Response Programs. Many other sites are remediated pursuant to mandatory state laws, such as the Property Transfer Program.

FINANCIAL ELEMENTS

Assessment and Cleanup Funding

A variety of grants, loans, and technical assistance are available to assist with brownfields reuse projects. The Office of Brownfield Remediation and Development is the state's one stop shop for financial assistance for Brownfields. <http://www.ctbrownfields.gov>

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
- Historic Preservation Tax Credit Program – Provides financial incentives in the form of historic tax credits for the conversion of historic commercial, industrial, former government property, cultural building, institutional, or mixed residential and nonresidential property to mixed residential and nonresidential uses or nonresidential use. <http://www.cultureandtourism.org/cct/cwp/view.asp?a=3933&q=430786>
- Historic Structures Rehabilitation Tax Credit Program – Provides a tax credit for the conversion of historic commercial, industrial, institutional, former government buildings, cultural building, or residential property of more than four units to residential use, including rental or condominium units. <http://www.cultureandtourism.org/cct/cwp/view.asp?a=3933&q=331966>

Liability Relief Provisions

Covenants Not to Sue (CNTS) – Two types of CNTS are available: one pursuant to Section 22a-133aa of the Connecticut General Statutes (CGS) and one pursuant to CGS Section 22a-133bb. A CNTS 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.

To realize this benefit, the property must be remediated in accordance with the Department's Remediation Standard Regulations (RSR) in effect on the effective date of the CNTS, 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

Brownfield Remediation and Revitalization Program

CGS Section 32-769 provides liability relief for certain innocent parties who acquire a brownfield and clean up the property to state standards within statutory timeframes. In exchange for cleanup onsite, the law provides that the eligible party is not required to clean up prior releases that migrated off-site, and provides various third party liability protections. http://www.cga.ct.gov/2014/sup/chap_588gg.htm

Abandoned Brownfield Cleanup Program

CGS Section 32-768 allows new developers of certain brownfields to not incur liability to address pre-existing, off-site contamination as long as cleanup of onsite contamination continues, and migration of contamination from the site ceases. Contamination on-site must be cleaned up under the Voluntary Cleanup Program pursuant to Section 22a-133x. A Covenant Not to Sue pursuant to CGS Section 22a-133aa is provided upon completion, free of charge. http://www.cga.ct.gov/2014/sup/chap_588gg.htm

Municipal Liability Relief Program

Section 22a-133ii of the Connecticut General Statutes provides relief from state and third party liability for any pre-existing contamination to any municipality or economic development agency, nonprofit economic development corporation, or non-stock corporation or limited liability company established by a municipality to address redevelopment. http://www.cga.ct.gov/2014/sup/chap_445.htm

Licensed Environmental Professional Program

DEEP 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 DEEP 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 k-3) were adopted in January 1996, and revised in June 2013. These regulations provide 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 DEEP 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 ICs. This link also provides additional information regarding contaminated sites in the state:

http://www.ct.gov/dep/cwp/view.asp?a=2715&q=325018&depNav_GID=1626

PROGRAM HIGHLIGHTS

DEEP is in the middle of a comprehensive evaluation and transformation of its state cleanup laws. Starting in January 2011, DEEP commenced a public process to evaluate all the state cleanup laws, identify what is working well and what could be improved, and began shaping proposals for transforming the cleanup laws. The goals are a more efficient, speedy, clear, comprehensive and protective system. Cleanup transformation details and documents are on the DEEP website (www.ct.gov/deep/remediation or Comprehensive Evaluation and Transformation of Connecticut's Cleanup Program webpage at www.ct.gov/deep/cwp/view.asp?a=2715&q=481178&deepNav_GID=1626).

OTHER LAND PROGRAMS

State Superfund Program

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

Significant Environmental Hazard Program

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

Underground Storage Tank Petroleum Clean-Up Program

www.ct.gov/dep/cwp/view.asp?a=2717&q=325322&depNav_GID=1652

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 & Brownfields)
nick.hodgkins@maine.gov
207-287-4854

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 (DEP) satisfaction, in exchange for protections from enforcement actions. The VRAP is intended to encourage the cleanup and redevelopment of contaminated properties within the state.

<http://www.maine.gov/dep/spills/vrap/index.html>

- **Funding Source(s) for the Program:** Federal grants and VRAP Program fees.
- **Cost to enter program or fees for service:** There is a \$500 application fee and reimbursement of all staff costs.
- **Sites Enrolled in VCP:** As of June 2014, 116 sites are underway.
- **Sites Completed under VCP:** As of June 2014, 635 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. The cost of the VRAP project manager's time is billed to the applicant.

Brownfields Assessment and Cleanup Funding

This program is funded through federal grants. Targeted Brownfields Assessment (TBA) 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 a 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 obtaining 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

Cleanup guidelines are currently available and consider four separate exposure scenarios for soil contact: 1) residential, 2) outdoor commercial worker, 3) construction/excavation worker, and 4) recreational/park user. Alternatively, a site-specific goal may be established using the state's risk-assessment guidance document. <http://www.maine.gov/dep/spills/publications/guidance/index.html>

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 ICs 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 UECA's.
- **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 ICs. This link also provides additional information regarding contaminated sites in the state.

<http://www.maine.gov/dep/maps-data/remdescriptanddata.html>

PROGRAM HIGHLIGHTS

The MEDEP Brownfields Program provided assessment services through its Section 128(a) Response Program funding to assess an old dairy property and associated residence in Bangor for a nonprofit housing developer. An underground petroleum tank and contamination issues with the building (i.e., asbestos, lead paint) were found. The MEDEP Brownfields Program plans to assist in the cleanup of portions of the property, as appropriate under the grant guidelines. A multi-unit housing complex for homeless persons is planned for the property.

OTHER LAND PROGRAMS

Municipal Landfill Remediation Program

<http://www.maine.gov/dep/spills/landfillclosure/index.html>

Underground Storage Tanks Program

<http://www.maine.gov/dep/waste/ust/index.html>

MASSACHUSETTS

Brownfields Program Massachusetts Department of Environmental Protection (MassDEP)

One Winter Street, 2nd Floor
Boston, MA 02108
<http://www.mass.gov/eea/agencies/massdep/cleanup/programs/>

Contact(s): Kerry Bowie
Brownfields Coordinator
kerry.bowie@state.ma.us
617-556-1007

Program Overview

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

PROGRAM

The Commonwealth of Massachusetts is committed to the cleanup and redevelopment of brownfields properties as a way to stimulate the economy and further attain 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.

<http://www.mass.gov/eea/agencies/massdep/cleanup/programs/>

- **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 MassDEP's Voluntary Cleanup Program (VCP):** More than 44,000 release notifications have been made to MassDEP, with about 4,000 still active. Approximately 1,400 new releases enter the program each year.
- **Sites Completed under VCP:** 40,000 releases have been 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 products and services 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.

<http://www.massdevelopment.com/financing/specialty-loan-programs/brownfields-redevelopment-fund/>

Incentives

- Brownfields Tax Credit Program
- Municipal Tax Abatement Program
- Economic Development Incentive Program (EDIP)
- State Historic Tax Credit

<http://www.mass.gov/eea/agencies/massdep/cleanup/programs/brownfields-tax-incentives.html>

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, but where the owner/developer has committed to clean up and redevelop the property.

<http://www.mass.gov/ago/doing-business-in-massachusetts/economic-development/brownfields-covenant-program/>

Environmental Insurance

The Brownfields Act created the Brownfields Redevelopment Access to Capital (BRAC) Program, which backs loans with state-subsidized, volume-discounted environmental insurance.

<http://www.mass.gov/eea/agencies/massdep/cleanup/programs/state-subsidized-environmental-insurance.html>

Brownfields Redevelopment Authorities (or similar)

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. Since then there has been three rounds of site nominations. <http://www.mass.gov/governor/pressoffice/pressreleases/2012/3rd-round-of-brownfields-support-team-announced.html>

PROGRAM ELEMENTS

Methods/Standards/Controls

A risk-based regulatory program is in place; the regulations are set forth in the Massachusetts Contingency Plan (MCP).

<http://www.mass.gov/eea/agencies/massdep/cleanup/regulations/>

Contaminants Covered

Most 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, poly-aromatic hydrocarbons (PAHs) and polychlorinated biphenyls (PCBs), perchlorate, research department explosives (RDX), and high melting explosives (HMX). Some OHM are exempt from reporting. These OHM are listed in the MCP. www.mass.gov/dep/cleanup/laws/regulati.htm

Licensed Site Professionals (LSP)

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.

http://public.dep.state.ma.us/LSP_2/lspsearch.aspx

Institutional Controls (IC)

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

- **IC Tracking:** AULs are tracked through publicly available databases, as well as geographic information systems (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 ICs. This link also provides additional information regarding contaminated sites in the state.

<http://public.dep.state.ma.us/SearchableSites2/Search.aspx>

PROGRAM HIGHLIGHTS

The 54-acre Indian Orchard Business Park (IOBP) Project is located within a state-designated environmental justice neighborhood and represents an opportunity to assemble the largest tract of potentially developable land within the City of Springfield. This site comprises four former industrial and manufacturing properties with a mixture of publicly- and privately-owned sites. Contamination and derelict building conditions have complicated the City's efforts to redevelop the site as an integrated modern business complex.

In May 2011, the Springfield Redevelopment Authority (SRA) authorized land disposition of a 12-acre portion of this project for a 2.2 megawatt solar power generating facility. MassDEP helped the City with technical assistance concerning cleanup issues (e.g., removing six large underground storage tanks and reviewing open release tracking numbers) and hosted informational and liability meetings between the City and Western MassElectric. This collaborative approach enabled the construction of the solar array to be completed on the former "Foundry Building" property that was used to produce iron and steel valves. Western Massachusetts Electric Company (WMECo) and the SRA entered into a 30-year lease term with annual payments to the City. Under the current plan, revenue from the lease will fully satisfy the debt obligation on the property within five years. In addition, WMECo has agreed to pay all legally-assessed tax obligations yielding more than \$500,000 in annual revenue to the City.

OTHER LAND PROGRAMS

Hazardous Waste Management

<http://www.mass.gov/eea/agencies/massdep/recycle/hazardous/>

Underground Storage Tanks Program

<http://www.mass.gov/eea/agencies/massdep/toxics/ust/>

NEW HAMPSHIRE

Brownfields Program New Hampshire Department of Environmental Services (DES)

P.O. Box 95
Concord, NH 03302-0095
<http://des.nh.gov/>

Contact(s): Rebecca S. Williams
rebecca.williams@des.nh.gov
603-271-6573

Program Overview

- Brownfields Program
- Brownfields Cleanup Revolving Loan Fund
- Brownfields Covenant Program
- Liability Relief Provisions
- 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. These approaches include: the Brownfields Covenant Program, Brownfields Assessment Program, Brownfields Cleanup Revolving Loan Fund, and the Department of Environmental Services (DES)/Grantee Brownfields Partnership. <http://des.nh.gov/organization/divisions/waste/hwrp/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:** None
- **Sites Enrolled in VCP:** As of June 2014, 151 sites have enrolled in the program.
- **Sites Completed under VCP:** As of June 2014, 89 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/hwrp/sss/brownfields/index.htm>

Incentives

- Brownfield sites are exempt from state hazardous waste generator fee (RSA 147-B-9).
- Municipalities can abate taxes at brownfield sites (RSA 76:19-a).

Liability Relief Provisions

- Program offers a No Further Action (NFA) letter (when active remediation measures were not required), a Certificate of Completion (COC) upon completion of a remedial action with the exception of groundwater monitoring, a Certificate of No Further Action (when all environmental health standards have been met), 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.
- "Qualified holder" provisions of hazardous waste and petroleum statutes provide protection to lenders and municipalities (for tax deeding).

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/hwrp/sss/brownfields/grantee.htm>

PROGRAM ELEMENTS

Methods/Standards/Controls

Applicable Rules and Regulatory Authority that serve to guide environmental site investigation and remediation are defined within: Env-Or 600 Contaminated Site Management and Env-Or 800 Brownfields Program under RSA 147-F

<http://des.nh.gov/organization/divisions/waste/hwrp/sss/brownfields/index.htm>

Additional Guidance Documents may be used for site-specific conditions.

http://des.nh.gov/organization/divisions/waste/hwrp/sss/hwrp/guidance_documents.htm

Contaminants Covered

Petroleum compounds, chlorinated volatile organic compounds (VOCs), 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 IC 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. Ground water 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 an inspection program for monitoring compliance with Notices of AURs. However, RPs and subsequent site owners are required to submit self-certification forms to DES on a periodic basis to demonstrate continued compliance and awareness of the Notice of AUR. Non-compliance with the conditions of a Notice of AUR is grounds for requiring active remedial actions and termination of the Notice of Activity and Use Restriction.

<http://des.nh.gov/organization/divisions/waste/hwrp/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 ICs. This link also provides additional information regarding contaminated sites in the state. <http://des.nh.gov/onestop/index.htm>

PROGRAM HIGHLIGHTS

The New Hampshire DES used Section 128(a) Response Program funding to complete Phase I and Phase II environmental assessments at the Richelson Building in Plymouth. The current building was constructed between 1930 and 1937 and was occupied by a clothing store and ski outfitting shop. In 1992, the building was renovated to include a furniture store, tanning salon, photocopy shop, bagel shop, an art studio, and an office for Plymouth State University (PSU). The building has been vacant since 2009. The assessments were conducted to determine potential petroleum contamination associated with an underground storage tank. The assessments revealed that no cleanup was required and allowed the Grafton County Economic Development Council (Council) to receive U.S. Department of Housing and Urban Development (HUD) funding to purchase the property. In addition, the Council was awarded \$500,000 in New Hampshire Tax Credits and successfully applied for a loan from the Northern Border Regional Commission, a new regional coordination mechanism for the Northern Forest states as well as a potentially significant new source of investment for economic and community development in the region. As the property is located adjacent to PSU, the Council worked with PSU to renovate the building to house a small business incubator and business resource center that will be run by PSU staff.

OTHER LAND PROGRAMS

Hazardous Waste Remediation State Contaminated Sites

<http://des.nh.gov/organization/divisions/waste/hwrp/index.htm>

Petroleum Remediation

<http://des.nh.gov/organization/divisions/waste/orcb/prs/prp/index.htm>

Asbestos Management

<http://des.nh.gov/organization/divisions/air/cb/ceps/ams/index.htm>

State Site Remediation and Brownfields Program Rhode Island Department of Environmental Management (RIDEM)

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 Ext. 7108

Program Overview

- Brownfields Program
- Cost to Enter the Program: \$1,000
- MOA with EPA Region 1 (February 1997)
- Liability Relief Provisions
- Tax Incentives
- Commerce RI

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 June 2014, 914 sites were in active investigation, remediation, or monitoring stages of the program.
- **Sites Completed under VCP:** As of June 2014, 956 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

- Commerce RI (Formerly RI Economic Development Corporation): Enterprise Zone Business Tax Credit – <http://www.commerceri.com/documents/finance/incentives/State%20Enterprise%20Zones.pdf> and <http://www.tax.ri.gov/regulations/other/cr03-07.php>
- 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 state tax credit programs. <http://www.commerceri.com/documents/finance/incentives/Historic%20Homeowner%20Tax%20Credit.pdf> and <http://www.preservation.ri.gov/credits/commstate.php>

Liability Relief Provisions

Under state law, all parties responsible for contamination at a site [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. § 23-19.14-7 Exemptions to liability. The following parties are not responsible parties and shall not be held liable for costs or damages associated with a release of hazardous material and/or petroleum:

<http://webserver.rilin.state.ri.us/Statutes/title23/23-19.14/23-19.14-7.HTM>

Brownfields Redevelopment Authorities (or similar)

Commerce RI, in coordination with RIDEM, administers a Brownfields Cleanup Revolving Loan Fund (RLF). Commerce RI acts as the financial program manager and RIDEM acts as the site manager. Sub-grants may be available to nonprofits and municipalities under the RLF depending on remaining funding and whether loans are available to all interested parties.

<http://www.dem.ri.gov/brownfields/financial/rifdocuments.htm>

PROGRAM ELEMENTS

Methods/Standards/Controls

The Remediation Regulations were amended on November 9, 2011. The regulatory 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 remained the same; 2) Environmental Land Usage Restriction (ELUR) requirements for some residential properties on arsenic only sites changed; and 3) Addition of Environmental Justice requirements with respect to Public Notices were added to Regulations for the first time.

<http://www.dem.ri.gov/pubs/regs/regs/waste/remreg11.pdf>

Contaminants Covered

The Remediation Regulations are intended to regulate the investigation and remediation of contamination resulting from the unpermitted Release of Hazardous Materials. Hazardous Materials are defined as “any material or combination or mixture of materials containing any Hazardous Substance. Petroleum and polychlorinated biphenyls (PCBs) are also 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 is under the jurisdiction of the RI Department of Health (RIDOH) if it falls under the RIDOH definition of a “Regulated Facility.”

Institutional Controls (IC)

Rhode Island supports the use of 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 ICs 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 brownfields 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/sitelist19.pdf> and <http://www.dem.ri.gov/brownfields/documents/sitelist20.pdf>

The following link is a geographic information system (GIS) that maps sites. <http://www.dem.ri.gov/maps/index.htm>

PROGRAM HIGHLIGHTS

The Office of Waste Management finalized an Expedited Policy for the Remediation of Environmental Simple Sites (EXPRESS) to provide Performing Parties and consultants with a means to work with the Office of Waste Management in streamlining the approval process at brownfield sites through expedited technical reviews, presumptive remedies, and confirmation sampling protocols.

After the EXPRESS Policy was drafted, meetings were set up with RI Society of Environmental Professionals (RISEP) to get feedback from the regulated community. After that input was incorporated, a formal comment period was held for the public in the summer of 2013. The Office of Waste Management received written comments from many interested parties, subsequently addressed any feedback, and finalized the Policy. Under this new Policy:

- The Performing Parties are in constant contact with the Office of Waste Management staff beginning with a startup meeting within 7 days after receipt of the EXPRESS Submission Package. This communication keeps the dialogue open and proactively deals with issues before or as they occur.
- Several new areas of self-certification of information to reduce Office of Waste Management review times.
- Time saving measures including the combination of the Remedial Decision Letter (RDL) and the Remedial Approval Letter (RAL) into one letter.
- Total time through the process from initial notification to issuance of a RAL is 60 days.

OTHER LAND PROGRAMS

Underground Storage Tank Management Program

<http://www.dem.ri.gov/programs/benviron/waste/topictan.htm>

Superfund and Department of Defense Program

<http://www.dem.ri.gov/programs/benviron/waste/topicffp.htm>

Waste Management Facilities Program

<http://www.dem.ri.gov/programs/benviron/waste/topicwfm.htm>

Brownfields Response Program Vermont Department of Environmental Conservation (DEC)

1 National Life Drive – Davis 1
Montpelier, VT 05620-3704
<http://www.anr.state.vt.us/dec/wastediv/SMS/brownfields-home.htm>

Contact(s): George Desch, Division Director
george.desch@state.vt.us
802-760-8041

Patricia Coppolino, Chief
patricia.coppolino@state.vt.us
802-249-5822

Program Overview

- Brownfields Program
- Cost to Enter the Program: \$500
- 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:** 100% Federal Funds.
- **Cost to enter program or fees for service:** All applicants must pay a non-refundable application fee of \$500.
- **Sites Enrolled in in BRELLA:** As of June 2014, there were 47 active projects enrolled in BRELLA.
- **Sites Completed under BRELLA:** As of June 2014, 18 projects had received Certificates of Completion (COC) through 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/RCP/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/RCP/Liability-Limitation.htm>

Environmental Insurance

The Brownfields Revitalization Fund can provide grants or loans 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://accd.vermont.gov/business/relocate_expand/capital/brownfields

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 Investigation and Remediation of Contaminated Properties document.

Risk assessment at sites is allowed using the EPA Risk Assessment Guidance (RAG) and will need approval from the Vermont Department of Health. <http://www.anr.state.vt.us/dec/wastediv/SMS/pubs/IROCP.pdf>

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. The 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 ICs. 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

Surrounded by natural beauty, the former Vermont Tissue South property is located in the rural town of Bennington. Just three miles from the downtown and adjacent to Bennington College, this former mill sits on the north bank of the Walloomsac River. Its location was ideal for bringing a greater amount of cheaper renewable energy to the area while also cleaning up contaminated land. Since 1877, the Vermont Tissue Paper Corporation operated a paper manufacturing and processing facility until it was abandoned in 1986. Over the years, there was unauthorized dumping on the site. The Vermont Department of Environmental Conservation (DEC) used Section 128(a) Response Program funding to oversee assessment activities that revealed polychlorinated biphenyls (PCBs), dioxins, furans, and polycyclic aromatic hydrocarbons (PAHs) in soil, concrete, and plumbing. After the property was cleaned up, the historic mill building was repurposed into residential units and a hydroelectric facility was developed on the property. A man-made concrete dam will house two energy-generating turbines and a secondary bedrock dam addresses environmental concerns related to fish migration pathways, water oxygenation, and water temperature. In addition, DEC, through community action, cleaned up the property and transformed it into a public open space. Other benefits include the preservation of a historic building and ecological improvements that have enhanced habitat functioning of the Walloomsac River.

OTHER LAND PROGRAMS

Sites Management Program

http://www.anr.state.vt.us/dec/wastediv/SMS/sites_management_section.htm

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>

Solid Waste Management Program

<http://www.anr.state.vt.us/dec/wastediv/solid/home.htm>

EPA REGION 2

Brownfield Development Area (BDA) Initiative New Jersey Department of Environmental Protection (NJDEP) Office of Brownfield Reuse

401 East State Street, 5th Floor
P.O. Box 420, Mail Code 401-05K
Trenton, NJ 08625-0420
<http://www.nj.gov/dep/srp/>

Contact(s): Tim Bartle, Chief
timothy.bartle@dep.state.nj.us
609-984-1790

Program Overview

- Brownfields Program
- Cost to Enter the Program: Annual fees and Remediation Permit fees
- Liability Relief Provisions
- Brownfield Reimbursement Program
- Hazardous Discharge Site Remediation Fund
- Economic and Redevelopment Growth Program

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 brownfields 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/>

May 7, 2012 marked the full implementation date for the Site Remediation Reform Act and the supporting Administrative Requirements for the Remediation of Contaminated Sites. These initiatives improve the quality and speed of site remediation activities through the installation of a Licensed Site Remediation Professional program. Environmental professionals in New Jersey must be experienced and pass a rigorous examination and licensing procedure in order to manage the remediation of brownfields. In return, they assume the authority to document the completion of remediation activities through the issuance of a Remedial Action Outcome letter, replacing the former state-issued No Further Action letter. Additional information is found at <http://www.state.nj.us/dep/srp/>.

- **Funding Source(s) for the Program:** Federal grants, 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 (AOC) and affected environmental receptors at each site and fixed fees for certain activities and programs, and calculated fees based on hourly rate for any oversight.
- **Sites Enrolled in BDA Program:** As of June 2014, there are 31 BDAs with 339 sites.
- **Sites Completed under BDA Program:** Prior to May 7, 2012, OBR issued 6 No Further Action (NFA) determinations indicating that remediation was complete. Since May 7, 2012, site closure is documented through the issuance of a Remedial Action Outcome letter, issued by a Licensed Site Remediation Professional. No Remedial Action Outcome letters have been issued for BDA sites under this new program.

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. Funding for this program is derived from state Corporate Business Tax revenue. The availability of this funding has been greatly reduced by increased demand and reduced Corporate Business Tax revenue. <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
- Economic and Redevelopment Growth Program provides grants to eligible developers/owners of up to 75% of the incremental increase in approved state revenues that are directly realized from the businesses operating in the redevelopment project premises. These funds are used to reimburse remediation and development costs. <http://www.njeda.com/erg>
- 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 (SRRRA) 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://www.nj.gov/state/planning/brownfields-task-force.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. Deed Notices, another institutional control, are applied to sites where soil contamination above unrestricted use standard(s) remain onsite after remediation activities are complete.

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. NJDEP uses a formal permit system to track the maintenance of institutional and engineering controls. Part of this permitting system includes annual permit maintenance fees and the submission of a biennial certification to report on the status of the controls' effectiveness. NJDEP inspection is required every five years.

- **IC Tracking:** NJDEP issues post-remediation Remedial Action permits to track those cases that have used engineering and ICs. These permits are monitored to ensure that inspection and reporting obligations are met and the biennial certifications are submitted.
- **IC Oversight and Monitoring:** 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. NJDEP is required to inspect engineering controls at least once 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.nj.gov/dep/srp/kcsnj>.

Institutional and engineering controls are mapped on the NJDEP geographic information system, available to the public at

<http://www.nj.gov/dep/gis/newmapping.htm>. Areas of historic fill are mapped on and made available at

<http://www.state.nj.us/dep/njgs/geodata/dgs04-7.htm>.

PROGRAM HIGHLIGHTS

The City of Woodbridge has partnered with NJDEP/OBR to remediate/redevelop several of its brownfield sites. Once these sites are remediated, they will be redeveloped for reuse as passive open-space/recreation, to expand/relocate existing businesses, attract new businesses, create an eco-park, and build a power plant. One of the projects in the construction phase is the \$845 million Woodbridge Energy Center. This 700-megawatt natural gas-fueled facility is expected to open by early 2016 and generate enough electricity to power 700,000 homes, reduce the state's reliance on imported energy, reduce energy costs for residences and businesses, create over 500 construction jobs, generate \$3.5 million in ratables, create 25 permanent jobs with a payroll of \$50 million, and remediate/redevelop a former chemical manufacturing site that has sat vacant and contaminated for decades.

OTHER LAND PROGRAMS

Underground Storage Tanks (UST) 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/>



Ground breaking ceremony at the Woodbridge Energy Center.

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 Environmental Cleanup and Brownfield Page)

<http://www.dec.ny.gov/about/627.html>
(Information on DEC's Division of Environmental Remediation)

Contact(s): derweb@gw.dec.state.ny.us
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>

- **Funding Source(s) for the Program:** State funds, as well as federal grants.
- **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 June 2014, DEC approved 523 applications for participation in the BCP.
- **Sites Completed under BCP:** As of June 2014, DEC has issued 155 Certificates of Completion (COC) for BCP sites since the program's inception.

FINANCIAL ELEMENTS

Investigation and remediation 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 COCs)

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 the BCP.

Institutional Controls (IC)

ICs 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

By providing cleanup oversight, liability relief, and tax credits for cleanup and redevelopment, the Brownfield Cleanup Program—a Section 128(a) Response Program grantee—was instrumental in this site's transformation. The Twin Rivers Common site in Binghamton, NY, is a former manufactured gas plant (MGP) that operated in the late 1800s. After MGP operations ceased, the site was occupied by a number of companies performing various industrial and commercial operations, including: a lumber yard and carpentry shop, a truck company, a gas station, a used car lot, and a service center. Prior to remediation, the primary contaminants of concern in the soil included benzene, xylene, lead, and polycyclic aromatic hydrocarbons (PAHs). Groundwater in two on-site wells contained several chlorinated solvents, benzene, toluene, xylene, PCBs, barium, arsenic, and several PAHs above groundwater criteria. Site remediation involved the excavation of MGP waste and contaminated soils. 13,400 cubic yards (21,770 tons) of construction and demolition debris and soils were transported for off-site disposal. The site has been redeveloped into a student housing project called "Twin River Commons." The project is considered a central part of Binghamton's ongoing renewal, attracting students from local universities to live and socialize downtown and supporting local businesses.



Twin River Commons, site of a former Manufactured Gas Plant, is now a student housing complex in downtown Binghamton

LAND PROGRAMS ADMINISTERED BY OTHER STATE AGENCIES

Brownfield Opportunity Areas (BOA) Program, administered by New York State Department of State – The BOA Program provides technical and financial assistance to municipalities and community-based organizations to conduct area-wide redevelopment planning and assessments on strategic brownfield sites. <http://www.dos.ny.gov/communitieswaterfronts/grantOpportunities/boagrants.html>

OTHER VOLUNTARY RESPONSE PROGRAMS

Environmental Restoration Program – The Environmental Restoration Program provides grants to municipalities to reimburse up to 90% of onsite eligible costs and up to 100% of off-site eligible costs for site investigation and remediation activities. Applications are not being accepted at this time due to a lack of funding. <http://www.dec.ny.gov/chemical/8444.html>

Enforcement Programs

Spill Response Program – The purpose of the Spill Response Program is to protect public health and the environment by ensuring a timely and appropriate response to unauthorized spills and discharges of contaminants. <http://www.dec.ny.gov/chemical/8428.html>

Superfund Program – The mission of the state Superfund Program is to identify and characterize suspected inactive hazardous waste disposal sites (sites) and to investigate and remediate those sites that have consequential amounts of hazardous waste which pose a significant threat to public health and the environment. <http://www.dec.ny.gov/chemical/8439.html>

Hazardous Waste Management Program – Under the Hazardous Waste Management Program, the state regulates all aspects of hazardous waste management, including: generators, transporters and treatment, storage and disposal facilities.

<http://www.dec.ny.gov/chemical/8486.html>

Puerto Rico Environmental Quality Board (PREQB) Property Redevelopment and Voluntary Cleanup Program (PRVCP)

P.O. Box 11488
San Juan, Puerto Rico 00910)
<http://www.jca.gobierno.pr>

Contact(s): Pascual E. Velázquez García
pascualvelazquez@jca.gobierno.pr
787-767-8181 ext. 3234 or 3236

Program Overview

- Brownfields Program
- Cost to Enter the Program: N/A

PROGRAM

In 2000, Puerto Rico began the development of the Property Redevelopment and Voluntary Cleanup Program (PRVCP) under a state assistant grant from EPA. The establishment of the PRVCP will facilitate the cleanup and/or redevelopment of brownfields within the island. Incentives for participation in the program will include liability relief for prospective purchasers and lenders, cleanup certification, Memorandum of Understanding between PREQB and EPA, and agreements between interested parties.

- **Funding Source(s) for the Program:** Federal grants.
- **Cost to enter program or fees for service:** PREQB will establish a reasonable cost to enter into the PRVCP.
- **Sites Enrolled in VCP:** N/A.
- **Sites Completed under VCP:** N/A.

FINANCIAL ELEMENTS

Assessment and Cleanup Funding

N/A

Incentives

PREQB is evaluating tax incentives to be used in the PRVCP.

Liability Relief Provisions

PREQB has the authority to issue cleanup letters and completion letters.

PROGRAM ELEMENTS

Methods/Standards/Controls

PREQB is developing the procedures and methods to be used in the PRVCP. A list of Cleanup Standards has been already developed to serve as the criteria to be achieved when remediating a site.

Contaminants Covered

PREQB developed a list of chemicals of concern to be addressed under the PRVCP.

Institutional Controls (IC)

N/A.

PROGRAM HIGHLIGHTS

The Puerto Rico Environmental Quality Board (EQB) is using Section 128(a) Response Program funding to establish a Voluntary Cleanup Program (VCP). The EQB continues to make progress toward the VCP by focusing on the identification, redevelopment, revitalization, and cleanup of brownfields in Puerto Rico. One of the initial tasks performed under the cooperative agreement was the development of a brownfields inventory. To streamline the efforts needed to complete the inventory, EQB reached out to the 15 municipalities in Puerto Rico that currently have EPA Brownfields Community-wide Assessment Cooperative Agreements to request copies of their completed brownfields inventories. The EQB used these examples to develop an electronic state-wide brownfields inventory to provide valuable site information to the EQB and other government entities.

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://dpr.gov.vi/>

Contact(s): Dr. Clancia Pelle
clancia.pelle@dpr.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

To operate and expand its brownfields program, the Virgin Islands continue to make progress to establish a Voluntary Cleanup Program (VCP), which will address the cleanup and/or redevelopment of brownfields within the Virgin Islands (VI). The VCP will be designed to return brownfields to a useable condition. Cleanup will be performed under a memorandum of agreement between the Department of Planning and Natural Resources-Division of Environmental Protection (DPNR-DEP) and the participant.

- **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

PREQB is developing the procedures, cleanup standards, and methods to be used in the PRVCP.

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.

Institutional Controls (IC)

Land use controls, including ICs, can be used in conjunction with remediation in the VIVRP.

PROGRAM HIGHLIGHTS

To operate and expand its brownfields program, the Virgin Islands (VI) continue to make progress to establish a Voluntary Cleanup Program (VCP), which will address the cleanup and/or redevelopment of brownfield sites within the VI. The VCP will be designed to return brownfield sites to useable condition. Cleanup will be performed under a memorandum of agreement between the Department of Planning and Natural Resources-Division of Environmental Protection (DPNR-DEP) and the participant. Following the enactment of the VI Brownfield Revitalization and Environmental Restoration Act in 2008, the program is finalizing the signatures for the promulgation of its final drafted rules and regulations. DPNR-DEP used its Section 128(a) Response Program funding to inventory 141 sites and assess 20. Currently, the program is seeking a professional services contractor to assist the division with conducting Phase I assessments.

EPA REGION 3

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 (August 1997)
- 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.dnrec.delaware.gov/dwhs/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 (10%) and the Hazardous Substances Cleanup Act Fund (HSCAF) (90%).
- **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 June 2014, there are 183 sites in the VCP and 166 sites in the BDP.
- **Sites Completed under VCP:** As of June 2014, 138 sites have been 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 brownfields. About 700 sites have been identified for inclusion in the program, with cleanup underway at 96.
- Brownfields Matching Grants offered by the Delaware Economic Development Office (DEDO) provide up to \$100,000 in matching grants.

Liability Relief Provisions

The BDP offers complete liability protection for existing contamination to qualified brownfields 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 Waste and Hazardous Substances (WHS). The BAC is composed of consultants, developers, local business men and women, and representatives from the Division of WHS. <http://www.awm.delaware.gov/BAC/Pages/BACPortal.aspx>

PROGRAM ELEMENTS

Methods/Standards/Controls

Risk-based cleanup standards of 1.0×10^{-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 brownfields; asbestos and lead paint contamination are covered if found in the soil and surveys for each are allowable reimbursable costs.

Institutional Controls (IC)/Long Term Stewardship (LTS)

ICs/land-use controls are allowed, including Uniform Environmental Covenants, operation and maintenance plans, and Ground Water Management Zones (GMZ). 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 ICs. This link also provides additional information regarding contaminated sites in the state.

<http://www.dnrec.delaware.gov/dwhs/sirb/Documents/Certified%20BF%20List.pdf>

PROGRAM HIGHLIGHTS

A new Habitat for Humanity project is set to replace a brownfield at the intersection of 14th and Walnut Street in Wilmington. DNREC used Section 128(a) Response Program funding to conduct environmental assessment activities to investigate hazardous substances as a result of the historic commercial and light industrial use and historic fill materials on the property. The site sampling was completed and the final report summarizing the results of the investigation was submitted to U.S. Environmental Protection Agency (EPA) Region 3 in January 2014. The results indicated that additional soil and groundwater investigation will be necessary at the property. This additional investigation will take place under the Delaware Brownfields program to further delineate, and possibly remediate, the property prior to it being redeveloped into affordable housing for the City of Wilmington.

OTHER LAND PROGRAMS

Tanks Management Section (TMS)

<http://www.dnrec.delaware.gov/tanks/Pages/default.aspx>

Superfund Program

<http://www.nav.dnrec.delaware.gov/DEN3/>

Voluntary Cleanup Program (VCP)

District of Columbia Department of the Environment
1200 First St., 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 June 2014, the tax incentive portion of the Act had not yet been implemented.

In late 2010, amendments to the Brownfield Revitalization Act were enacted which authorize the District to establish a program for responding to releases of hazardous substances. This Superfund-type program is currently under development, including the drafting of regulations to implement the program. <http://www.ddoe.dc.gov>

- **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 June 2014, 27 sites are enrolled in the program.
- **Sites Completed under VCP:** As of June 2014, 14 sites have been 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

The District is currently analyzing the costs and benefits of implementing the tax incentive portion of the Brownfield Revitalization Act.

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 Leaking Underground Storage Tank (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 the following.

- **IC Tracking:** The Brownfield Revitalization Amendment Act of 2000 authorizes DDOE to create an IC tracking process.
- **IC Oversight:** The Brownfield Revitalization Amendment Act of 2000 authorizes DDOE to create an IC oversight process.
- **IC Monitoring:** The Brownfield Revitalization Amendment Act of 2000 authorizes DDOE to create an IC 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 ICs. This link also provides additional information regarding contaminated sites in the state. <http://www.ddoe.dc.gov>

PROGRAM HIGHLIGHTS

The Capital Area Food Bank (CAFB) serves as the central supplier for more than 700 food pantries and nonprofits assisting more than 680,000 people in the D.C. area, distributing up to 33 million pounds of food per year. In order to address a growing hunger crisis, CAFB was in need of a larger facility. A site was found at 4900 Puerto Rico Avenue, NE. The site was contaminated with petroleum hydrocarbons and metals in soil and ground water. With oversight from DDOE's VCP, an existing warehouse was demolished, the site was remediated, and a new 123,000-square-foot facility was constructed that doubled the food bank's current storage space and increased its freezer and refrigerator capacity. CAFB opened its new facility on July 31, 2012.



Before: Old Warehouse



After: New Facility

OTHER LAND PROGRAMS

Underground Storage Tanks (UST) and Leaking Underground Storage Tanks (LUST) Program

<http://www.ddoe.dc.gov>

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
James.Carroll@Maryland.gov
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://mde.maryland.gov/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 (LMA) Land Restoration Program (LRP) to provide state oversight for voluntary cleanups of properties contaminated with hazardous substances

http://mde.maryland.gov/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 the first participant and all subsequent applications pay a \$2,000 fee.
- **Sites Enrolled in VCP:** As of June 2014, 590 have been accepted into the VCP.
- **Sites Completed under VCP:** As of June 2014, 418 sites have received either a No Further Requirements Determination or a Certificate of Completion (COC).

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.maryland.gov/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 (EZ); 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 COCs 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.maryland.gov/programs/Land/MarylandBrownfieldVCP/Pages/programs/landprograms/errp_brownfields/forms/index.aspx

Contaminants Covered

Polychlorinated biphenyls (PCBs) and oil (as of October 1, 2004) are covered; 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)

ICs are allowed and are included in the No Further Requirements Determination (NFRD) or COC. The state notes that ICs “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 Geographic Information System (GIS)-based website to ensure that sites with IC/LUCs are readily available to the general public.
- **IC Oversight:** When the 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 ICs. This link also provides additional information regarding contaminated sites in the state.

http://www.mde.maryland.gov/programs/Land/MarylandBrownfieldVCP/mapping/Pages/programs/landprograms/errp_brownfields/mapping/index.aspx

PROGRAM HIGHLIGHTS

The MDE LRP used Section 128(a) Response Program funding to make advances to its 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.maryland.gov/programs/Land/HazardousWaste/HazardousWasteHome/Pages/programs/landprograms/hazardous_waste/home/index.aspx

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>
(click on “Environmental Cleanup & Brownfields” on the toolbar)

Contact(s): Troy Conrad
tconrad@pa.gov
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 (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/land_recycling_program/20541

- **Funding Source(s) for the Program:** State cleanup fund provides primary source of administrative costs and it is supplemented through CERCLA 128(a) funding.
- **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.
- **Sites Enrolled in VCP:** As of June 2014, 1,138 sites are currently enrolled in the program.
- **Sites Completed under VCP:** As of June 2014, 4,956 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. These resources can be accessed on DEP's website: <http://www.ahs.dep.pa.gov/GrantsCenter/>

DEP works in conjunction with the Department of Community and Economic Development (DCED) <http://www.newpa.com/find-and-apply-for-funding/> who offer an array of different funding programs, grants, loans, tax credits, and other incentives to help businesses, communities, and municipalities succeed in Pennsylvania. A few of the key programs applicable to brownfield redevelopment are

- Industrial Sites Reuse Program
<http://www.newpa.com/find-and-apply-for-funding/funding-and-program-finder/industrial-sites-reuse-program-isrp>
- Infrastructure Development Program
<http://www.newpa.com/find-and-apply-for-funding/funding-and-program-finder/infrastructure-development-program-idp>
- Business in Our Sites
<http://www.newpa.com/find-and-apply-for-funding/funding-and-program-finder/business-our-sites-bos-loans>

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).
<http://www.newpa.com/find-and-apply-for-funding/funding-and-program-finder/job-creation-tax-credits-jctc>
- Brownfield Tax Incentive
http://www.portal.state.pa.us/portal/server.pt/community/brownfield_redevelopment/20540/brownfield_tax_incentive/1096759
- Keystone Special Development Zone - An incentive-based tax credit program designed to foster redevelopment of former industrial and commercial sites in designated geographic zones. Businesses that provide job-creating economic development opportunities through the expansion of existing operations or the relocation of operations to the Commonwealth of Pennsylvania may be eligible for tax credits under this program.
<http://www.newpa.com/find-and-apply-for-funding/funding-and-program-finder/keystone-special-development-zone-ksdz>
- PennVEST - a low-interest loan program to help reduce or eliminate water quality threats at industrial and commercial properties. http://www.pennvest.state.pa.us/portal/server.pt/community/funding_programs/9322/non-point_source_projects/541851

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 and Recovery Act (RCRA), or Toxic Substances Control Act (TSCA). This was the first One Cleanup Program MOA negotiated with EPA in the nation.

PROGRAM ELEMENTS

Methods/Standards/Controls

The Cleanup Standards Scientific Advisory Board assists DEP in developing cleanup standards and identifying appropriate statistical and scientific procedures. The Board consists of members with knowledge in the fields of geology, engineering, public health, toxicology, risk assessment, and environmental law.

http://www.portal.state.pa.us/portal/server.pt/community/cleanup_standards_scientific_advisory_board/21545

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/standards%2C_guidance_and_procedures/21543/statewide_health_standards/1034862

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 IC 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/uniform_environmental_covenants_act/21547

- **IC Tracking:** Environmental covenants created under the law will be recorded in county land records and in the PA AUL registry.
- **IC Oversight and Monitoring:** The environmental covenants will be binding and enforceable on successive owners over time.
- **PA Activity and Use Limitation Registry:** A user friendly GIS-based website that allows users to identify properties within the commonwealth where any type of Activity and Use Limitation (AUL) has been imposed and of which DEP has been informed. AULs are restrictions or obligations with respect to real property. The term includes engineering controls and 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 ICs. This link also provides additional information regarding contaminated sites in the state. <http://brownfields.pasitesearch.com/>

PROGRAM HIGHLIGHTS

With support from EPA's Section 128(a) Response Program, Pennsylvania held its 7th Annual Brownfields Conference in Altoona on September 27 and 28, 2011. 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 brownfield/commercial real estate forecasts, sustainable redevelopment, community outreach and planning, and innovative financing opportunities in challenging economic times. The conference also featured a tour of regional Altoona success stories including the DeGol Industrial Center, the Station Medical Center Mall complex, and the Penn State's Devorris Downtown Center and Sheetz Center for Entrepreneurial Excellence. Approximately 225 people attended the conference.

OTHER LAND PROGRAMS

Storage Tank Cleanup Program

http://www.portal.state.pa.us/portal/server.pt/community/storage_tank_cleanup_program/20605

Hazardous Sites Cleanup Program

http://www.portal.state.pa.us/portal/server.pt/community/hazardous_sites_cleanup_program/20600

RCRA Corrective Action Program

http://www.portal.state.pa.us/portal/server.pt/community/treatment_storage_and_disposal_facilities/14082/rcra_corrective_action_program/1124370

Brownfields and Land Renewal Program Voluntary Remediation Program (VRP)

Virginia Department of Environmental Quality (DEQ)
Division of Land Protection and Revitalization
629 East Main Street,
P.O. Box 1105
Richmond, VA 23218
[http://www.deq.virginia.gov/Programs/
LandProtectionRevitalization/RemediationProgram.aspx](http://www.deq.virginia.gov/Programs/LandProtectionRevitalization/RemediationProgram.aspx)

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

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

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

Program Overview

- Brownfields Program
- Cost to Enter the VRP : Phase 1 Application Fee of \$2,000 and Phase 2 \$7,500 Eligibility Fee
- MOA with EPA Region 3 (January 2002)
- Liability Relief Provisions
- Tax Incentives

PROGRAM

Since 1995, Virginia has operated a program for voluntary cleanups of contaminated sites. Regulations promulgated in 1997 provided a framework for selecting cleanup standards under the Voluntary Remediation Program (VRP) and sites are eligible to participate when remediation is not clearly mandated pursuant to a federal or state regulatory program. Amendment 2 of the Regulations (technical & administrative changes) went into effect on January 29, 2014 and Amendment 3 of the Regulations (registration fee adjustment) became effective on July 1, 2014.

<http://www.deq.virginia.gov/Programs/LandProtectionRevitalization/RemediationProgram/VoluntaryRemediationProgram.aspx>

On March 12, 2004, Virginia issued an Interim Brownfields Manual. Virginia's Department of Environmental Quality's (DEQ) 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/Programs/LandProtectionRevitalization/RemediationProgram/Brownfields.aspx>

- **Funding Source(s) for the Program:** EPA 128(a) grants and registration fees.
- **Cost to enter program or fees for service:** VRP has a registration application fee of \$2,000 (Phase 1) and an eligibility fee of \$7,500 (Phase 2). There is an annual cost defrayment fee of \$4,500 (Phase 3). Amending a site Certificate may require an additional fee.
- **Sites Enrolled in Voluntary Cleanup Program:** As of June 2014, 441 sites have enrolled in the VRP.
- **Sites Completed under Voluntary Cleanup Program:** As of June 2014, 265 sites have received No Further Action (NFA) Certificates.

FINANCIAL ELEMENTS

Assessment and Cleanup Funding

Costs for site cleanup are borne by the program participants, however 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).

<http://www.virginiaresources.org/projectfinancing.shtml>

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/Programs/LandProtectionRevitalization/RemediationProgram/VoluntaryRemediationProgram/TaxIncentives.aspx>

Liability Relief Provisions

Virginia's Brownfields Law protects bona fide prospective purchasers (BFPP) and innocent landowners from having to conduct containment or cleanup as a statutory responsible person under Virginia's air, water, and waste laws at a brownfield site if they meet the statutory definitions and the additional requirements in the law, though appropriate care is required. There is no fee to obtain a BFPP letter. Virginia also provides comfort letters for contiguous property owners and lender liability situations.

http://www.deq.virginia.gov/Portals/0/DEQ/Land/RemediationPrograms/Brownfields/BROWNFIELDS_MANUAL-BC-12-29-2009.pdf

PROGRAM ELEMENTS

Methods/Standards/Controls

The Program uses a Risk-Based Corrective Action process that utilizes ICs 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 ICs). 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/Programs/LandProtectionRevitalization/RemediationProgram/VoluntaryRemediationProgram/VRPRiskAssessmentGuidance.aspx>

Contaminants Covered

Typical contaminants covered include volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), Metals, Pesticides and Herbicides. Petroleum and polychlorinated biphenyls (PCBs) can be addressed by VRP, if not regulated under another program.

<http://www.deq.virginia.gov/Programs/LandProtectionRevitalization/RemediationProgram/VoluntaryRemediationProgram/GuidanceandRegulations.aspx>

Institutional Controls (IC)

Institutional controls are allowed; however, Virginia does not have a long-term stewardship program for Voluntary Cleanup Program. UECA laws went into effect in July 2010; regulations went into effect on November 9, 2011; however, the use of UECA is voluntary.

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 ICs. This link also provides additional information regarding contaminated sites in the state.

<http://www.deq.virginia.gov/Programs/LandProtectionRevitalization/RemediationProgram/Brownfields/BrownfieldsforSale.aspx>
<http://www.deq.virginia.gov/Programs/LandProtectionRevitalization/RemediationProgram/VoluntaryRemediationProgram/PublicInformation.aspx>

Site Specific Assessment (SSA)

The Brownfields Program has completed a number of site-specific assessments of property through contracts with local governments to conduct Phase I and Phase II Environmental Site Assessments or further characterization of existing properties in order to facilitate property sales, purchases, and/or redevelopments. Due to funding issues, it is unlikely the Program will be able to conduct SSA work in the upcoming fiscal year.

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.

Virginia Brownfields Assistance Fund

The General Assembly allocated \$1 million for Fiscal Year 12 to be used for the purpose of promoting the restoration and redevelopment of brownfields and to address environmental problems or obstacles to reuse so that these sites can be effectively marketed to new economic development prospects. The Virginia Economic Development Partnership (VEDP) and DEQ awarded 17 grants to local governments from this funding to date.

PROGRAM HIGHLIGHTS

The former Stillwater Textile Plant in Goshen ceased operations nearly 10 years ago and sat idle and heavily vandalized for years afterward, with a number of environmental concerns. The property spans over 146 acres, much of which was open space not used for plant operations. In 2009, EPA's Superfund Technical Assessment and Response Team conducted an environmental investigation, determining that property conditions did not warrant an emergency removal action. The results allowed a local businessman to move forward with further evaluation of the property for potential purchase in order to expand his timber milling operations. Rockbridge County provided significant support for the reuse of this property and applied for a Virginia Brownfields Assistance Fund Grant in order to further evaluate the property prior to redevelopment. Virginia DEQ Regional and Brownfields staff held several meetings with the potential purchaser and representatives of the former owners to discuss environmental concerns. The property is now enrolled in the state's Voluntary Remediation Program in order to complete cleanup of the textile mill area of the property.

OTHER LAND PROGRAMS

VA DEQ Division of Land Protection & Revitalization

<http://www.deq.virginia.gov/Programs/LandProtectionRevitalization.aspx>

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): Patty Hickman

patricia.a.hickman@wv.gov

304-926-0499 ext. 1263

Program Overview

- Cost to Enter the Program: Fee is calculated according to the size of property
- MOA with Region 3 (February 2010)
- Liability Relief Provisions
- Licensed Remediation Specialists (LRS) Program
- Brownfields Assistance Centers

PROGRAM

The Voluntary Remediation and Redevelopment Act (VRRRA) 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 VRRRA limits enforcement actions by DEP, provides financial incentives to entice investment in brownfields, 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:** Federal grants and cost recovery for project oversight.
- **Cost to enter program or fees for service:** Fee is calculated according to the size of property.
- **Sites Enrolled in VCP:** As of June 2014, 220 sites have entered the Voluntary Remediation Program (VRP).
- **Sites Completed under VCP:** As of June 2014, 136 Certificates of Completion (COC) have been issued.

FINANCIAL ELEMENTS

Liability Relief Provisions

- The VRP offers COCs 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 suits or contribution actions

Licensed Remediation Specialist (LRS) Program

Under the VRRRA, Licensed Remediation Specialists (LRS) are required to supervise activities during cleanups pursuant to VRRRA.

<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 (BAC) are available to assist local governments, nonprofits, prospective developers and other stakeholders in navigating the brownfields redevelopment process in West Virginia. <http://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. West Virginia DEP has also contracted with Terradex to continue to improve tracking and response to dig tickets. When a notification is received it is initially reviewed relative to the location of the MISS Utility dig-ticket and recorded covenant sites using Goggle Earth and the KML covenant files available from the agency. 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. For the period of April 2011 through March 2012, DEP reviewed 509 notifications of excavation activities for sites within the MISS Utility grid network.

The following Web page contains the link to the state's public database that maintains an inventory of sites, maps sites, and/or tracks ICs (see land use covenants on the Web page to download the information). This link also provides additional information regarding contaminated sites in the state. <http://www.dep.wv.gov/dlr/oer/voluntarymain/Pages/default.aspx>

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 (EC) (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>. DEP introduced legislation during the 2012 WV Legislative Session to establish a Land Stewardship Trust. The legislation failed to pass in 2012, and was reintroduced during the 2013 Legislative Session. As a result of legislation passed during that session, the nonprofit West Virginia Land Stewardship Corporation was created. Its goals are to establish a land stewardship program to provide oversight of long-term monitoring of site conditions and controls; begin a site certification program for site redevelopment; and create a statewide land bank program to transition unused properties back into productive use.

PROGRAM HIGHLIGHTS

The West Virginia Brownfield Assistance Centers (BACs) at Marshall University and West Virginia University initiated the WV Redevelopment Collaborative, funded through a private foundation, in order to provide project assistance. The BACs established a FOCUS grant program to provide small grants to communities and nonprofits to jump-start redevelopment projects throughout the state. Each project brought together a team of leaders from state agencies, community foundations, financial institutions, and nonprofit organizations, in training exercises to build a framework to examine collective goals and challenges in strengthening the redevelopment process. The BACs work with communities on ways to address dilapidated buildings and develop plans for reusing these properties in ways that have a positive impact on the communities. West Virginia Department of Environmental Protection used Section 128(a) Response Program funding to assist the BACs with the Annual West Virginia Brownfields Conference, where these resources will be showcased, along with success stories from involved communities. 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.



A team from Barbour County works on an action plan as part of the WV Redevelopment Collaborative

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

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
lan@adem.state.al.us
334-279-3053

Program Overview

- Brownfields Program
- Cost to Enter the Program: : \$4,215
- Oversight Fees
- Liability Relief Provisions
- Revolving Loan Fund
- Tax Incentives
- Tax Abatement Incentives

PROGRAM

Alabama's Brownfields Redevelopment and Voluntary Cleanup Program presents 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 (66%) and Alabama Land Recycling and Economic Redevelopment Act (ALRERA) fees (33%).
- **Cost to enter program and fees for service:** All applicants must pay a non-refundable application fee of \$4,215. Various designated programmatic fees cover state oversight costs.
- **Sites Enrolled in VCP:** As of June 2014, 93 sites are actively enrolled in the VCP.
- **Sites Completed under VCP:** As of June 2014, 275 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.

- Brownfields Revolving Loan Fund (RLF) targeted to counties and municipalities.
<http://www.adem.state.al.us/programs/land/brownfields.cnt>

Incentives

Tax abatement 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 incurs 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 ICs.

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 VCP, brownfields and Resource Conservation and Recovery Act (RCRA) sites.

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

http://gis.adem.alabama.gov/adem_dash/GISINSP.html

Furthermore, the following link provides additional information regarding contaminated sites in the state:

<http://www.adem.state.al.us/programs/land/landforms/128Spreadsheet.htm>

PROGRAM HIGHLIGHTS

The former 12-acre Greif Brothers Corporation property located in Cullman had a variety of operations dating back over 90 years. Industrial activities started around 1917 with the Dremen Manufacturing Company. Over the years, the property was home to the Standard Industrial Laundry Company, the Porter Knitting Mills Company, the Acadia Planning Company, the King Pharr Canning Company, the Raible Division Sheet Metal and Stamping Company, the Cullman Supply Company, and finally the Greif Brothers Corporation (Greif). Greif manufactured steel drum containers from 4.5 to 85 gallons in size from 1947 until the plant's closure in 2002. The Greif property had numerous onsite buildings which housed a variety of operations ranging from machine, welding, painting, manufacturing to parts distribution and warehousing. Two of the larger buildings were damaged by fire in April 2010. The majority of the onsite buildings were deconstructed and all recycled/salvageable material was sold, donated, or otherwise utilized by the City of Cullman. In addition to local usage, companies from as far as Louisiana came to purchase salvaged materials from the site. In all, a total of 12 roll-offs of unsalvageable material went to the landfill, a rather minimal amount when considering a 12-acre lot that had about 200,000 square feet of buildings removed. The bulk of the work at the old industrial Greif property, located on Second Avenue in downtown Cullman, was paid for with a low-interest \$630,000 Brownfield Redevelopment Loan from the ADEM and a \$200,000 Site-specific Cleanup grant from the EPA. In addition to the recycling effort, the site is also home to a phytoremediation project that will eventually bring in approximately 400 trees to safely filter dangerous chemicals out of the soil and ground water. The recycling efforts far exceeded project management expectations. The environmental manager for the project said, "Because that is such a hallmark site for the community, it's nice to know a bit of the Greif Brothers property will live on in other places. Metals have been recycled; portions of buildings have been set up on other sites and a lot of old lumber has been re-used at different locations. It does take a little extra time, but rather than land-filling valuable materials, this is worth the investment of time. We're very pleased and the work meets the mission of redeveloping brownfield properties, of not only re-working that property but also repurposing those materials for use." The multipurpose 12-acre site has a municipal police station, municipal vehicle maintenance facility, municipal landscaping workstation, emergency response supply storage facility, and a cleared, graveled area to the south designated for such community activities as "Oktoberfest." Part of that area is scheduled to have a gymnasium constructed in 2013. Other successes include Montgomery's Riverwalk Stadium, home of the AA Minor League Montgomery Biscuits and the Parkside Stadium in downtown Birmingham, home of the AA Minor League Birmingham Barons. Both stadiums are significant economic drivers in their respective cities.



The Master Redevelopment Plan for the Greif property in Cullman

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>

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 June 2014, 206 sites have voluntarily entered into brownfield site rehabilitation agreements with the Department of Environmental Protection (DEP).
- **Sites Completed under Brownfields Program:** June 2014, 70 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 by an eligible business. The job bonus refund is available to companies that create new jobs on a site with a brownfields agreement or on a property that abuts a site with a brownfields agreement. 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 \$5,000,000. The Voluntary Cleanup Tax Credit program has approved a total of \$40,227,696 and issued a total of \$25,523,680 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)

ICs are key to a RBCA approach and are allowed in all cleanup program areas. The property owner must agree to the use of an IC, 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 ICs at sites. It is available online for public users.
- **IC Oversight and Monitoring:** DEP audits ICs 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 ICs. 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

Located approximately one mile northeast of downtown Orlando, the Mills Park development is taking shape on a 12-acre former lumber yard. A railroad spur that ran down the middle of the property was the source of polycyclic aromatic hydrocarbon and arsenic contaminated soils. Site cleanup began in the spring of 2012 and resulted in the removal of more than 11,000 tons of contaminated soil. While cleanup was underway, a Brownfield Site Rehabilitation Agreement (BSRA) was negotiated and signed. The Department issued an unconditional Site Rehabilitation Completion Order (SRCO) in December 2012. When complete, the mixed use redevelopment will include more than 348,000 square feet of retail, restaurant, medical, general office, and residential space including a Fresh Market store that is scheduled to open by 2014.



Artist rendering of the Mills Park Development

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>

Brownfields Program

Georgia Department of Natural Resources (DNR)
Environmental Protection Division
Land Protection Branch
2 Martin Luther King Jr. Drive SE
Suite 1054 East Tower
Atlanta, GA 30334
<http://epd.georgia.gov/hazardous-waste>

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://epd.georgia.gov/brownfields>

- **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 June 2014, 525 properties had been enrolled in the program; 39 of these properties were subsequently withdrawn.
- **Sites Completed:** As of June 2014, 300 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.

Incentives

Tax abatement provisions are available for recovery of certified investigation and cleanup costs at qualifying properties.

<http://epd.georgia.gov/brownfields#files>

Liability Relief Provisions

The *Georgia Brownfield Act (formerly the Hazardous Site Reuse and Redevelopment 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. The statute was amended in 2014 to clarify that lessees and those holding other forms of property interest can also qualify as prospective purchasers in order to receive liability protection.

<http://epd.georgia.gov/brownfields#files>

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 ICs provisions for brownfields 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 ICs.

<http://epd.georgia.gov/uniform-environmental-covenants>

- **IC Tracking:** For non-listed brownfield properties (which do not have such regulatory requirements) Georgia uses Response Program Grant funding to inspect, monitor and track ICs. A database to capture all ICs 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 or formalized under an environmental covenant.
- **IC Oversight:** Oversight and technical review is provided by environmental engineers and geologists under both the Brownfields and Response and Remediation 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/ICs).

The following Web address is a direct link to the state's public brownfields database that maintains an inventory of brownfields and/or tracks ICs. <http://epd.georgia.gov/brownfields#files>

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 ICs. This link also provides additional information regarding contaminated sites in the state.

<http://epd.georgia.gov/brownfields#files>

PROGRAM HIGHLIGHTS

In March 2014, a topping out ceremony was held for the new headquarters of Porsche Cars North America. Porsche chose to locate this new destination facility at Aerotropolis Atlanta, in part because of its proximity to the world's busiest airport, Hartsfield-Jackson Atlanta International Airport. Formerly the site of a decommissioned Ford Motors assembly plant in Hapeville, Georgia, the 122-acre property was acquired in 2008 by the nationally recognized Jacoby Development, Inc., a land development company that specializes in reclamation of impaired sites and creation of environmentally sensitive multi-use properties. Following demolition (and recycling) of the plant buildings, the re-christened Aerotropolis Atlanta site was remediated. Jacoby Development removed a total of 57,000 tons of contaminated soil from the property. The site has since been subdivided, and portions have been sold to buyers, including the Atlanta Hartsfield-Jackson International Airport and Porsche. Porsche broke ground on the headquarters in late 2012 and construction is expected to be completed in 2014. Located on 26-acre campus at One Porsche Drive, the \$100 million dollar development will feature a Technical Service and Training Center, a Conference Center, restaurants, and a museum. As an industry first, the Porsche headquarters campus will feature a Customer Experience Center including a 1.6-mile test track and handling road course to showcase the capabilities of Porsche's industry-leading vehicles. The facility will house 400 employees, including 100 jobs that will be new to Georgia.

OTHER LAND PROGRAMS

Hazardous Site Cleanup

<http://epd.georgia.gov/hazardous-waste>

<http://epd.georgia.gov/voluntary-remediation>

Underground Storage Tanks (UST) Program

<http://epd.georgia.gov/underground-storage-tanks>

Brownfields Program

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
- Expanded Liability Limitations Provisions
- MOA with EPA Region 4 (December 2012)
- Cleaner Commonwealth Fund
- Tax Incentives
- Grant writing assistance

PROGRAM

The Kentucky Brownfield Redevelopment 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, fees, and federal grants
- **Cost to enter program or fees for service:**
 - Informal program leading to Notice of Completion letter – no cost at the present
 - Voluntary Environmental Remediation Program (VERP), which leads to Covenant Not to Sue (CNTS) - \$1,000 to \$2,500 based on acreage plus any oversight costs beyond that. Fees may be waived in certain circumstances.
 - KRS 224.1-415 provides a Notice of Eligibility/Notice of Concurrence - \$2,500
- **Sites Enrolled in VCP:**
 - Informal Program – hundreds of sites
 - VERP – two sites
 - KRS 224.1-415 – dozens of sites
- **Sites Completed under VCP:**
 - Informal program – thousands of sites
 - VERP – 0 sites
 - KRS 224.1-415 – dozens of sites (since February 2013)

FINANCIAL ELEMENTS

Assessment and Cleanup Funding

The Cleaner Commonwealth Fund provides cleanup grants to local governments, quasi-governmental entities, and non-profits. Starting in 2015, it will provide cleanup loans to local governments, quasi-governmental entities, non-profits, and private entities. <http://dca.ky.gov/brownfields/Pages/Cleanercommonwealthfund.aspx>

Technical assistance, including help with identifying and applying for potential funding, is available to both public and private sector entities.

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 CNTS under VERP. <http://dca.ky.gov/brownfields/Pages/Liability.aspx>

KRS 224.1-415 provides property owners and prospective property owners (who can certify that they did not cause a release or have relationships with those who did, and who develop a plan to reuse the property safely) documentation that they will not be held responsible for conducting site investigation and remediation under Kentucky Superfund laws, specifically KRS 224.1-400 and KRS 224.1-405. <http://waste.ky.gov/SFB/Pages/Brownfields.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 portions of 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, 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:

- Proving that no action is required
- Proving that site/release can be managed with engineering/institutional controls
- Removal
- Any combination of the above

Kentucky uses the EPA "Regional Screening Levels (RSL) for Chemical Contaminants at Superfund Sites.

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 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 ICs 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 years to determine if additional action is necessary to protect human health or the environment.

PROGRAM HIGHLIGHTS

Kentucky's Brownfield Redevelopment Program has a strong culture of in-depth, quality customer service. Nowhere is this better demonstrated than in the support services provided to communities and other entities applying for EPA Brownfields grants. Kentucky has a four-prong approach to supporting grant applicants.

1. Provide notice of funding opportunities.
2. Offer training, both in person and via the Web.
3. Host grant parties, where applicants bring draft applications and share them to receive peer review.
4. Offer one-on-one review and consultation.

Most years, Kentucky meets or exceeds the national average for successful grants.

OTHER LAND PROGRAMS

Underground Storage Tanks Branch

<http://waste.ky.gov/UST/Pages/default.aspx>

Superfund Branch

<http://waste.ky.gov/SFB/Pages/default.aspx>

Methamphetamine Lab Cleanup

<http://waste.ky.gov/SFB/MethLabCleanup/Pages/default.aspx>

Mississippi Brownfield Program

Mississippi Department of Environmental Quality (MDEQ)
Groundwater Assessment and Remediation Division
P.O. Box 2261
Jackson, MS 39225-2261
<http://www.brownfields.ms/>

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

Program Overview

- Brownfields Program
- Cost to Enter the Program: \$100/hour oversight, \$2,000 up front
- 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.brownfields.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. Cost typically does not exceed 5% of the total cost of the brownfield redevelopment project (e.g., Phase I Environmental Site Assessment (ESA), Phase II ESA, corrective action planning, remediation, analytical, legal, appraisals, environmental insurance, and other redevelopment project costs).
- **Sites Enrolled in VCPs:** As of June 2014, 177 sites are enrolled in MS Response Programs.
- **Sites Completed under VCPs:** As of June 2014, 63 sites have been completed under MS Response Programs.

FINANCIAL ELEMENTS

Assessment and Cleanup Funding

- 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 Mississippi Economic Redevelopment Act (§ 57-91-1) promotes redevelopment by providing a tax rebate to defray the remediation costs associated with cleaning up contaminated property. Counties and/or municipalities that contain properties with environmental contamination must first approve a remediation project area within its jurisdiction. After approval of the remediation plan by MDEQ through a Brownfield Agreement ((§ 49-35-15) and the project by MDA, all sales, income, and franchise taxes collected from businesses located in the redevelopment project area would be deposited into a special fund that would be used to reimburse the developer for approved cleanup costs. Reimbursement to the developer would be made semi-annually for a period of up to 15 years, with a maximum distribution to the developer of two and a half times the allowable remediation cost. <http://bit.ly/MS-MERA>
- The Brownfield Voluntary Cleanup and Redevelopment Incentives Act provides a state income tax credit for a property owner equal to 25% of the costs of remediating a brownfield 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. <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.

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. ICs 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.

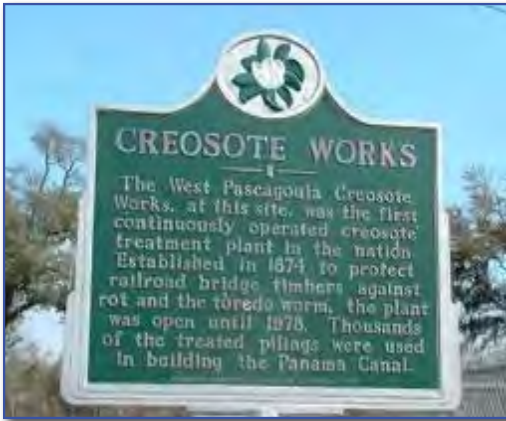
Institutional Controls (IC)

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 ICs 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 ICs. This link also provides additional information regarding contaminated sites in the state. <http://list.brownfields.ms>

PROGRAM HIGHLIGHTS



Historical Marker at the Gautier Oil site

The former Gautier Oil Brownfield Agreement Site was utilized by the railroad and its lessees for wood treating (creosote) operations from approximately 1870 to 1979, and then waste oil recovery from 1980 to 1983. Following a period of inactivity, Seaboard Coast Line Railroad in 1985, removed above ground structures, storage and process tanks, drums and piles of sludge, sand filter beds, and the excavation/backfill of the surface impoundment south of the railroad trestle near the West Pascagoula River. Since that time, CSX Transportation (CSXT) has been working closely with the MDEQ to evaluate environmental impacts associated with the site and adjacent River and Bayou Pierre. Affected environmental media include soil, ground water, and near shore sediments of the River and Bayou.

CSXT held a Public Information Session well in advance of the work to discuss and solicit comments to the proposed remedial plan. In January 2011, prior to project kickoff, CSXT hosted a community gathering at the site to inform the local community of the planned work and again give the locals an opportunity to voice any concerns. CSXT and its contractors effectively communicated with the community throughout the 11-month remediation project. To date, CSXT has spent over \$15 million to remediate the site.

Approximately 16,000 tons of impacted soil and 7,000 tons of sediment have been disposed and 25,000 wetland plants have been removed, stored, and replanted along with the restoration of approximately three acres of fringe wetlands. CSXT is planning to partner with the Land Trust for the Mississippi Coastal Plain to establish a conservation easement on the entire site. It is CSXT's goal to restore the site to its natural habitat which will promote wildlife use.

OTHER LAND PROGRAMS

Voluntary Evaluation Program

[http://www.deq.state.ms.us/MDEQ.nsf/pdf/GARD_ussvep/\\$File/Ussvep.pdf?OpenElement](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



Wetlands Restoration work by CSXT included replanting approximately 25,000 wetlands plants on the former Gautier Oil Site

Brownfields Program and Inactive Hazardous Sites Voluntary Cleanup Program

North Carolina Department of Environment and Natural Resources (DENR)
Division of Waste Management
217 W. Jones Street
Raleigh, NC 27603
<http://portal.ncdenr.org/web/wm/>

Contact(s): Bruce Nicholson
Brownfields
bruce.nicholson@ncmail.net
919-707-8330

Charlotte Jesneck
Voluntary Cleanup
charlotte.jesneck@ncmail.net
919-707-8327

Program Overview

- Brownfields Program
- Cost to Enter the Program: \$2,000/\$2,500 with additional fees for completed brownfields agreement
- Liability Relief Provisions
- Tax Incentives

PROGRAM

There are two programs in North Carolina that involve cleanup of contaminated properties, the Inactive Hazardous Sites Program (IHSP) and the Brownfields Program. The Brownfields Program is strictly reserved for non-causative parties while any party may participate in the IHSP.

Brownfields Program – Authorized by the state statute known as the Brownfields Property Reuse Act, the program provides a mechanism to treat prospective developers of brownfields 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). Prospective developers receive from DENR a brownfields agreement which provides a Covenant Not to Sue (CNTS) in exchange for conducting safemaking actions outlined in the agreement (may include any combination of land use restrictions, mitigation, and/or remediation). <http://portal.ncdenr.org/web/wm/bf> or www.ncbrownfields.org

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/ihs/home>

- **Funding Source(s) for the Program:** Federal grants, fees, appropriations, and tax.
- **Cost to enter program or fees for service:** Under the Brownfields Program there is a \$2,000 initial fee at the beginning of the process and then a second fee, due prior to execution of the brownfields agreement, equivalent to the cost to the DENR and the Department of Justice. http://portal.ncdenr.org/web/wm/bf/fee_info. 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 June 2014, there are 225 completed brownfields agreements and an additional 120 sites in the program pipeline. The completed sites have continuing obligations for annual land use restriction certifications. IHSB's VCP – As of June 2014, 184 sites have approved ongoing voluntary assessments and/or cleanups underway.
- **Sites Completed under VCP:** Brownfields Program – As of June 2014, there are 225 completed brownfields agreements. IHSB's VCP – As of June 2014, 502 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. For voluntary remedial actions conducted with the approval of the Inactive Hazardous Sites Program under an administrative agreement, there is a \$5 million liability cap on remediation expenses not available if the state must conduct enforcement or parties conduct work without program approval.

<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 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 and the authorizing statute provides for their enforcement by the state, even with general lack of privity.

At sites with significant public benefit at stake, DENR recently initiated a program (“Ready for Reuse Program”) which DENR works with an entity that cannot establish non-causative status to produce a draft brownfields agreement for a yet unidentified future non-causative prospective developer. The eligible prospective developer then would be protected upon purchase of the brownfields property. DENR will produce such a Ready for Reuse Agreement in order to reduce risk at the property and to assist in the marketing of the property for redevelopment to a future non-causative prospective developer. However, such a “Ready for Reuse” brownfields agreement confers no liability protections to the ineligible entity with whom DENR worked to produce the agreement. 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. However, risk-based cleanup levels are now available for ground water at certain qualifying sites. To qualify the property must have primarily been used for the manufacture of a commercial product or the generation of electricity, the remediating party must demonstrate that the contamination has not and will not migrate off the property above unrestricted use levels and the release must have been reported to the state prior to March 1, 2011.

Contaminants Covered

Under the Brownfields Program, sites with exclusively petroleum hydrocarbon contamination from Underground Storage Tanks (UST) are ineligible. Otherwise, all soil and ground water contaminants are eligible, including those properties where non-UST contamination is with comingled UST contamination. The IHSB’s VCP addresses only non-petroleum hazardous substance and pollutant contamination.

Institutional Controls (IC)

The North Carolina 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, at those sites eligible for risk-based ground water cleanup standards, 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 ICs. This link also provides additional information regarding contaminated sites in the state. <http://portal.ncdenr.org/web/wm/bf/projectinventory>

PROGRAM HIGHLIGHTS

The North Carolina Brownfields Program has signed a brownfields agreement, setting the stage for the redevelopment of the former Ecusta Paper Mill near Brevard. The mill began operation in 1939 and was at one time one of the largest paper mills in the southeast. This is the first of seven planned brownfields agreements that will eventually cover 540 acres of property with an \$800 million mixed use redevelopment. The closure of the historic Ecusta Mill led to 2,300 layoffs and the planned development will regenerate nearly 2,000 jobs. The agreement marked a milestone for the North Carolina Brownfields Program as the 200th brownfields agreement since program inception. This agreement is the culmination of cooperative efforts between numerous environmental programs within the North Carolina Department of Environment and Natural Resources and the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) pre-remedial and removal programs of EPA Region 4. The abandonment of the mill in 2003 resulted in shutdowns of various environmental systems and threatened uncontrolled releases into the Davidson River. Davidson River Village signed an administrative order on consent to conduct assessment and cleanup activities and has been active in the demolition and cleanup of the mill for three years. Cleanup of several portions of the property are complete or nearing completion, ongoing monitoring will continue through the redevelopment of the property. The brownfields agreement will provide institutional control provisions that will protect public health and the environment on the first tract slated for redevelopment. It is the first in a series of seven planned agreements for various tracts on the property.

The property will be redeveloped into Davidson River Village, a large mixed use redevelopment to include residential, retail, hospitality, and open space uses with strong acknowledgement of the mill history for the local community

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>

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/>

Contact(s): Robert Hodges

hodgesrf@dhec.sc.gov

803-898-0919

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/HomeAndEnvironment/Pollution/CleanUpPrograms/BrownfieldsCleanupLoanFund/>

- **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 (RP) and non-responsible parties (NRP) 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) Response Program grant. A Phase I Environmental Assessment is required along with an application for NRPs.
- **Sites Enrolled in VCP:** June 2014, 383 sites are currently enrolled in the program.
- **Sites Completed under VCP:** As of June 2014, 137 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 \$5,213,000, 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 NRPs who have entered into the VCP.

<http://www.sctax.org/NR/ronlyres/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 NRPs.

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. For sites where the Brownfields Program has implemented ICs, the sites 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 ICs 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 ICs. This link also provides additional information regarding contaminated sites in the state.

<http://www.scdhec.gov/apps/environment/PublicRecord/>

PROGRAM HIGHLIGHTS

The 1910 Building was originally built and served as the Victoria Yarn Mill #2 until the depression of 1930. In 1936 the building was purchased by the Rock Hill Body Company which became one of the earliest makers of truck bodies and school bus bodies in the Southeast, until closing in 1987. The goal of this project was to restore the old building to create 21 family rental apartments along with the construction of 18 single-family rental houses on the approximately 8-acre property. This project is a unique blend of historic and new that provides affordable low-income housing to a distressed part of Rock Hill. The 1910 Building is on the federal historic registry and federal funds were used to bring the property and the neighborhood back to life. This brownfields redevelopment is part of a larger plan to revitalize the Hagins-Fewell old mill neighborhood of the City of Rock Hill. The city took this opportunity to invest in major infrastructure improvements by installing sidewalks, street lighting, curbs and neighborhood entrance signs around the development. This brownfields redevelopment provided temporary jobs during the recent recession and permanent jobs where none existed since 1987.

The Developer entered into a Voluntary Cleanup Contract with the state’s Section 128(a) Response Program. Environmental assessments revealed the presence of volatile organic compounds (VOCs), semi-VOCs and heavy metals within the surface and subsurface soils. While many remedial technologies were considered, a grid pattern sampling assessment and excavation and removal of impacted areas was determined as the best approach. Nearly 300 tons of soil was excavated and disposed of at a Subtitle D Landfill. This project was completed in January of 2011. A Certificate of Completion for the Brownfields Non-Responsible Party Voluntary Cleanup Contract is dated February 4, 2011. The cost of the environmental work was \$90,500.00. Other funding sources leveraged included: IRS Section 42 Federal 9% Low-Income Housing Tax Credits converted to cash through the Federal Exchange Program; Department of Housing and Urban Development (HUD) funds through the Federal HOME Program; Federal and State Historic Tax Credits; and State Textile Mill Tax Credits. The total development cost was \$8,633,223.



Before picture of the former 1910 Building



After picture of the former 1910 Building

OTHER LAND PROGRAMS

Underground Storage Tanks (UST) Program

<http://www.scdhec.gov/HomeAndEnvironment/Land/UndergroundStorageTanks/>

Dry Cleaning Program

<http://www.scdhec.gov/HomeAndEnvironment/Land/DryCleaningSites/>

Superfund Program

<http://www.scdhec.gov/HomeAndEnvironment/Pollution/CleanUpPrograms/Superfund/>

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/remediation_voluntary-cleanup.shtml

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 entities 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 (NFA) 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/remediation_voluntary-cleanup.shtml

- **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 June 2014, 135 sites are enrolled in the VOAP.
- **Sites Completed under VOAP:** As of June 2014, 110 sites have received NFA 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 brownfield property tax credit at qualified brownfield properties.

<http://state.tn.us/sos/acts/106/pub/pc1134.pdf>

The following is an excerpt from the law: 'Effective June 30, 2010, a franchise and excise tax credit equal to 50% or 75%, depending on the amount of capital investment (\$25 million or \$200 million, respectively) of the purchase price of Brownfield property purchased in Tennessee for the purpose of a qualified development project. The total value of credits authorized is capped at \$10 million per year and allows the credit to be used for development projects using non-prime agricultural properties in any year in which credits remain available. "Brownfield property" is defined as real property that is the subject of an investigation or remediation as a Brownfield project under a voluntary agreement or consent order pursuant to Tenn. Code Ann. Section 68-212-224. [Tenn. Code Ann. Section 67-4-2009]'

Liability Relief Provisions

Participants can receive a 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/remediation_brownfields-toolbox.shtml

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 ICs.
- **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 ICs. This link also provides additional information regarding contaminated sites in the state. <http://www.tn.gov/environment/dataviewers.shtml>

PROGRAM HIGHLIGHTS

The Greater Memphis Greenline in Shelby County, a non-profit organization devoted to creating and promoting an integrated multi-use trail network throughout Memphis, transformed a 13.3-mile stretch using a U.S. Environmental Protection Agency (EPA) Section 104(k) Brownfields Assessment grant and Section 128(a) Response Program funding. The hazardous substance Assessment grant, awarded in 2008, was used to assess a stretch of 100-foot wide abandoned railroad corridor running from Cordova to Memphis. The area around this corridor became a dumping ground for household and industrial debris over the last several decades. TDEC then used Section 128(a) Response Program funding to provide oversight of cleanup activities. The corridor was redeveloped as a rails-to-trails green space for residents to use for walking, bicycling, and other recreational activities.

OTHER LAND PROGRAMS

Underground Storage Tanks (UST) Program

<http://tn.gov/environment/underground-storage-tanks/>

EPA REGION 5

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 IEPA. <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 June 2014, 766 sites are currently in the program.
- **Sites Completed under VCP:** As of June 2014, 3,472 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 Site Remediation Program 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 Act (CERCLA) liability.
- Brownfields Environmental Assessments – The Office of Site Evaluation provides municipalities with site-specific assessments funded by Illinois's 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, soil gas 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 situations where the 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 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 NFR 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 ICs. This link also provides additional information regarding contaminated sites in the state. <http://epadata.epa.state.il.us/land/srp/>

PROGRAM HIGHLIGHTS

Using Section 128(a) Response Program funding, IEPA completed a Phase I environmental assessment at the Pullman State Historic Site, a 12-acre parcel located at 111th Street and Cottage Grove Avenue in South Chicago that operated as the Pullman Car Manufacturing Company. The Illinois Historic Preservation Agency (IHPA) and the City of Chicago Department of Housing and Economic Development requested the assessment in preparation for a potential property transfer from IHPA to the National Park Service. Phase I identified five recognized environmental conditions based on past operations: a transformer pit, a potential underground storage tank, a former cooling pond filled with slag, a Corliss Steam Engine that would have generated bottom ash and heavy metals, and an automotive repair shop. IEPA provided the Phase I report to IHPA in January 2014 and conducted the Phase II assessment field work in April 2014. For more information about the effort to turn the Pullman site into the country's first urban National Park: <http://www.npca.org/about-us/regional-offices/midwest/pullman/>.

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>



Pullman State Historic Site

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, Room 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): Corey Webb
CWEBB@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; revisions underway)
- Liability Relief Provisions

PROGRAM

Indiana Brownfields Program – This is a resource for public and private brownfield stakeholders and a mechanism for the state to partner with communities and eligible private entities to address environmental concerns to facilitate brownfield redevelopment. The main goal is to help communities identify and mitigate environmental barriers that impede local economic growth by offering government assistance primarily for site assessment and/or cleanup activities as an incentive for redevelopment or reuse of brownfield properties to revitalize communities. Since 2005, the program has been managed by the Indiana Finance Authority (IFA), combining financial, legal, and technical resources, including IFA and IDEM staff. <http://www.in.gov/ifa/brownfields/>

Voluntary Remediation Program (VRP) – The main goal of this program 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 (competitive and non-competitive).
- **Cost to enter program or fees for service:** The Indiana Brownfields Program is free (though 2007 state legislation allows for fees), 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. State costs for voluntary cleanups generally range from \$5,000 - \$20,000. The VRP recovers costs for project administration, technical evaluation, confirmatory sampling, and travel.
- **Sites Enrolled in VCP:** As of June 2014, there are 1,312 Indiana Brownfields Program sites and more than 831 VRP applicants.
- **Sites Completed under VCP:** As of June 2014, for the Indiana Brownfields Program, an approximate total of 696 closure/liability interpretation letters (Comfort Letters, Site Status Letters, NFA Letters) and comment letters were issued; 47 Brownfield Determination Letters (usually for tax incentives), and 148 Petroleum Eligibility Determination Letters were issued; more than 30 miscellaneous site support/approval letters (usually for other agency funding) were issued; seven professional services awards (Auto Sector Initiative sites) were issued; 433 grants were awarded; and 34 loans were closed (includes state low-interest loans and nine federal Revolving Loan Fund (RLF) loans). Note that at the end of calendar year 2009, all state funding for the Indiana Brownfields Program was suspended indefinitely; at this time, state-funded Stipulated Assessment and Remediation Grants, Petroleum Remediation Grants, and Low-interest Loans are no longer available.

As of June 2014, 287 sites have successfully completed the VRP, and 338 sites remain active.

FINANCIAL ELEMENTS

Assessment and Cleanup Funding

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

Incentives

A variety of tax incentives are available to assist with brownfield 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” and/or “closure” offered at this time. Requests for Comfort and/or Site Status Letters can be submitted outside of any financial assistance. Sites assessed/remediated with federal and/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 Remediation Closure Guide (RCG) allows for consistent, risk-based standards among all IDEM cleanup programs (and the Indiana Brownfields Program). RCG that is being utilized replaces the former Risk Integrated System of Closure (RISC) that had been utilized since 2002.
- Indiana developed risk-based residential and commercial/industrial screening level criteria for soil and ground water contaminants and allows for site-specific risk assessments to determine alternative site 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. Risk-based screening levels have been developed for approximately 150 common constituents, excluding asbestos.
- In the Indiana Brownfields Program, asbestos, lead paint, and PCBs are eligible contaminants for program assistance under certain circumstances, as well as other Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) 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 RCG 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; 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:** IDEM staff are primarily responsible for this activity.

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 ICs. This link also provides additional information regarding contaminated sites in the state. <http://www.in.gov/idem/6551.htm>

PROGRAM HIGHLIGHTS

In response to limited resources and the multi-disciplinary nature of brownfields, the Indiana Brownfields Program focuses on sustainable partnerships and leveraging of a variety of resources to facilitate brownfield redevelopment. As an example of government-assisted site success, the Indiana Brownfields Program utilized its Section 128(a) Response Program funding from U.S. Environmental Protection Agency (EPA) to conduct technical oversight for environmental activities and to issue a Brownfields Comfort Letter to address liability concerns at the 40+-acre former Reilly Tar/Vertellus located at 1500 (&1800) South Tibbs Avenue in Indianapolis, Marion County (Site). The Site, which has a long history as a Superfund site, was redeveloped as the Maywood Solar Farm through multiple resources and partnerships, including EPA and supporting EPA's Re-Powering America's Land Initiative. See related news articles at

<http://www.ibj.com/largest-solar-farm-on-superfund-site-goes-online/PARAMS/article/47259>
and <http://www.insideindianabusiness.com/newsitem.asp?ID=64576>.



Former Reilly Tar/Vertellus redeveloped as
Maywood Solar Farm

OTHER LAND PROGRAMS

IDEM Leaking Underground Storage Tanks (LUST) Program

<http://www.in.gov/idem/4997.htm>

IDEM Excess Liability Trust Fund (ELTF) Program

<https://secure.in.gov/idem/5063.htm>

IDEM State Cleanup Program

<http://www.in.gov/idem/4179.htm>

Brownfield Redevelopment Assessment Program and Cleanup and Redevelopment Program

Michigan Department of Environmental Quality (DEQ) P.O. Box 30426
Lansing, MI 48909

<http://www.michigan.gov/deqbrownfields>

Contact(s): Carrie Geyer
Brownfield Redevelopment Program
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517-284-5182

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517-284-5120

Jeanne Schlaufman
Baseline Environmental Assessments
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586-753-3823

Program Overview

- Brownfield Program
- Cost to Enter the Program: None
- MOA with EPA Region 5 (July 1996)
- Liability Relief Provisions
- Tax Incentives

PROGRAM

Michigan created options to overcome the obstacles of brownfield redevelopment, including cost-effective cleanup options, causation-based liability, liability protection for new owners, state funding for cleanups, and grant and loan programs. Innovative use of available federal, state, and local resources can be incorporated into redevelopment incentives to support expansion and to encourage business investment and expansion in Michigan. <http://www.michigan.gov/deqbrownfields>

- **Funding Source(s) for the Program:** Various environmental state restricted funds, bond funds, and federal grants.
- **Cost to enter program or fees for service:** No Fees. Private owners can conduct cleanups under Part 201, Environmental Remediation, or Part 213, Leaking Underground Storage Tanks, of the Natural Resources and Environmental Protection Act, PA 451 of 1994, as amended.
- **Sites Enrolled in VCP:** Sites are not enrolled. The DEQ conducts state-funded and managed response activities at sites where the liable party is not available or not viable.
- **Sites Where Cleanup Activities Have Occurred:** As of June 2014, DEQ had provided oversight or assistance on more than 10,000 cleanup projects.

FINANCIAL ELEMENTS

Assessment and Cleanup Funding

- Brownfield Redevelopment Grant Program offers municipalities grants of up to \$1,000,000 for investigation and cleanup activities on brownfield properties with a proposed redevelopment. The municipality does not need to own the property
- Brownfield Redevelopment Loan Program offers municipalities loans of up to \$1,000,000 for investigation and cleanup activities on brownfield properties. The municipality does not need to own the property.
- Tax increment financing for environmental activities is available to brownfield redevelopment authorities to promote redevelopment of contaminated properties. A list of established brownfield authorities, local contact information, and links to the updated brownfields legislation can be found at the link below.
- Michigan's EPA 128a Brownfield Grant is utilized to provide Targeted Brownfield Site Assessments for municipalities with qualifying properties.
- More information regarding all of these programs can be found at: <http://www.michigan.gov/deqbrownfields>

Incentives

A variety of additional financial incentives including tax increment financing for non-environmental activities and community redevelopment grants are available to assist with brownfields reuse projects from the Michigan Economic Development Corporation. More information regarding these programs can be found at the following link: <http://www.michiganadvantage.org/Grow-Your-Business/>

Liability Relief Provisions

Completing a Baseline Environmental Assessment (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. A BEA does not provide liability protection at sites regulated by the federal Resource Conservation and Recovery Act (RCRA), and Comprehensive Environmental Response Compensation and Liability Act (CERCLA).

Tax increment financing and community redevelopment grants are available to brownfields redevelopment authorities in order to promote redevelopment of contaminated, blighted and functionally obsolete sites as well as properties controlled by a land bank. A list of established brownfields authorities, local contact information, and links to the updated brownfields legislation are found at: http://www.michigan.gov/deq/0,1607,7-135-3311_4110_23246---,00.html

PROGRAM ELEMENTS

Methods/Standards/Controls

- Risk-based standards are in place for soil and ground water based on residential and non-residential land-use categories.
- A property is considered 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.
- Michigan DEQ also allows for the development of alternate criteria levels with the performance of site-specific risk assessments.

Contaminants Covered

Program covers petroleum and hazardous substances.

Institutional Controls (IC)

Land and resource-use restrictions are an integral part of Michigan’s cleanup and redevelopment program. Michigan DEQ has established a tracking system for land and resource-use restrictions that are submitted to the state. This system includes a web-based mapping application that identifies properties with ICs.

PROGRAM HIGHLIGHTS

The Remediation and Redevelopment Division convened a Collaborative Stakeholders Initiative (CSI) in 2012, made up of dozens of key stakeholders in an effort to transform the cleanup and redevelopment program. The initiative focused on seven key areas: brownfield redevelopment, cleanup criteria, due care obligations, free product/source removal/ground water/surface water interface, Part 201 rules, and vapor intrusion. Program and process improvements are continuing with stakeholder workgroups formed in 2014 to further focus on the brownfield redevelopment program and the cleanup criteria.

More information about the Brownfield Continuous Program Improvement (CPI) Workgroup can be found at: http://www.michigan.gov/deq/0,4561,7-135-3311_4109_9846_30022-319330--,00.html

More information about the Criteria Stakeholder Advisory Workgroup can be found at: http://www.michigan.gov/deq/0,4561,7-135-3311_4109_9846_30022-325789--,00.html



Northville Garage Redevelopment – Before



Northville Garage Redevelopment – After

Northville Garage Project: The city of Northville received Brownfield Redevelopment Grant Funding from the Michigan DEQ to facilitate the redevelopment of a former dry cleaner and gas station. The .45-acre site was heavily contaminated with dry cleaning solvents and petroleum products from historical operations. Grant funds were used to address the environmental impacts on the site and allow the building to be redeveloped into a popular grill restaurant called the Garage.

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/deqsuperfund>

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

Minnesota Pollution Control Agency (MPCA), Remediation Division
520 Lafayette Road
St. Paul, MN 55155

<http://www.pca.state.mn.us/lupg7f9>

Contact(s): Jessie Ebertz
PB Program
jessie.ebertz@state.mn.us
651-757-2328

Gary Krueger
VIC Program
gary.krueger@state.mn.us
651-757-2509

Program Overview

- Brownfield 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 brownfields. The MPCA can also issue liability assurance letters through its Voluntary Investigation and Cleanup (VIC) and Petroleum Brownfields (PB) programs.

<http://www.pca.state.mn.us/index.php/waste/waste-and-cleanup/cleanup/brownfields/index.html>

- **Funding Source(s) for the Program:** State Cleanup Fund and federal grants.
- **Cost to enter program or fees for service:** \$125 Hourly fee charged for MPCA staff time on brownfields projects.
- **Sites Enrolled in Brownfields Programs:** As of June 2014, 328 sites are active in the VIC Program and 371 sites are active in the PB Program.
- **Sites Completed under Brownfields Programs:** As of June 2014, over 5,483 sites are completed (have received assurance letters) 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 are provided by sources other than the MPCA. <http://www.pca.state.mn.us/lupg7f9>

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 Program. In addition, MPCA offers Tank Removal Verification, Off-site Source Determinations, Site closure, and Closure Confirmation letters in the PB Program.

Brownfields Redevelopment Toolbox

Prepared by the MPCA, Minnesota Department of Agriculture (MDA), and the Association of State and Territorial Solid Waste Management Officials (ASTSWMO) State Response and Brownfields Program Operations Task Force, 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/lupg7f9>

PROGRAM ELEMENTS

Methods/Standards/Controls

Minnesota uses a risk-based approach that considers planned property use. Minnesota employs state surface water quality standards, ground water standards, soil vapor standards, indoor air standards, and some EPA standards for various media, 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. Site-specific risk assessments can also be done in order to select and apply cleanup values for sites. <http://www.pca.state.mn.us/enzq83d>

Contaminants Covered

The MPCA Brownfields Programs (VIC and PB) provide oversight of investigation and cleanup of releases to the environment of hazardous substances and petroleum contamination. See below for agricultural contaminants.

Institutional Controls (IC)

ICs 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, in 2007.

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 ICs. This link also provides additional information regarding contaminated sites in the state.

<http://www.pca.state.mn.us/index.php/data/contaminated-sites.html>

PROGRAM HIGHLIGHTS

Success stories illustrating sites at which private and public development projects were cleaned up and redeveloped in partnership with the VIC and PB are posted on the MPCA website. New success stories are added monthly.

<http://www.pca.state.mn.us/index.php/waste/waste-and-cleanup/cleanup/cleanup-success-stories/index.html>

OTHER VOLUNTARY CLEANUP PROGRAMS

Agriculture Voluntary Investigation and Cleanup Program (AgVIC)

<http://www.mda.state.mn.us/chemicals/spills/incidentresponse/agvic.aspx>

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

Ohio Environmental Protection Agency (OEPA)
Division of Environmental Response and Revitalization
P. O. Box 1049
Columbus, OH 43216-1049

Contact(s): Amy Yersavich, SABR Program Manager
amy.yersavich@epa.state.oh.us
614-644-2924

Ohio Development Services Agency, Office of Redevelopment
77 South High Street, 26th Floor
Columbus, OH 43215-6130

Contact(s): Thea Walsh, Deputy Chief
Thea.Walsh@development.ohio.gov
614-995-2292

Program Overview

- Brownfield Program
- Cost to Enter the Program: Fee structure
- MOA with EPA Region 5 (September 2007)
- 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 Redevelopment's Brownfield Fund – Assists communities in creating wealth from personal, business, and community successes. The Office of Redevelopment works to identify the resources and financing necessary to assess, clean up, and redevelop brownfields. http://development.ohio.gov/cs/cs_brownfield.htm

- **Funding Source(s) for the VCP Program:** Program fees and federal grants
- **Cost to enter VCP program or fees for service:** Fee structure. <http://www.epa.ohio.gov/portals/30/vap/docs/instr-att-fee.pdf>
- **Sites Enrolled in VCP:** As of June 2014, 483 No Further Action (NFA) letters have been issued since the inception of the program in 1994.
- **Sites Completed under VCP:** As of June 2014, 441 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, offered by Ohio EPA, Office of Redevelopment, and JobsOhio, are available to assist with brownfields reuse projects

Ohio EPA: http://www.epa.ohio.gov/derr/SABR/Grant_Assistance.aspx

ODSA Office of Redevelopment: http://development.ohio.gov/cs/cs_brownfield.htm

JobsOhio: http://jobs-ohio.com/images/Revite_Loan_Assessment_Grant_APR2014.pdf

Incentives

Tax Abatement—upon issuance of a CNTS from the Director of the Ohio EPA for a remedy under the VAP, 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>

Liability Relief Provisions

A person undertaking a voluntary action contract 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 an 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 conducted properly, Ohio EPA can issue a CNS, which promises the volunteer that the State of Ohio will not require further investigation or cleanup of the property. <http://epa.ohio.gov/Portals/30/vap/docs/Fact%20Sheet.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.ohio.gov/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 brownfields technical and financial assistance and incentives are available in Ohio. Information on the various programs is organized by the type of organization with oversight (e.g., federal, state, regional, private). These can range from technical assistance in area-wide planning or completing grant applications, seed money from foundations to leverage other sources of funding, in-kind services for assessment and sampling, grants and loans for brownfield cleanup and development and serving disadvantaged communities, or tax credits for historic preservation.

<http://www.epa.ohio.gov/derr/SABR/CommunityBrownfieldFundingResources.aspx>

PROGRAM ELEMENTS

Methods/Standards/Controls

In accordance with Ohio Revised Code (ORC) Chapter 3746, Ohio EPA developed the original rules governing the VAP 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. The VAP reviews and revises rules every five years with input from external stakeholders. For more information on the latest review and revision of the VAP rules, see Program Highlights below. <http://epa.ohio.gov/derr/derrrules.aspx>

Contaminants Covered

Hazardous substances and/or petroleum. Sites contaminated with petroleum from Underground Storage Tanks (USTs), except in very specific instances, are not allowed entry into the VAP (see Program Highlights below, which details new changes in petroleum UST eligibility). 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.
- **IC Oversight and Monitoring:** Ohio EPA inspects institutional controls (activity and use) every five years.

Ohio's Brownfields Inventory Database

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

PROGRAM HIGHLIGHTS

Starting in late 2013, the Ohio EPA Division of Environmental Response and Revitalization conducted a five-year rule review of the VAP rules in their entirety, in accordance with ORC §119.032. It was proposed that the regulations be amended to clarify eligibility for participation, revise program fees to more closely match costs actually incurred by the Agency, revise the generic numerical risk standards, update the property specific risk assessment procedures, clarify ground water classification and potable use response requirements, better define where an urban setting designation may be applied, create a remediation modification process, revise variance protocol and include case-by-case determinations, incorporate a new no NFA review process, include new audit section guidelines for NFA letters, and update other program procedures. Ohio EPA received significant input from interested parties at various outreach events, and also met with developers, certified professionals, and groups such as NAIOP (the Commercial Real Estate Development Association) to gain an understanding of various perspectives during the formal early stakeholder outreach period. The rules were filed with Joint Committee on Agency Rule review (JCARR) on April 24, 2014 and a public hearing was held at Ohio EPA on June 2, 2014. The rules will become effective on August 1, 2014. <http://epa.ohio.gov/derr/derrrules.aspx>

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>

RCRA Corrective Action and Closure

<http://epa.ohio.gov/derr/RCRA.aspx>

Remediation and Redevelopment Program

Wisconsin Department of Natural Resources (WDNR)
101 South Webster Street, Box 7921
Madison, WI 53707-7921
<http://dnr.wi.gov/topic/Brownfields/>

Contact(s): Michael Prager
Land Recycling Team Leader
michael.prager@wisconsin.gov
608-261-4927

Program Overview

- Brownfield Program
- Cost to Enter the Program: Fee structure
- Financial Elements
- Liability Relief Provisions
- MOA with EPA Region 5 (November 2006)
- Tax Incentives
- Brownfields Insurance Program

PROGRAM

The WDNR's Remediation and Redevelopment Program provides technical and financial assistance and project oversight for local governments and private parties to clean up and redevelop brownfields. 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 two fee structures for parties' assistance in the cleanup and redevelopment of contaminated properties, depending on whether or not the site is seeking a Voluntary Party Liability Exemption. <http://dnr.wi.gov/topic/Brownfields/Fees.html>
- **Sites Enrolled:** As of June 2014, more than 3,215 sites are being cleaned up in the traditional cleanup program, seeking closure letters. Approximately 116 active sites are in the Voluntary Party Liability Exemption (VPLE) process, seeking Certificates of Completion (COC).
- **Sites Completed:** As of June 2014, more than 25,537 sites have received close-out letters and 145 sites have received COCs.

FINANCIAL ELEMENTS

Assessment and Cleanup Funding

A variety of state and federal grants, loans and technical assistance is available to assist with brownfields reuse projects. <http://dnr.wi.gov/topic/Brownfields/Financial.html>

Incentives

A variety of tax incentives are available to assist with brownfields reuse projects. <http://dnr.wi.gov/topic/Brownfields/Financial.html>

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.
- **COCs** – By entering the 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/topic/Brownfields/Liability.html>

PROGRAM ELEMENTS

Methods/Standards/Controls

Wisconsin has a soil cleanup standard rule (ch. NR 720, Wis. Adm. Code) that applies to all sites with soil contamination. The rule provides a responsible party (RP) with options for addressing soil contamination. The RP and their consultant can either demonstrate that the site has met site-specific soil cleanup standards developed using the methodology set out in the rule; or utilize 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 ground water into compliance with standards within a reasonable period of time. <http://dnr.wi.gov/topic/Brownfields/Laws.html>

One Cleanup Program

The WDNR and 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/topic/brownfields/rprogram.html>

Contaminants Covered

All contaminants are included. Where federal requirements (e.g., RCRA or 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 ICs 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.

<http://dnr.wi.gov/topic/Brownfields/Residual.html>

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

- An engineering control requires long-term maintenance;
- A building or other structure that inhibited full investigation of the contamination is removed and further investigation and cleanup becomes possible; and
- 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/topic/Brownfields/clean.html>
- **IC Oversight:** Each state regulatory agency has oversight for its own continuing obligations.
- **IC Monitoring:** As of May, 2014, DNR has audited nearly 500 properties with continuing obligations per year using its EPA Section 128(a) 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

The 2.43-acre Kwik Trip property in La Crosse, was once the location of a large dry cleaning facility and a warehouse. These two formerly contaminated sites are now the home of a new \$13 million, 72,000 sq. ft. commercial bakery expansion that will provide food goods for Kwik Trip's growing statewide network of gas station convenience stores.

In early 2013, the city of La Crosse acquired the warehouse parcel and entered into a long-term lease with Kwik Trip, in conjunction with a development agreement, for use of the land. The city condemned the dry cleaning facility parcel in 2009 for a street improvement project. Both parcels are included in the boundaries of TIF 13, also known as the Kwik Trip TIF, which is supporting a major expansion of numerous Kwik Trip facilities, including a dairy, hygiene lab, ice plant, and warehouse. These projects have created several hundred new jobs and added over \$30 million to the local tax base.

To make this redevelopment project happen, DNR worked closely with the city to assess and remediate significant tetrachloroethylene (PERC) contamination in soil and groundwater on both parcels. In addition to technical support, DNR's Ready for Reuse loan program, funded by EPA, provided the city with a no- interest \$312,000 loan to help pay for the cleanup.

The loan was awarded on May 14, 2013, and remedial excavation began on May 21. Kwik Trip began construction of the expanded bakery facility shortly thereafter. The 72,000-square-foot expansion supports a new freezer, cooler dock, cooler warehouse, dry warehouse and expanded production area. The \$13 million new facility is designed to generate efficiency and product quality improvements. The freezer will begin operating in the Spring of 2014, with the remaining areas of the project set to be completed later in 2014.

EPA REGION 6

Brownfields Program

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

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

Program Overview

- Brownfield 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 discourage the development of greenfields or pristine properties in the State of Arkansas. <http://www.adeg.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 June 2014, 98 sites were enrolled in the Brownfields Program.
- **Sites Completed under VCP:** As of June 2014, 33 Certificates of Completion have been issued.

FINANCIAL ELEMENTS

Assessment and Cleanup Funding

Arkansas Brownfields Program Section 128(a) Response Program funding is available to municipalities, quasi-governmental organizations and nonprofits for Comprehensive Site Assessment and minor site cleanup. ADEQ may spend up to \$200,000 per site for environmental site assessments under ADEQ's Targeted Brownfields 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.adeg.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 to be enrolled in the VCP. Asbestos surveys are also provided by the TBA program but are not eligible for VCP enrollment.

Institutional Controls (IC)

Arkansas does not have a system to monitor or enforce long-term stewardship and ICs. ICs 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 ICs. This link also provides additional information regarding contaminated sites in the state. <http://www.adeg.state.ar.us/hazwaste/bf/brownfield.asp>

PROGRAM HIGHLIGHTS

The Arkansas Brownfields Program enabled Our House, Inc. to turn a lot containing a run-down old power plant into a brand-new Children's Center, which serves 150 homeless and near-homeless children each day in Little Rock, Arkansas. The environmental issues with the property were one the biggest uncertainties for the entire project. The Arkansas Brownfields Program provided technical support and environmental assessments to determine the contamination present on the site. The Arkansas Brownfields Program spent approximately \$115,000.00 in Targeted Assistance Brownfields grant funds to enable Our House Inc. to redevelop the property. The Arkansas Brownfields Program gave Our House, Inc. the confidence that the site would be a safe place to build the new Children's Center.

OTHER LAND PROGRAMS

Regulated Storage Tanks (RST) Program

<http://www.adeg.state.ar.us/rst/default.htm>

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): brownfields@la.gov
225-219-3536

Program Overview

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

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 June 2014, 127 sites were enrolled in the program.
- **Sites Completed under VCP:** As of June 2014, 63 Certifications of Cleanup (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>

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 Louisiana 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 Risk Evaluation/Corrective Action Program (RECAP).

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:** ICs 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 ICs. This link also provides additional information regarding contaminated sites in the state. <http://map.deq.state.la.us/index2.htm>

PROGRAM HIGHLIGHTS

Louisiana DEQ used its Section 128(a) Response Program funding to conduct cleanup activities at several sites. During the summer of 2010, 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. Cleanup of two properties in Shreveport—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—were funded by Revolving Loan Fund (RLF) Response Program funding and were completed in 2011. A cleanup of a former gas station along the Enterprise Boulevard Corridor project (Lake Charles), as well as a cleanup of a former gas station property, which will be the new Westwego Governmental Building Complex (Westwego, in the metro New Orleans area), were completed in the summer 2012. Louisiana DEQ completed the second Targeted Brownfields Assessment (TBA) contract, accomplishing over 20 assessments. In addition, Louisiana DEQ completed the third contract (TBA III), including a focus on the historic Shreveport Commons area near downtown Shreveport, as well as other promising properties throughout the state.

OTHER LAND PROGRAMS

Underground Storage Tank (UST) Program

<http://www.deq.louisiana.gov/portal/tabid/2674/Default.aspx>

Voluntary Remediation Program (VRP)

New Mexico Environment Department (NMED)
Harold Runnels Building
1190 St. Francis Drive
P.O. Box 5469
Santa Fe, NM 87502
<http://www.nmenv.state.nm.us/>

Contact(s): Pam Homer
Program Manager
pamela.homer@state.nm.us
505-827-2754

Michelle Hunter
VRP Scientist
michelle.hunter@state.nm.us
505-827-0071

Program Overview

- Voluntary Remediation and Brownfields Program
- Cost to Enter the Program: \$1,000 plus oversight fees for VRP; no cost for TBA services
- MOA with EPA Region 6 (December 1999)
- Liability Relief Provisions

PROGRAM

New Mexico's Voluntary Remediation Program (VRP), established in 1999, provides incentives for the voluntary assessment and remediation of contaminated properties, with oversight by the New Mexico Environment Department (NMED); it removes future liability of lenders and landowners. 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/RemediationOversight/VRP.html>

- **Funding Source(s) for the Program:** Federal grants, Revolving Loan Fund (RLF) repayments and oversight fees.
- **Cost to enter the VRP:** As of October 2012, there were 33 active sites in the program.
- **Sites Enrolled in VRP:** As of June 2014, there were 30 active sites in the program.
- **Sites Completed under VRP:** As of June 2014, 72 sites had completed cleanups through the program.

FINANCIAL ELEMENTS

Assessment and Cleanup Funding

EPA's Targeted Brownfields Assessment (TBA) funding enables NMED to offer Phase I and II assessments and remediation planning for sites owned by local/tribal governments or nonprofit organizations. Low-interest loans for remediation are available to public and private entities through NMED's Brownfields Revolving Loan Fund. <http://www.nmenv.state.nm.us/gwb/RemediationOversight/Brownfields.html>

Liability Relief Provisions

Upon successful completion of a voluntary remediation project, NMED provides a Covenant Not to Sue (CNTS) 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 voluntary remediation agreement and over which NMED has authority.

PROGRAM ELEMENTS

Methods/Standards/Controls

Voluntary remediation activities must achieve applicable standards, or where applicable standards are not prescribed, a site-specific human-health and environmental risk assessment may be performed to identify risk-based cleanup levels.

Contaminants Covered

Solid waste, hazardous waste, Comprehensive Environmental Response Compensation and Liability Act (CERCLA) hazardous substances, and any substance that could alter, if discharged or spilled, the physical, chemical, biological or radiological quality of water.

Institutional Controls (IC)

Conditional Certificates of Completion are issued if monitoring, engineering controls, remediation systems, post-closure care, or affirmation of future non-residential land use are necessary to ensure that the performance standard is achieved. NMED performs periodic audits of required institutional or engineering controls.

The following Web address is a direct link to the state's public database that maintains an inventory of sites, and/or tracks ICs. This link also provides additional information regarding contaminated sites in the state. <http://www.nmenv.state.nm.us/gwb/RemediationOversight/VRP.html>

PROGRAM HIGHLIGHTS

The Lexington Hotel is located on historic Route 66 in Gallup, New Mexico, near the Navajo Nation and Zuni Pueblo Reservations. The 1930s-era hotel was showing its age when the nonprofit organization Community Area Resource Enterprise, Inc. (CARE 66) acquired the property in 2009. CARE 66 had a vision to provide supportive and transitional housing for low-income individuals. Phase I and II environmental site assessments funded by EPA Region 6 Assessment grants revealed the need for asbestos remediation. In 2011, NMED used its Section 128(a) State Response Program funding to assess alternatives and develop the remediation and quality assurance plans with community input. CARE 66 then obtained an American Recovery and Reinvestment Act (ARRA) sub-grant through NMED's Brownfields Revolving Loan Fund to complete the cleanup. Additional support for the Lexington's \$2.3M rehabilitation came from the Navajo Housing Authority, the Department of Housing and Urban Development (HUD) Rural Housing and Economic Development, the New Mexico Legislature, the U.S. Congress, the Daniels Fund, and a local Gallup family. The renovation was completed and the new facility began operating in 2012.



The Lexington Hotel after Renovations



The Luna Lodge after Renovations

The Luna Lodge was built in 1950 during the golden age of Route 66 tourism. The 28-room lodge was built in the typical motor court style of the time and is largely unaltered. It was placed on the National Register of Historic Places in 1998. Luna Lodge was vacant for several years and is in an area that has been targeted by the City of Albuquerque for significant revival. New Life Homes, a nonprofit agency that provides permanent housing for clients with special needs and other disabilities, has rehabilitated Luna Lodge into apartment units. The facility includes a community room and a training kitchen that serves as a small business incubator and a resource for residents looking to learn food industry skills. The restoration project preserves the historical significance and Pueblo Revival style architecture of Luna Lodge. The redeveloped site features a 30-unit apartment complex that provides affordable housing for previously homeless residents and residents with special needs

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>

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 Kottke
Brownfields Manager
Rita.Kottke@deq.state.ok.us
405-702-7100

Brownfields Program

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: Reimbursement of Oversight costs (DEQ); No Cost (OCC)
- MOA with EPA Region 6 (April 1999) (DEQ)
- Liability Relief Provisions (DEQ)
- Financial Incentives (DEQ)

PROGRAM

The Oklahoma Department of Environmental Quality (DEQ) Brownfields Program provides a means for private parties, public and governmental entities, and nonprofits to voluntarily investigate and, if warranted, clean up properties that may be contaminated by pollution. The brownfields process includes a Consent Order for site characterization and 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) related sites, or from leaking underground petroleum storage tank (PST) sites. This program also issues state Petroleum Eligibility letters and helps arrange funded assessments and cleanups through the Oklahoma Energy Resources Board (OERB) or the Petroleum Storage Tank (PST) Division's Indemnity fund, or an EPA Targeted Assessment. <http://www.occeweb.com/og/brownfields.htm>

- **Funding Source(s) for the Program:** Federal grants, Oversight Cost Reimbursement (DEQ); State Cleanup Funds (OCC).
- **Cost to Enter Program or Fees for Service:** Oversight cost reimbursement (DEQ); None (OCC).
- **Sites Enrolled in VCP:**
 - **DEQ** – As of June 2014, 34 sites were currently enrolled in the program.
 - **OCC** – As of June 2014, 1,945 sites, mainly rural, have been inspected and evaluated between brownfields-qualified (510) and simple junk and debris sites. Of the brownfields-qualified sites, 461 have been referred to OERB for cleanup. This year so far, 229 inspected sites have been inspected. Fifteen sites, complex and/or urban, are currently enrolled in the OCC program for a cleanup with Certificate.
- **Sites Completed under VCP:**
 - **DEQ** – As of June 2014, 20 Brownfields Certificates of No Action Necessary have been issued. Fourteen Brownfields Certificates of Completion (COC) have been issued.
 - **OCC** – As of June 2014, four sites have completed the OCC Brownfields Program and been given a COC. So far 80% of the brownfields-eligible sites referred to OERB have had an OERB cleanup completed or are scheduled for a cleanup.

FINANCIAL ELEMENTS

Assessment and Cleanup Funding

- DEQ provides Targeted Brownfields Assessments (TBA) to public entities and nonprofit groups. Low-interest loans and grants are available to nonprofit and public entities for cleanup. Public, nonprofit and private entities may obtain low interest loans from DEQ's Brownfields Revolving Loan Fund (RLF).
- The State Clean Water Revolving fund may be accessed for the cleanup of brownfields that have the potential to impact waters of the state.
- 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 under DEQ authorities. Basic industries that locate their primary business on a DEQ brownfield site may qualify for incentive payments under the Oklahoma Quality Jobs Act. <http://www.deq.state.ok.us/lpdnew/Brownfields/brownfiledsfinancialincentives 5-15-12.pdf>

Liability Relief Provisions

For completed brownfields actions, for which DEQ has issued a COC or Certificate of No Action Necessary, DEQ is prohibited from assessing administrative penalties or pursuing civil actions against the participants in the program as well as any lender, lessee, successor or assign if they are in compliance with any post-certification conditions or requirements as specified in the Certificate of No Action Necessary, or COC (DEQ). Since DEQ has a Brownfields Memorandum of Agreement with EPA, the federal Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) enforcement bar applies to sites that complete DEQ's program.

Upon completion of projects under its jurisdiction, OCC offers a COC for Cleanup sites and a Certificate of No Further Action for sites where the assessment shows no significant pollution problem. OCC cannot assess administrative penalties or pursue civil actions against the participants in the program as well as any lender, lessee or successor, or assign if they are in compliance with any post-certification conditions or requirements. The federal government will not take an administrative or judicial enforcement action against sites in compliance with the state program

PROGRAM ELEMENTS

Methods/Standards/Controls

- Risk-Based Corrective Action (RBCA)-type processes are 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. Both are risk based, comparing the pollution levels at a site to those calculated as necessary based on the site's use – residential, commercial, agricultural, etc.

Contaminants Covered

- DEQ's Brownfields Program has authority over properties affected by pollution. Pollution is defined as "the presence in the environment of any substance, contaminant or pollutant, or any other alteration of the physical, chemical or biological properties of the environment or the release of any liquid, gaseous or solid substance into the environment in quantities which are or will likely create a nuisance or which render or will likely render the environment harmful or detrimental or injurious to the public health, safety or welfare, or to domestic, commercial, industrial agricultural, recreational, or other legitimate beneficial uses, or to livestock, wild animals, birds, fish or other aquatic life, or to property." However, the DEQ Brownfields Program will refer applicants to other agencies if the jurisdictional 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 underground storage tanks. This includes crude oil, saline produced water/brine, gasoline, and diesel.

Institutional Controls (IC)

ICs are allowed if they adequately protect the public. DEQ has authority to implement land use controls, if necessary. DEQ currently has an ArcGIS system with a layer for ICs in the state. <http://www.deq.state.ok.us/mainlinks/gis/index.html>

- **IC Tracking:** DEQ internally tracks active and completed sites, and sites scheduled for completion in the next year are added to the Brownfields Public Record. When the certificate is issued the site is entered into the IC database. DEQ prefers multiple layers of ICs to ensure that the site remains protective long term.
- **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. DEQ audits the sites and ICs every five years.
- **IC Monitoring:** If long-term monitoring is required at a DEQ 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, prior to a Brownfields Certificate being issued.

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 ICs. This link also provides additional information regarding contaminated sites in the state. <http://www.deq.state.ok.us/lpdnew/ICviewer.html>

Under the OCC Brownfields Program, ICs 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. Ground water sites can be listed in the Oklahoma Water Resources Board's Appendix H, which lists areas with special requirements, including zones to be cased off or even prohibitions on installing water wells as necessary.

PROGRAM HIGHLIGHTS

Hobart Public School System in the City of Hobart is in great need of a safe place for parents to drop-off and pick-up elementary school students. The elementary school is located on State Highway Business Route 9 and has no parking or pick-up area that is safe for the children. Children often have to cross the busy highway to get to their parents' vehicles. The abandoned Hobart Middle School, located next door, is the ideal property to create a safe place for child pick-up and parking; however, it contained asbestos and the school system did not have the necessary funds for the abatement. DEQ used Section 128(a) Response Program funding to conduct an environmental assessment and used the State Fund to complete asbestos abatement. With abatement complete, the school system is moving forward to demolish the building and complete the safe pick-up area for the 2014-2015 school year.

The new Devon Energy World Headquarters Tower was completed at the end of 2012 and won the 2013 Phoenix Award Grand Prize. At a cost of approximately \$750 million, this new building is 908 feet tall—the tallest building in Oklahoma—has 50 floors, and offers 1.8 million square feet of space. Part of this property was previously occupied by Oklahoma City's Galleria Parking Garage, which ceased operations in the early 2000s. The Oklahoma Corporation Commission (OCC) used Section 128(a) Response Program funding to oversee the assessment and cleanup of the property. The assessments, which included a grid pattern of soil boring samples, revealed soil and groundwater contamination from several underground storage tanks (USTs). These USTs and 280 cubic yards of contaminated soil were removed, and 61,814 gallons of contaminated water were treated and disposed of properly. The new building now serves as the northern anchor of Oklahoma City's aggressive "Core to Shore" downtown redevelopment project

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>

Voluntary Clean Up Program (DEQ)

<http://www.deq.state.ok.us/lpdnew/VCPIndex.htm>

Voluntary Cleanup Program

Texas Commission on Environmental Quality (TCEQ)
 MC 221
 P.O. Box 13087
 Austin, Texas 78711-3087
<http://www.tceq.texas.gov/goto/vcp>

Contact(s): Anna Rodriguez Brulloths, VCP-CA Manager
Anna.R.Brulloths@tceq.texas.gov
 512-239-5052

TCEQ Brownfields Site Assessment Program
 MC 221
 P.O. Box 13087
 Austin, Texas 78711-3087
<http://www.tceq.texas.gov/goto/bsa>

Contact(s): Stephanie Kirschner, Brownfields Program Manager
Stephanie.Kirschner@tceq.texas.gov
 512-239-2360

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/oil-gas/environmental-cleanup-programs/>

Contact(s): Aimee Beveridge, Voluntary Cleanup Program Manager
aimee.beveridge@rrc.state.tx.us
 512-463-7995

Program Overview
<ul style="list-style-type: none"> • 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)

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.

Voluntary Cleanup Program – <http://www.tceq.texas.gov/goto/vcp>
 Innocent Owner/Operator Program (IOP) – <http://www.tceq.texas.gov/goto/iop>
 Brownfields Site Assessments Program – <http://www.tceq.texas.gov/goto/bsa>

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 Voluntary Cleanup Program (VCP) and governments, nonprofit organizations, tribes, and universities through its Brownfields Response Program (BRP).

Voluntary Cleanup Program – <http://www.rrc.state.tx.us/oil-gas/environmental-cleanup-programs/site-remediation/voluntary-cleanup-program/>
 RRC Brownfield Response Program (BRP) – <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 for VCP and IOP; applicant must reimburse TCEQ for the direct costs of oversight. For VCP, this fee can be waived for government entities and non-profit organizations. There is no fee to apply to the Brownfields Program.
- **Sites Enrolled in VCP:**
 - **TCEQ** – As of June 2014, the VCP had received 2,536 applications representing dry cleaners, manufacturing facilities, shopping centers, warehouses, auto-related businesses, and other commercial and industrial enterprises.
 - **RRC** – As of June 2014, 100 sites were entered into the VCP and BRP.
- **Sites Completed under VCP:**
 - **TCEQ** – As of June 2014, 1,925 sites were issued Certificates of Completion (COC).
 - **RRC** – As of June 2014, 8 brownfields certificates and 42 VCP certificates have been granted.

FINANCIAL ELEMENTS

Assessment and Cleanup Funding

- 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 in the VCP program, parties will receive a COC from TCEQ or RRC, which states that all non-responsible parties are released from all liability provided by Texas Health and Safety Code, Chapter 361, Section 361.6035 and Chapter 91 Subchapter O, Texas Natural Resources Code.

In the TCEQ Innocent Owner/Operator Program (IOP), innocent owners and operators may receive an Innocent Owner/Operator Certificate (IOC) which confirms immunity from liability under Texas Health and Safety Code, Chapter 361, Section 361.751.

PROGRAM ELEMENTS

Methods/Standards/Controls

The Texas Risk Reduction Program (TRRP) follows a Risk-Based Corrective Action process (RBCA) that allows for the use of engineering and institutional controls. All TCEQ and RRC sites are evaluated using the TRRP rule, 30 Texas Administrative Code (TAC) Chapter 350. In the TCEQ VCP, site cleanups of releases from regulated underground and aboveground storage tanks are evaluated using the Petroleum Storage Tank Rules, 30 TAC Chapter 334.

A VCP applicant may use state-developed cleanup levels or site-specific data to develop site-specific cleanup levels.

<http://www.tceq.texas.gov/remediation/standards>

Contaminants Covered

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

Institutional Controls (IC)

Institutional controls must be placed in the real property records of the county in which the property is located 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.texas.gov/goto/vcp>

<http://www.rrc.state.tx.us/oil-gas/environmental-cleanup-programs/site-remediation/voluntary-cleanup-program/list-of-railroad-commission-vcp-and-brownfield-sites-102013/>

PROGRAM HIGHLIGHTS

Belo Garden construction began in March 2011 and the park opened to the public in May 2012. Belo Garden is approximately 1.46 acres and was formerly used as a parking lot. Over the past 100 years, the site was used for a wide array of purposes, including but not limited to, three petroleum-oil related facilities, two hat manufacturers, a car repair facility, and a paint shop (as well as residential housing dating back to the 1880s). The City of Dallas was awarded two grants to clean up the site, one from the North Central Texas Council of Governments and one from EPA. The site entered into the Voluntary Cleanup Program (VCP No. 2286) to ensure that the park met state environmental standards. Remediation of affected soil included the excavation and disposal of surface and sub-surface soils exceeding the critical protective concentration levels (PCLs) to an approved landfill disposal facility. Approximately 21,194 cubic feet of affected soil was characterized (through sampling), stabilized and removed from the site. Ground water was not impacted. The new Belo Park features perennial gardens, shaded groves, plaza spaces, an interactive fountain, a 10-foot high hill (which provides topographical relief and views over the central fountain plaza), a shaded garden grove and more. In addition to funding from City of Dallas bonds, federal grants and other private sources, Belo Corp. committed \$6.5 million toward the \$14.5 million construction of the park.

OTHER LAND PROGRAMS

Petroleum Storage Tank (PST) Program (TCEQ)

https://www.tceq.texas.gov/agency/data/enf_clean_data.html

Dry Cleaner Remediation Program

http://www.tceq.state.tx.us/remediation/dry_cleaners/

Superfund Program

<http://www.tceq.state.tx.us/remediation/superfund/>



The Belo Garden Redevelopment

EPA REGION 7

Brownfield Redevelopment Program and Land Recycling Program (LRP)

Iowa Department of Natural Resources (DNR)
Wallace State Office Building
502 East 9th Street
Des Moines, IA 50319
<http://www.iowabrownfields.com>

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
- Brownfield Redevelopment Tax Incentives through Iowa Economic Development Authority

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.iowabrownfields.com>

- **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 June 2014, a total of 101 sites were actively enrolled in the program.
- **Sites Completed under VCP:** As of June 2014, 72 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) Response Program funding focuses on small and rural communities in the state. Funds can be used for Phase I ("due diligence") and Phase II environmental site assessments and small-scale cleanups at brownfields, with Section 128(a) matching funds available up to \$15,000 per project.

Incentives

A variety of tax credits and resources are available through the Iowa Economic Development Authority (IEDA) to assist with brownfields reuse projects, including the Iowa Brownfield Tax Credit program, wherein investments in the purchase, assessment, cleanup or renovation of brownfields can receive a 24% tax credit of up to \$1,000,000 per project.

Liability Relief Provisions

Program offers No Further Action (NFA) certification that is transferable to a new owner, through implementation of the Uniform Environmental Covenants Act (UECA), as a part of the LRP site enrollment and completion.

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. <http://www.iowabrownfields.com>

Contaminants Covered

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

Institutional Controls (IC)

Statutorily based environmental protection easement is required for use with non-residential standards. It may be possible to move the point of compliance with standards outside of area with an IC or appeal to a less restrictive standard with an IC. Use of an IC 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 ICs. This link also provides additional information regarding contaminated sites in the state.

<https://programs.iowadnr.gov/contaminatedsites/pages/search.aspx>

PROGRAM HIGHLIGHTS

The Department of Natural Resources (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 a valuable key to understanding what potential environmental conditions exist at a property. Beginning in 2004, DNR used its Section 128(a) Response Program funding to acquire 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 20,000 historic prints, creating a complete mosaic of GIS images of the State of Iowa, with coverage from 1938 through today. The historic aerial photo database is an integral part of environmental due diligence research in Iowa and has 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 (UST) Program

<http://www.iowadnr.gov/InsideDNR/RegulatoryLand/UndergroundStorageTanks.aspx>

Voluntary Cleanup and Property Redevelopment Program Kansas Brownfields Program/Voluntary Cleanup 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>

<http://www.kdheks.gov/ars/index.html>

Contact(s): Leo Henning,
Director, Bureau of Environmental Remediation
lhening@kdheks.gov
785-296-1662

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Maggie Weiser
Environmental Use Control Unit Chief
mweiser@kdheks.gov
785-291-3807

Program Overview

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

PROGRAM

The Voluntary Cleanup and Property Redevelopment Program works in conjunction with the State Brownfields Program and the Environmental Use Control Program. Under the Voluntary Cleanup and Property Redevelopment Program, 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/ars/vcp/index.html> and <http://www.kdheks.gov/brownfields/index.html>

- **Funding Source(s) for the Program:** Oversight fees and federal grants.
- **Cost to enter program or fees for service:** Voluntary Cleanup Program 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 June 2014, 330 properties were active in either investigation or cleanup.
- **Sites Completed under VCP:** As of June 2014, the VCPRP issued 271 No Further Action letters and 2,904 acres had been remediated.

FINANCIAL ELEMENTS

Assessment and Cleanup Funding

- Kansas Brownfields Program: <http://www.kdheks.gov/brownfields/index.html>
- Kansas Brownfields Cleanup Assistance Grant
- 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/euc/index.html>

Contaminants Covered

All contaminants and pollutants covered including lead, asbestos and polychlorinated biphenyls (PCBs).
<http://www.kdheks.gov/ars/vcp/index.html>

Institutional Controls (IC)

Use environmental use controls (EUC).

- **EUC/IC Tracking:** All EUC/ICs are tracked and a part of a computerized database for public viewing.
- **EUC/IC Oversight:** All EUC/ICs are enforceable by KDHE pursuant to the statute.
- **EUC/IC Monitoring:** All EUC/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. As of December 2013, 173 environmental use controls have been recorded on properties in Kansas. This link also provides additional information regarding contaminated sites in the state. http://www.kdheks.gov/remedial/isl_disclaimer.html

PROGRAM HIGHLIGHTS

KDHE is using its Brownfields Program to assist the Cities of Wichita and Andover to expand their network of bicycling/walking trails. In the City of Wichita, one segment of trail, the Redbud Trail, was recently completed along 2.5 miles of rail-banked railway corridor in May 2011 while a second 1-mile segment is currently being developed. The City of Andover also requested assistance from the Brownfields Program for a 1.7-mile segment of the Redbud Trail within their City limits. KDHE used Section 128(a) Response Program funding to perform Phase I and Phase II/III brownfields assessments on all three segments that identified heavy metals (and polynuclear aromatic hydrocarbons [PAHs] Wichita segments only) above action levels in isolated spots along the trail. Both City projects have been enrolled in KDHE's Voluntary Cleanup and Property Redevelopment Program to address the residual soil contamination above KDHE action levels by incorporating appropriate remedial measures into the trail design and construction (e.g., capping the contaminated soil under the concrete path and covering the path shoulders with low permeability cover material). An Environmental Use Control will also be established on the trail segments and will include Soil Management Plans to establish a framework for how the impacted media encountered during trail construction and other future activities will be addressed. The City of Wichita funded its completed portion of the project with KDHE's Brownfields Cleanup and Revolving Loan Fund sub-grant and a \$2.3 million federal transportation enhancement grant and is in the process of securing additional grant funding for the additional 1-mile segment. The City of Andover is funding its project with a \$1.7 million transportation enhancement grant. All trails are expected to be completed and open to the public by 2015.

OTHER LAND PROGRAMS

State Cooperative Program

<http://www.kdheks.gov/remedial/scu/index.html>

Storage Tanks Program

<http://www.kdheks.gov/tanks/index.html>

Drycleaning Program

<http://www.kdheks.gov/ars/index.html#drycl>

Superfund Program

<http://www.kdheks.gov/ars/superfund/index.html>

Brownfields / Voluntary Cleanup Program (BVCP)

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

Contact(s): Scott Huckstep
Scott.Huckstep@dnr.mo.gov
573-526-8913

Catherine Jones
Catherine.Jones@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 Department of Natural Resources' (MoDNR) 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 June 2014, 1,214 sites have been enrolled since program establishment in 1994. Approximately 25 applications are processed annually and there are typically 275-300 active projects.
- **Sites Completed under VCP:** As of June 2014, 731 Certificates of Completion (COC) 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 and hazardous 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 brownfield 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 brownfield 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 that has a population of 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.ded.mo.gov/BCS%20Programs/BCSProgramDetails.aspx?BCSProgramID=3>

Liability Relief Provisions

A COC 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 processes.

- The Risk-Based Corrective Action 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 ICs. 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 ICs. This link also provides additional information regarding contaminated sites in the state.

<http://www.dnr.mo.gov/env/hwp/docs/sitestatuslist.xls>

PROGRAM HIGHLIGHTS

The MoDNR's Hazardous Waste Program released its new hazardous substance investigation and cleanup online information system on December 2, 2013 at <https://www.dnr.mo.gov/molts>. The site provides a comprehensive information resource designed to ensure property is used safely in Missouri. This website features an interactive map viewer with individual site status summaries from department databases for every site with links to important documents from department files. It also includes downloadable data layers that local governments or utilities can download and use in their own permitting and planning efforts. These layers are updated monthly and are free. An automated process updates map data from two department databases on a monthly basis, and a real-time link to any site-related documents in the department's electronic filing system are provided for each location. A comprehensive outreach plan being implemented in 2014 will educate key audiences about potential exposure risks, activity and use limitations designed to ensure their safety at risk-based cleanup sites, and where to easily find information about such properties in Missouri. This map represents the first time MoDNR has used the Google mapping platform, and is part of an overall effort to use technology to improve the visibility of environmental information to the public to protect human health and the environment.



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>

Voluntary Cleanup Program (VCP)

Nebraska Department of Environmental Quality (NDEQ)
1200 N Street, Suite 400
P.O. Box 98922
Lincoln, NE68509
<http://deq.ne.gov/>

Contact(s): Mike Felix
Section Supervisor, Remediation Section
mike.felix@nebraska.gov
402-471-4210

Tom Buell
Unit Supervisor, Superfund/VCP Unit
thomas.buell@nebraska.gov
402-471-4210

Carrie McCaleb
VCP/Brownfields Coordinator, Superfund/VCP Unit
carrie.mccaleb@nebraska.gov
402-471-6411

Program Overview

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

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://deq.ne.gov/Superfun.nsf/Pages/VCP>

- **Funding Source(s) for the Program:** Federal grants and application fee and initial deposit.
- **Cost to enter program or fees for service:** Non-refundable application fee of \$2,000 and refundable initial deposit of \$3,000.
- **Sites Enrolled in VCP:** As of June 2014, 16 sites are active in the voluntary cleanup program.
- **Sites Completed under VCP:** As of June 2014, 13 sites have successfully completed cleanup requirements under the VCP 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 provides funding to cover the costs of environmental site assessments and 50% of costs (up to \$10,000) to remove and dispose of asbestos, for eligible applicants.

Liability Relief Provisions

None

PROGRAM ELEMENTS

Methods/Standards/Controls

NDEQ developed a comprehensive VCP 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 that presents a conceptual site model based on a thorough investigation, and a remedial action work plan that 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 guidance document includes the development of remediation goals for soil gas and groundwater that would be protective of indoor air quality to address the vapor intrusion pathway.

If at the completion of all cleanup activities: the applicant has remitted all applicable fees, met the provisions and objectives agreed to with NDEQ, and 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)

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

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

Current information on the Public Record and IC tracking system can be found at: <http://deq.ne.gov/Superfun.nsf/Pages/ICTS>

NDEQ partners with the Nebraska Department of Natural Resources (NDNR) to map institutional control areas in the state. This aids water well drillers with critical information to prevent installation of domestic water wells in contaminated areas. The current information is available on the NDNR's website at: <http://maps.dnr.ne.gov/Wells/>

PROGRAM HIGHLIGHTS

Recently, NDEQ worked with the U.S. Department of Agriculture (USDA) to enroll multiple former surplus grain storage sites into the VCP. NDEQ will provide oversight to all actions at these sites. NDEQ will also ensure compliance with applicable state and federal laws and regulations pertaining to site-related work. The agreement between USDA and NDEQ has an initial list of sites within Nebraska that will be addressed and investigated. This list may be revised on an annual basis. Additionally, NDEQ continues to encourage and work with appropriate Section 128(a) program participants to enroll in the VCP after completion of Section 128(a)-supported Phase I and II Environmental Site Assessments.

OTHER LAND PROGRAMS

Petroleum Remediation Program

<http://www.deq.state.ne.us/LUST-RA.nsf/Pages/LUST>

Superfund Program

<http://www.deq.state.ne.us/Superfun.nsf>

EPA REGION 8

Brownfields and 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
<https://www.colorado.gov/pacific/cdphe/voluntary-cleanup>

Contact(s): Monica Sheets
 Remediation Programs Manager
 303-692-3398
 Doug Jamison
 Superfund/Brownfields Unit Leader
 303-692-3404
 Fonda Apostolopoulos
 Voluntary Cleanup and Redevelopment Program
 303-692-3411
 Barbara Nabors
 State Incentives for Redevelopment of Contaminated Land in Colorado
 303-692-3393

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
- Tax Credit for Environmental Remediation of Contaminated Land

PROGRAM

Voluntary Cleanup and Redevelopment 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. <https://www.colorado.gov/pacific/cdphe/voluntary-cleanup>

- **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 June 2014, there have been approximately 950 applications. Approximately 50 applications are processed each year.
- **Sites Completed under VCP:** As of June 2014, 900 sites have been completed under the VCP.

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. <https://www.colorado.gov/pacific/cdphe/brownfields-revolving-loan-fund>
- **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

- **Sub-Grants** - 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.
- **State Income Tax Credit for Environmental Remediation of Contaminated Land** - In 2014, the Colorado General Assembly passed Senate Bill 14-073 providing a tax credit for environmental remediation of contaminated land within the State. The law provided a 40% tax credit on cleanup expenses up to \$750,000 and a 30% credit on cleanup expenses greater than \$750,000 up to \$1,500,000. Taxpayers and qualified entities may transfer the credit.

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.

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 ICs at state cleanup program sites, Resource Conservation and Recovery Act (RCRA) cleanup sites, Superfund 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. 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. The database is available to the public at: <https://www.colorado.gov/pacific/cdphe/hmcovenants>
- **IC Oversight and Monitoring:** Colorado's long-term stewardship provisions include monitoring, ICs 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 ICs. These links also provide additional information regarding contaminated sites in the state.

<https://www.colorado.gov/pacific/cdphe/categories/services-and-information/environment/environmental-cleanup>

PROGRAM HIGHLIGHTS

The Dahlia Square Shopping Center was built in early 1950 on the site of the former Ferry Brickyard. The shopping center quickly became a focal point for local business and commerce, functioning as a community hub. Over the decades, the once vibrant shopping center slowly began to deteriorate as the shopping habits of local citizens shifted. By the 1990s, Dahlia Square was less than 15% occupied and had fallen into disrepair. The Denver Urban Renewal Authority (DURA) and the City and County of Denver created the Northeast Park Hill Urban Renewal area in 2001 to help redevelop and reinvigorate the area. During the assessment of the property's redevelopment potential, significant soil contamination was found that needed to be addressed. Park Hill Community, Inc. received a \$200,000 Brownfields Cleanup grant from EPA in 2005 to address the contamination found at the Dahlia Square property. In 2005, EPA also used \$78,000 of Targeted Brownfields Assessment funding to complete a Phase II Environmental Assessment for the site. The grant was part of a wide variety of funding used for property remediation, including grants and loans from federal and other sources, totaling more than \$7 million. Remediation of the property's soil resulted in the excavation of 40,000 cubic yards of landfill materials in abandoned mine pits left from its previous use as a brickyard. This material was disposed of at a local landfill. Additionally, three 3,000-4,000 gallon underground storage tanks (UST) and one 500-gallon UST were removed from the property. Cleanup was completed in June 2006 under the VCP, paving the way for redevelopment. A private developer purchased the property, and in 2009 opened a new 12,000 square-foot Park Hill Family Medical Clinic. The developer also has plans to build more than 100 new housing units, but these plans are on hold due to the slow housing market. However, a second developer agreed to build a 128-unit affordable housing complex for seniors, with assistance from the Colorado Housing and Finance Authority (CHFA). This development has been awarded a 9% tax credit by CHFA and has resulted in an additional private investment of over \$12 million.



The Dahlia Square Senior Apartment Complex

OTHER LAND PROGRAMS

Superfund Program

<https://www.colorado.gov/pacific/cdphe/superfund-sites>

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.mcp>
<http://deq.mt.gov/pcd/default.mcp>

Contact(s): Jason Seyler
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Ed Kiely
Petroleum Brownfields
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406-841-5057

Becky Holmes
Hazardous Waste Brownfields
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406-444-2876

Program Overview

- Brownfields Programs
- Cost to enter program: None; reimbursement of all administration costs
- 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 Tank (LUST)/Brownfields, and Hazardous Waste. Additional information regarding each program can be found at: <http://deq.mt.gov/brownfields/default.mcp>.

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 VCPs.

LUST/Brownfields Section

[DEQ's Leaking Underground Storage Tank \(LUST\)/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.

- **Funding Source(s) for the 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 VCP 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 June 2014, 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.mcp>.
- Montana Assessment grants are discussed at: <http://deq.mt.gov/Brownfields/TargetedBA.mcp>.
- Loans available through state Board of Investments program may apply to brownfields.

- Assessment and Cleanup funding is also available through the Department of Natural Resource and Development's Resource and Development Grants. Additional information can be found at: <http://dnrc.mt.gov/cardd/ResourceDevelopment/rdg/ProjectPlanningGrants.asp>
- 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 VCP 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.mcp>

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, ICs allowed as appropriate.

PROGRAM HIGHLIGHTS

The Montana DEQ used Section 128(a) Response Program funding to generate two new background reports for Montana. The first report presents Typical Indoor Air Concentrations of Volatile Organic Compounds in Non-Smoking Montana Residences Not Impacted by Vapor Intrusion. The second presents the Background Concentrations of Inorganic Constituents in Montana Surface Soils. Links to both of these reports can be found at: <http://deq.mt.gov/StateSuperfund/resources.mcp>.

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/Brownfields/>

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 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 June 2014, 2 active sites are currently enrolled in the program.
- **Sites Completed under Program:** As of June 2014, 38 sites have completed full or partial cleanups, and 47 sites have completed Phase I or Phase II assessments through the program.

FINANCIAL ELEMENTS

Assessment and Cleanup Funding

The state is using Section 128(a) Response Program grant funds to conduct site assessments and/or contamination removal activities at Brownfield sites.

<http://www.ndhealth.gov/wm/Brownfields/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.

<http://www.ndhealth.gov/wm/Publications/QualificationForResponsibilityExemptionRegulatoryAssurance.pdf>

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 ICs 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 ICs 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 ICs. This link also provides additional information regarding contaminated sites in the state.
<http://www.ndhealth.gov/WM/Brownfields/BrownfieldsSitesInNorthDakota.pdf>

PROGRAM HIGHLIGHTS

In 2013, the North Dakota Brownfields Program used Section 128(a) Response Program funding to assist the City of Walhalla in conducting an asbestos abatement of the Walhalla Clinic, which is a community medical and dental clinic. The clinic was undergoing a complete renovation and asbestos was discovered during a phase II assessment conducted by the City. The cleanup assistance provided by the Brownfields program allowed the Clinic to stay on budget for the renovation and will help continue to allow the clinic to operate in this medically underserved rural area of North Dakota.

OTHER LAND PROGRAMS

Underground Storage Tanks (UST) Program

<http://www.ndhealth.gov/WM/UndergroundStorageTankProgram/>

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

kim.Mcintosh@state.sd.us

605-773-3296

Program Overview

- Brownfields Program
- Cost to enter 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, state general funds and fines and penalties collected by the agency.
- **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 June 2014, the program has assisted over 12,890 sites through the voluntary cleanup program (VCP). Each year approximately 250 new sites are entered into the VCP program.
- **Sites Completed under VCP:** As of June 2014, over 12,250 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) Response Program grant funds to conduct Phase I and II Assessments of a limited number of brownfield sites each year. These sites may include mine-scarred lands, petroleum sites, and sites impacted by solvents, heavy metals asbestos, or controlled substances. As of June 2014, funds have been used to perform assessment and cleanup activities on 57 brownfield sites.

Liability Relief Provisions

Legislation (SDCL Chapter 74:05:12) was passed to establish additional liability provisions for sites designated as brownfields 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/des/gw/Spills/dbspillsearch.aspx>) contains information on state rules, assessment and cleanup standards, and provides a mechanism to track long-term institutional controls.

- **IC Tracking:** ICs are recorded on deed notices and environmental covenants and are tracked by the Department of Environment and Natural Resources' (DENR) database.

- **IC Oversight:** The oversight is provided on all assessment and cleanup projects.
- **IC Monitoring:** South Dakota does not perform field monitoring of ICs unless a complaint is received, or a problem is identified.

The following Web address is a direct link to the state's public database that maintains an inventory of regulated substance and brownfields, maps of sites by community, and/or information on ICs being used at a particular site. This link also provides additional detailed information regarding each contaminated site in the state. <http://denr.sd.gov/des/gw/groundprg.aspx>.

PROGRAM HIGHLIGHTS

When Huron University closed its doors in 2005 there was a flurry of committee meetings, strategic planning sessions, and forecasting for what the facility could become. But with time dampening enthusiasm and no apparent forward progress, the facility moved to the back of everyone's mind. The owner, an out-of-state real estate investment company, was unable to find a buyer for the facility and the facility slowly began to become rundown. In 2011, after exhausting all avenues to find resources to upgrade the existing campus, the City of Huron worked in conjunction with numerous private and nonprofit agencies to develop an aggressive plan to purchase the property and redevelop the site into "Central Park." The redevelopment plan called for construction of a new full-featured city park with multiple playgrounds, picnic shelters, a new aquatic center, and renovation of the former "Campus Center" student union building to offer post-secondary education opportunities to the community, serve as a meeting venue for community events, and as new headquarters for the city's parks department. To allow for this redevelopment, six major structures and a series of tunnels had to be demolished, and a number of underground fuel tanks also had to be removed. The State Department of Environment and Natural Resources used section 128(a) Response Program funding to assist the city in assessing the buildings and site. In addition, 128(a) funds were used to assist in the development of cleanup plans for the site. Through fund raising efforts, private business contributions, the New Markets Tax Credit program, and other local and federal resources, the city assembled a financing package and began construction of the \$12.8 million community facility in the fall of 2011. Completed in May 2013, the completed project offers the citizens of Huron use of a new water park, picnic shelters, playground equipment, opportunities to take college and vocational classes, use of the community meeting rooms, expanded youth programming, and a picturesque walking trail that encompasses the site. Huron Mayor David McGirr noted that the redevelopment project would not have moved forward in a timely manner, or perhaps not all, without section 128(a) assistance. "Addressing the significant environment problems of the redevelopment site was a major concern for our community leaders and Huron citizens as we explored the feasibility of this project," said McGirr. "With the assistance of the 128(a) funding we were able to accurately assess the extent of asbestos, mold and petroleum contamination at the site on a very tight schedule to meet the requirements of our financing package," said McGirr. "The DENR technical and financial assistance was invaluable in allowing us to determine the scope of the problem and establish a plan for remediation that put our community's environment concerns at ease."



Area Master Plan for Central Park in Huron

OTHER LAND PROGRAMS

Storage Tanks Program

<http://denr.sd.gov/des/gw/tanks/TankSection.aspx>

Superfund Program

<http://denr.sd.gov/des/gw/Superfund/Superfund.aspx>

Voluntary Cleanup Program / 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/index.htm>

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 VCP Program: Voluntary Cleanup Program application fee: \$2,500 and costs in excess of the fee are reimbursable
- Enforceable Written Assurance 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 VCP is administered by the Division of Environmental Response and Remediation (DERR). 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/DERR also provides assistance to communities and other stakeholders struggling with brownfields issues. An enforceable written assurance (EWA) is a tool to manage brownfields prior to and after purchase of property.

<http://www.deq.utah.gov/ProgramsServices/programs/cercla/voluntarycleanup/index.htm>

- **Funding Source(s) for the Program:** Federal grants (100%).
- **Cost to enter program or fees for service:** A \$2,500 application fee and an environmental assessment are required at time of application. The fee is used to cover UDEQ/DERR costs for eligibility assessment and signing a voluntary cleanup agreement. Any monies remaining from the application fee are applied towards oversight. UDEQ/DERR and the applicant must enter into a voluntary cleanup agreement before UDEQ/DERR can review work plans and reports. The agreement provides for reimbursement of UDEQ/DERR oversight costs by the VCP applicant.
- **Sites Enrolled in VCP:** As of June 2014, 84 applications had been received by the program.
- **Sites Completed under VCP:** As of June 2014, 42 Certificates of Completion (COC) and 2 no further actions (NFA) were issued.

FINANCIAL ELEMENTS

Assessment and Cleanup Funding

Federal grants are available to assist with brownfields reuse projects. When funding is available, the state performs Targeted Brownfields Assessments (TBA) for eligible applicants.

Liability Relief Provisions

The VCP offers a COC with limited liability relief for non-responsible parties, future owners, and lenders. The Utah Hazardous Substances 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 June 2014, UDEQ/DERR has received 77 EWA applications and issued 61 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 ICs, site specific risk-based levels relying on ICs, and others based on consultation with UDEQ/DERR. A VCP applicant may perform a site-specific risk assessment.

Contaminants Covered

The program does not restrict on basis of contaminants.

Institutional Controls (IC)

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

- **IC Tracking:** ICs and conditions of closure are defined in the COC. ICs may also be defined in an environmental covenant developed in accordance with the Uniform Environmental Covenants 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 UDEQ/DERR's Web page to augment the public record.
- **IC Tracking:** ICs and conditions of closure are defined in the COC. ICs 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 UDEQ/DERR's Web page to augment the public record.
- **IC Oversight:** UDEQ/DERR reviews and accepts all proposed remedies under the VCP prior to implementation. A site management plan may be necessary to manage engineering and/or ICs.
- **IC Monitoring:** The UDEQ/DERR actively manages post-remediation sites with a Site Management Plan and environmental covenant 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, provides site location information, and/or tracks ICs. The links also provide additional information regarding contaminated sites in the state.

<http://www.superfund.utah.gov/vcp.htm>

<http://www.enviromap.utah.gov/>

<http://www.superfund.utah.gov/vcpic.htm>

http://www.eqedocs.utah.gov/Default.aspx?SSName=DERR_CERCLA_EC

PROGRAM HIGHLIGHTS

Cleanup of the former Morgan Hanauer Smelter was completed in August 2008 and a COC was issued under the VCP. A mixed use development became the driving force for the transformation of this underutilized property since a light rail station is directly adjacent to the site. In July 2013, an EWA was issued to help establish Reasonable Steps and facilitate operation of a long-term acute care hospital on the northwest portion of the site. This new development further promotes the reuse of the former Morgan Hanauer Smelter property and is helping transform the surrounding area.



Former Morgan Hanauer Smelter site – Before



Former Morgan Hanauer Smelter 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/>

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/>

Contact(s): Jerry Breed
VRP Program Manager
jerry.breed@wyo.gov

307-777-5617

Vickie Meredith
Brownfields/Orphan Sites Program Supervisor
vickie.meredith@wyo.gov
307-335-6948

Program Overview

- Brownfields Assistance Program
- Cost to Enter the VRP Program: \$500 plus oversight fees (\$50/hour)
- MOA with EPA Region 8 (March 2002)
- Liability Relief Provisions

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 VRP:** As of June 2014, 193 sites were in the program.
- **Sites Completed under VRP:** As of June 2014, 93 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/Templates/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 onsite; and supplemental requirements.

Contaminants Covered

All contaminants are eligible in the program.

Institutional Controls (IC)

The program uses ICs.

- **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 ICs. This link also provides additional information regarding contaminated sites in the state. <http://deq.state.wy.us/volremedi/sitelist.asp>

PROGRAM HIGHLIGHTS

In Wyoming in 2011, a new rule took effect that states that facilities must be implementing a Pollution Prevention (P2) Plan consistent with the promulgated Voluntary Remediation Program (VRP) rule to be eligible to enter a contaminated site into the program. A statewide outreach campaign utilizing a variety of media was launched to inform Wyoming facility owners and operators about Pollution Prevention Planning and the new rule.

Components of the outreach campaign included:

- A mass mailing to over 15,000 entities in Wyoming
- Development of two 60-second P2 public service announcements (PSAs) that aired on multiple radio stations over several months
- Development of two 30-second PSAs in video format that aired on both local and cable TV outlets statewide
- Two half-page color display PSAs published in the only statewide newspaper in Wyoming
- Development of an "Interactive Toolbox" for the VRP website that provides Best Management Practices for P2, and a variety of other electronic P2 resources for Wyoming business owners and operators

In September 2011, the National Pollution Prevention Roundtable announced that the Wyoming Department of Environment Quality VRP won an MVP2 award for Multi Media for the television video P2 PSA, an MVP2 award for Multi Media for the electronic outreach material (P2 Interactive Toolbox), and an honorable mention award for the radio PSA. For more information on the Wyoming VRP and the P2 outreach efforts, please visit the website: <http://deq.state.wy.us/volremedi/P2-planning.asp>.

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

Brownfields Response

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

Contact(s): Ioane Tomanogi
Brownfields Coordinator
ioane.tomanogi@epa.as.gov
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://www.epa.as.gov/brownfields-response>

- **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

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.

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)

ICs are determined on a case-by-case basis.

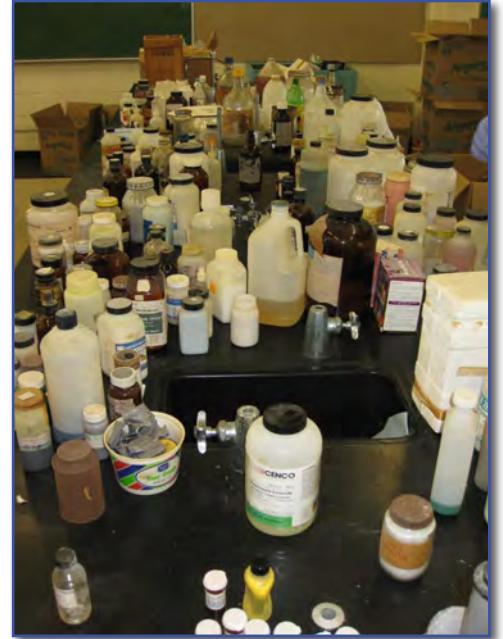
PROGRAM HIGHLIGHTS

Dozens of calls were received from schools regarding the presence of unknown chemicals and materials in their science laboratories. AS-EPA conducted lab inspections of five high schools and the American Samoa Community College and determined a variety of expired, unlabeled, and unused chemicals. There were numerous containers of unidentified and expired chemicals accumulating and subject to deterioration at the site. All of these materials present the threat of a release of a hazardous substance to the environment. AS-EPA worked together with US-EPA in the proper removal and containment of these chemicals and hazardous substances. Acids, bases, and oxidizers were neutralized while mercury and other instruments containing mercury were packed for transport. AS-EPA is working with the Department of Education in developing a chemical management plan for every school laboratory.

OTHER LAND PROGRAMS

Hazardous Materials

<http://www.epa.as.gov/hazardous-materials>



Chemical and hazardous waste removal from school laboratories.

Voluntary Remediation Program / Brownfields Assistance Program

Arizona Department of Environmental Quality (ADEQ)
Waste Programs Division
1110 W. Washington Street
Phoenix, AZ 85007

Contact(s): Julie Hoskin
Voluntary Remediation Program (VRP)
Manager
Hoskin.Julie@azdeq.gov
602-771-4866

Jennie E. Curé
Brownfields Coordinator
jec@azdeq.gov
602-771-2296

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.azdeq.gov/environ/waste/cleanup/vol.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 ADEQ.
- **Sites Enrolled in VRP:** As of June 2014, 76 sites were in the program.
- **Sites Completed under VRP:** As of June 2014, 191 sites completed cleanup 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. <http://www.adeq.state.az.us/environ/waste/cleanup/brownfields.html>

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 (CNTS) 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.

<http://www.azdeq.gov/environ/waste/sps/liability.html>

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 and Recovery Act (RCRA) and Leaking Underground Storage Tanks (UST).

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; and hazardous wastes that are ignitable, corrosive, reactive or toxic. Crude oil and its fractions are excluded.

Institutional Controls (IC)

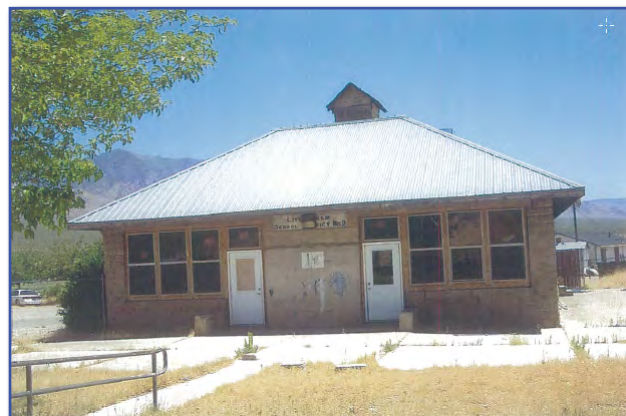
Arizona has a long-term stewardship program for the state voluntary and brownfields cleanup programs that includes monitoring, ICs, review and reevaluation, and Declaration of Environmental Use Restriction (DEUR) that run with the land.

- **IC Tracking:** The program maintains a database that tracks ICs 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 ICs. This link also provides additional information regarding contaminated sites in the state. <http://www.azdeq.gov/databases/deursearch.html>

PROGRAM HIGHLIGHTS

Littlefield is an unincorporated community in Mohave County located in the "Arizona Strip" region of Arizona (North of the Grand Canyon). The Littlefield Unified School District #9 applied for an asbestos abatement grant for the Old Littlefield School House. Built in 1924, it replaced an even older structure that was built in 1894. The school house was used for town meetings and Sunday school and served as the Littlefield Grade School. The Old Littlefield School Association was formed and partnered with the school district to preserve this historic structure. Removal of asbestos was necessary to initiate repairs on the building and to restore the structure to its original state. Community benefits of the restored schoolhouse include its conversion to a historical museum, an opportunity to highlight the rich history of this region, and to act as a community center for public meetings and gatherings. The museum will provide an opportunity to present historical material to future generations about the people who first settled this part of Arizona.



Old Littlefield School House, built in 1924.

OTHER LAND PROGRAMS

Underground Storage Tanks (UST) Program

<http://www.azdeq.gov/enviro/waste/ust/index.html>

Hazardous Waste Program

<http://www.azdeq.gov/enviro/waste/hazwaste/index.html>

Superfund Program

<http://www.azdeq.gov/enviro/waste/sps/index.html>

Brownfields and Environmental Restoration

California Department of Toxic Substances Control (DTSC)
700 Heinz Avenue
Berkeley, CA 94710
<http://www.dtsc.ca.gov/SiteCleanup/>

Contact(s): Janet Naito
janet.naito@dtsc.ca.gov
510-540-3825

Program Overview

- Brownfields Program
- Cost to Enter the Program: Cost recovery
- Liability Relief Provisions

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. DTSC generally addresses brownfields cleanups using programs under its Brownfields and Environmental Restoration Program.

DTSC Brownfields Reuse Program – <http://www.dtsc.ca.gov/SiteCleanup/Brownfields/>

CA EPA Brownfields Program – <http://www.calepa.ca.gov/Brownfields/>

CA SWRCB Brownfields Program – http://www.swrcb.ca.gov/water_issues/programs/brownfields/

- **Funding Source(s) for the Program:** State Accounts and reimbursements (approximately 80%), federal grants (approximately 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. The Water Board's SLIC program also requires reimbursement of staff costs.
- **Sites Enrolled in VCP:** As of June 2014, 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/>.
- **Sites Completed under VCP:** As of June 2014, DTSC staff issued either certifications or no further action decisions on over 561 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

http://www.waterboards.ca.gov/water_issues/programs/grants_loans/

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/BrownLandReuse.cfm>
- Prospective Purchaser Agreements and Liability Relief – <http://www.dtsc.ca.gov/SiteCleanup/Brownfields/BrownProsPurchaser.cfm>
- Site Designation Committee – <http://www.calepa.ca.gov/Programs/SiteDesig/>
- Local Government Agency Program (AB 440) – Beginning January 1, 2014 creates a program that provides immunity from liability for local agencies and subsequent property purchasers when local agencies clean up hazardous substance releases on a blighted property in accordance with specified procedures. <http://www.dtsc.ca.gov/SiteCleanup/Brownfields/BrownfieldsVoluntaryProgram.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 brownfields 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 ICs, monitors, and enforces cleanups, and completes audits. ICs 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 Boards maintain a list of deed-restricted properties that is available on the Internet.

<https://dtsc.ca.gov/SiteCleanup/SCLandUseRestrictionSites.cfm> and http://www.waterboards.ca.gov/water_issues/programs/deed_restrict/

- **IC Tracking:** ICs 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 Terradex™ 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

DTSC provided \$525,000 through a sub-grant from its Revolving Loan Fund to address contamination from a former auto wrecking yard so that the property could be redeveloped for affordable housing in San Jose. The funds were used to remove soil containing lead, petroleum hydrocarbons and polychlorinated biphenyls (PCBs). The City of San Jose provided land acquisition and construction loans to help realize key city objectives to stimulate development and affordable housing near transit and downtown jobs. The 92-unit Orvieto Family Apartments complex officially opened in May 2012, following a year-long contaminant cleanup overseen by the DTSC. Its location near bus lines, light rail and within a mile of a major retail center and its integration into a larger 29-acre Mediterranean-themed development called Montecito Vista Urban Village, provides a new gateway into downtown San Jose from the south. The project created an estimated 130 jobs and paid \$600,000 in fees to the city and local school district.

DTSC's Targeted Site Investigation (TSI) Program, a sub-task under the CERCLA Section 128(a) State Response Program, assists with brownfields redevelopment decisions through a no-cost environmental assessment program for local agencies and non-profits. Of the over 80 projects completed, several have been redeveloped. Groundwork San Diego Chollas Creek, a non-profit organization whose focus is to bring about sustained improvement and management of the physical environment through community based partnerships, was awarded an approximately \$75,000 grant for the assessment of the EarthLab Pocket Park. Through the TSI program, DTSC determined that there were no environmental conditions that would prevent redevelopment. Groundwork has obtained funding, and improvements at EarthLab are underway. This pocket park will offer a safe walkable route for local middle school students, and connect the community with public transit. EarthLab will also serve as a community resource by hosting workshops on backyard habitats, edible landscaping, and native plant propagation.

OTHER LAND PROGRAMS

Voluntary Cleanup Program

<https://dtsc.ca.gov/SiteCleanup/Brownfields/BrownfieldsVoluntaryProgram.cfm>

Underground Storage Tanks (UST) Program

http://www.waterboards.ca.gov/water_issues/programs/ust/

Guam Environmental Protection Agency Green Parcel Program

Guam Environmental Protection Agency (Guam EPA)
 P.O. Box 22439 GMF
 Barrigada, GU 96913
<http://epa.guam.gov/>

Contact(s): Walter S. Leon Guerrero
 Program Manager
walter.leonguerrero@epa.guam.gov
 671-300-4751

Program Overview

- Brownfields Program

PROGRAM

Guam EPA's Green Parcel's 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 Guam EPA's goal to identify and evaluate the risks posed by these properties and find solutions so that reuse and redevelopment is possible. Guam EPA seeks to accomplish these goals through public education, outreach, and local partnerships with private and government agencies. Green Parcel has worked with a contractor to develop the Pacific Basin Environmental Screening Levels (PBESLs) for Guam. The PBESLs will allow the environmental contractors a unified approach to site assessment and clean-up.

- **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

- Section 128(a) Response Program Grant - \$225,000 for Brownfields Site Assessment and Cleanup (2014) and development.
- Guam EPA is using Section 128(a) Response Program funds to conduct site assessment and to identify cleanup activities.

PROGRAM ELEMENTS

Under Section 128(a) 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 Comprehensive Environmental Response Compensation and Liability Act (CERCLA) hazardous substances, petroleum, lead-based paint and asbestos.

PROGRAM HIGHLIGHTS

In 2014, Guam EPA officially adopted the Pacific Basin Environmental Screening Levels (Pacific Basin ESLs) through board resolution. The Pacific Basin ESLs provide a baseline number for cleanup levels. The ESLs were created using scientific information collected at previous investigations. That information helped create a system that recommends the proper cleanup level required during response actions.

The Pacific Basin ESLs serve as standards to follow for any type of response action in Guam. The levels establish a baseline number that all assessment and cleanup actions should strive to achieve. Although each site is still directed by the site manager, and they have the ability to determine the final cleanup levels, the PBESLs give them a framework to start with. The levels can also be used to help in situations where there is a perceived presence of hazard.

The PBESLs in Guam are more stringent than those used in other areas. The conservative levels were set due to the island's reliance on a single source aquifer, the Northern Guam Lens. The Lens is housed in limestone karst. The limestone acts like a sponge for water and pollutants, it makes it possible for contamination to directly affect the drinking water source. The speed at which possible contaminants from land can

reach the Northern Guam Lens makes it more fragile than other water sources. During the past seven years, staff from Guam EPA worked with Hawaii's Dr. Roger Brewer to develop the Pacific Basin ESLs. The working group hosted multiple meetings for internal staff, private companies, and other government entities. The group also conducted a public hearing and presentation about the Pacific Basin ESLs to the Guam EPA board of directors during their February 2014 monthly meeting.

Dr. Brewer developed the ESLs for many Pacific islands including the Commonwealth of the Northern Mariana Islands (CNMI) and Hawaii. Although Guam's ESLs are based on prior models, some of the screening levels were changed to be more conservative to protect the Northern Guam Lens. More than 80% of island residents get their drinking water from the Northern Guam Lens. The Lens is considered a "highly vulnerable aquifer" by ESL standards. Highly Vulnerable Aquifers have more stringent soil leaching screening levels for a few chemicals including TPH and aldrin. Based on this, the default setting for Guam when utilizing the surfer is "highly vulnerable aquifer."

The Pacific Basin ESLs are typically used through a newly-created "surfer." The surfer is a Microsoft Excel document that helps contractors and other entities use the Pacific Basin ESLs. The easy-to-use interface allows the user to quickly reference the level of cleanup they should plan to achieve and other factors to take into consideration during the planning process. The basis of the surfer is the Pacific Basin ESL document.

For more information about the Pacific Basin ESLs and to download the surfer or the board resolution, [visit epa.guam.gov](http://epa.guam.gov).

OTHER LAND PROGRAMS

Underground Storage Tank (UST) Program

[http://guamepa.net/Guam Underground Storage Tank Regulations \(Draft Final v. 02DEC10\)\[1\].pdf](http://guamepa.net/Guam%20Underground%20Storage%20Tank%20Regulations%20(Draft%20Final%20v.%2002DEC10)[1].pdf)

State Cleanup Program Brownfields Cleanup and Redevelopment

Hazard Evaluation and Emergency Response (HEER) Office
Hawaii Department of Health (HDOH)
919 Ala Moana Boulevard, Room 206
Honolulu, HI 96814
<http://eha-web.doh.hawaii.gov/eha-cma/Leaders/HEER/brownfields-redevelopment-program>

Contact(s): Fenix Grange
fenix.grange@doh.hawaii.gov
808-586-4249

Melody Calisay
melody.calisay@doh.hawaii.gov
808-586-4249

Hawaii Brownfields Revolving Loan Fund

Office of Planning
Department of Business Economic Development and Tourism
P.O. Box 2359
Honolulu, HI 96804-2359
<http://planning.hawaii.gov/spb/>

Contact(s): Ruby Edwards
redwards@dbedt.hawaii.gov
808-587-2817

Mary Alice Evans
maevans@dbedt.hawaii.gov
808-587-2802

Program Overview

- Fast Track Cleanups
 - Cost: Oversight fees
- Voluntary Response Program
- Liability Relief Provisions
 - Cost: \$1,000 plus oversight fees
 - Liability Relief Provisions

PROGRAM

The State of Hawaii [State Cleanup Program \(SCP\)](#) 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://eha-web.doh.hawaii.gov/eha-cma/Leaders/HEER/voluntary-response-program>

The State of Hawaii's [Fast Track Clean-up Program \(FTC\)](#) offers landowners or other private parties the alternative to conduct an expedited voluntary investigation or cleanup under a simple agreement with the HEER Office. 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 June 2014, 38 contaminated properties have been enrolled in the VRP program. Today, there are a total of 9 active VRP sites in the program.
- **Sites Completed under VRP:** As of June 2014, HDOH has issued 21 Letters of Completion for 19 sites, closed one site with a No Further Action (NFA) determination without liability relief, and 3 sites withdrew from 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:** Between Fiscal Year (FY) 2009 and FY 2013, 150 new sites have been added. As of June 2014, the HEER office was overseeing assessment and cleanup of 458 active state sites
- **Sites Completed under State Program:** Between FY 2009 and FY 2013, a total of 173 state sites have received NFA determinations.

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

Under Hawaii's Environmental Response Law, HRS 128D, Part II, Eligible purchasers who receive a Letter of Completion through Hawaii's Voluntary Response Program are exempt from future liability related to contamination addressed under the VRP. The VRP requires that remedies must meet the cancer risk level of 10-6.

<http://eha-web.doh.hawaii.gov/eha-cma/Leaders/HEER/voluntary-response-program>

Bona Fide Prospective Purchaser Protection

In 2009, HRS 128D was amended to add a definition for "bona fide prospective purchasers" consistent with federal law which limits civil 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.

<http://eha-web.doh.hawaii.gov/eha-cma/documents/e1e1a0df-3001-4c51-9923-fc404786c7d1> and

<http://eha-web.doh.hawaii.gov/eha-cma/Leaders/HEER/environmental-hazard-evaluation-and-environmental-action-levels>

Contaminants Covered

Over 150 common contaminants are covered, including petroleum compounds, solvents, metals, pesticides, dioxins, polychlorinated biphenyls, polycyclic aromatic hydrocarbons, etc. Asbestos and lead-based paint are evaluated separately.

Institutional Controls (IC)

ICs are 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. Under the State Response Program Grant, Hawaii has begun to monitor existing ICs and expand the State IC tracking 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 ICs. This link also provides additional information regarding contaminated sites in the state.

<http://eha-web.doh.hawaii.gov/eha-cma/Leaders/HEER/public-records>

PROGRAM HIGHLIGHTS

The small footprint of the Hawaiian Islands, combined with intense urban expansion pressures, unique volcanic soils, and a remote tropical ocean environment create unique regulatory challenges. Hawaii has no hazardous waste disposal facilities in the state, a critical shortage of municipal landfill space, area-wide petroleum contamination in island harbors, unusual soil and sediment conditions, and a rare and fragile tropical ecosystem. Hawaii uses its Section 128(a) Response Program funding to address these challenges and encourage safe, effective, and defensible investigations and remedies at contaminated sites throughout the island chain. Hawaii recently completed a Background Metals Study to address a key data gap that has confounded environmental investigations in the state for years. The iron-rich volcanic soils have elevated concentrations of a number of metals, well above U.S. Environmental Protection Agency's (EPA's) Regional Screening Levels (RSLs) and the state's EALs. The background study statistically analyzed concentrations of 29 naturally occurring metals in 180 surface soil samples across the main Hawaiian Islands, and provides an approach to distinguish naturally occurring concentrations from releases of hazardous substances. One critical outcome of this EPA-funded research is the prevention of unnecessary delineation and remediation where naturally occurring concentrations of metals are significantly higher than EALs. To see the report, go to: <http://hawaii.gov/health/environmental/hazard/docs/99335.pdf>.

OTHER LAND PROGRAMS

Underground Storage Tank (UST) Program

<http://health.hawaii.gov/shwb/ustlust-data/>

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
 Bureau Chief
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: None. VCP cost based on type/size of property
- Liability Relief Provisions

PROGRAM

Nevada's Section 128(a) Response 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/vcp.htm>

- **Funding Source(s) for the Program:** Federal grants.
- **Cost to enter Voluntary Cleanup 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 June 2014, 1 site was enrolled in the program.
- **Sites Completed under VCP:** As of June 2014, 1 site had completed cleanup through the program.

FINANCIAL ELEMENTS

Assessment and Cleanup Funding

- NDEP is using Section 128(a) Response Program funds to conduct site assessment and cleanup activities.
http://ndep.nv.gov/bca/brownfield_state-grant.htm
- Nevada also operates an \$800,000 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 that 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 brownfield program and 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 Project Plan (QAPP) that U.S. Environmental Protection Agency (EPA) Region 9 approves 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/brownfields_qa_plan13.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)

ICs 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 ICs. This link also provides additional information regarding contaminated sites in the state. <http://ndep.nv.gov/bca/data.htm>

PROGRAM HIGHLIGHTS

Since 2010, the Nevada 128(a) Brownfields program has worked on several Phase I and Phase II environmental site assessments (ESA) with the Truckee River Flood Project helping the Flood Project to acquire land adjacent to the river along its course through Reno and Sparks, NV. The Truckee River Flood Project is a joint effort formed by interlocal agreement between Washoe County, NV, the cities of Reno and Sparks, NV and in partnership with the U.S. Army Corps of Engineers (USACE) and numerous stakeholders. The purpose of the Flood Project is to reduce the impact of flooding in the Truckee Meadows, restore the Truckee River ecosystem, and improve recreational opportunities along the river. The primary guidance document that the Flood Project uses to achieve these goals is the "Living River Plan", the community's flood management plan. This document is the result of a six-year effort by the Truckee River Flood Project's Community Coalition and represents more than 500 public meetings and 20,000 volunteer hours. Members of the coalition put forth a tremendous effort to arrive at a plan that was ultimately accepted community-wide and it has provided the majority of the USACE's flood protection plan for this portion of the river.

The Nevada Brownfields program has provided Phase I ESAs on three parcels and Phase II ESAs on six parcels for the Flood Project utilizing more than \$55,000 of Federal 128(a) funding. The Phase II ESAs were conducted on contiguous parcels in Reno, NV that had previously been occupied by a variety of commercial tenants, including auto repair shops, a photo developer, construction companies, machine shops, a granite counter top manufacturer, a painter, and multiple restaurants for over 30 years. In 2010, all structures were demolished leaving only concrete building pads and asphalt paved parking areas in place pending future site rehabilitation. A Phase I ESA performed for the Flood Project recommended further sampling and investigation due to the history of petroleum product and solvent usage on the properties. The Phase II assessments used a combination of test pits and passive soil gas samples to investigate the site for total petroleum hydrocarbons (TPH), volatile organic compounds (VOCs), and metals. The Phase II assessments determined that there were no significant impacts to the site by potential contaminants of concern and that the Flood Project could proceed with property acquisition and its planned restoration activities of the parcels without special management considerations to disturbed soil.



View of the Truckee River from Parcels Assessed for the Truckee River Flood Project

OTHER LAND PROGRAMS

Petroleum Program

<http://ndep.nv.gov/bca/fundhome.htm>

Superfund Program

<http://ndep.nv.gov/bca/spfdhome.htm>

NORTHERN MARIANA ISLANDS

Brownfields Program

Commonwealth of the Northern Mariana Islands (CNMI)
Division of Environmental Quality (DEQ)
Site Assessment and Remediation Branch
PO 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

- Submerged Lands Project – UXO Hazard
- Community Outreach – UXO Safety
- Voluntary Response Project
- DEQ Staff Training – HAZWOPER Trainers
- Brownfields 104k Phase II ESA Projects

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 and petroleum products. This branch is responsible for the assessment and cleanup of site contamination, as a result of the release of hazardous substances and petroleum, 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 U.S. Army Corps of Engineers (USACE) with Formerly Used Defense Site activities. <http://www.deq.gov.mp/sec.asp?seclD=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 Response Program by establishing program guidance documents, policies and regulations. Section 128(a) 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 releases.
- 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 an 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.asp?secID=8&artID=133>

Contaminants Covered

Hazardous substance (including explosives constituents) and petroleum products.

Institutional Controls (IC)

ICs 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 ICs. This link also provides additional information regarding contaminated sites in CNMI. <http://www.deq.gov.mp/article.asp?secID=8&artID=96>

PROGRAM HIGHLIGHTS

Under the Section 128(a) Response Program, the CNMI DEQ, with technical assistance from EPA Region 9, conducted assessment activities at the 7.6-acres KV-1 site located in Koblerville, Saipan. Surrounded by vacant private land, contamination at KV-1 site has thus far hindered potential redevelopment in the area. Goals for the site are to characterize the fuel product, delineate the contamination plume, and determine the cleanup method needed to eventually clean up the property—Section 128(a) Response Program funding has been instrumental in setting the stage for the site-specific investigation to collect this information. The assessment included installation and sampling of 13 monitoring wells for contaminant and plume characterization, producing valuable property information that will lead to a cleanup decision. This will eventually allow the property and adjacent properties to regain their market value. CNMI depends on tourism and available lands for economic revitalization, and over the past few years, the CNMI economy has been impacted adversely by the recent global economic recession. This has triggered a decline in both the number of tourists coming to the CNMI and the interest of investors in acquiring available land for development. Efforts such as the KV-1 site assessment will help reverse this trend.

OTHER LAND PROGRAMS

Pesticides and Storage Tanks Program

<http://www.deq.gov.mp/sec.asp?secID=7>

Toxic Waste Management Program

<http://www.deq.gov.mp/sec.asp?secID=11>

EPA REGION 10

Reuse & Redevelopment (R&R) Program

Alaska Department of Environmental Conservation (DEC)
 Division of Spill Prevention and Response
 Contaminated Sites Program
 410 Willoughby Avenue, Suite 303
 Juneau, Alaska 99811-1800
<http://dec.alaska.gov/spar/csp/>

Contacts: Amy Dieffenbacher
 Brownfield Coordinator
Amy.Dieffenbacher@alaska.gov
 907-465-5368

Sally Schlichting
 Environmental Program Manager
Sally.Schlichting@alaska.gov
 907-465-5076

Program Overview

- Reuse & Redevelopment Program
- Cost to Enter the Program: No fee
- Assessment and Limited Cleanup Services
- Liability Relief Provisions

PROGRAM

The Alaska Department of Environmental Conservation's (DEC) Reuse & Redevelopment (R&R) Program has developed resources to assist tribes, Alaska Native corporations, municipalities, and borough governments in identifying and assessing their brownfield sites. The Program works to help other state agencies in managing their contaminated sites for which a redevelopment interest exists on the part of a local community. The R&R Program also assists eligible applicants in applying for EPA Brownfields Program assistance and grants. The Program provides technical assistance, performs site assessments, conducts limited cleanups, helps maintain a publicly accessible contaminated sites database, and tracks site progress toward successful reuse. DEC's R&R Program also has an outreach and education component, with an emphasis on supporting the 23 Alaska Tribal Response Programs in implementing and enhancing their programs. The R&R Program's objectives are to assist with economic redevelopment of properties that are underutilized or abandoned as a result of real or perceived environmental conditions, while ensuring adequate oversight and protection to human health and the environment. 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.

- **Funding Source for the Program:** Federal funding (Section 128(a)).
- **Cost to Enter Program or Fees for Service:** There are no fees or cost recovery associated with R&R Program assistance on eligible projects, which can include both assessment and cleanup services; however, DEC's Contaminated Sites Program, where the R&R Program is housed, is required by statute to recover costs from responsible parties for its oversight and any associated contracting services should the state be required to take a state-lead response action. Services provided directly by R&R Program funding and staff for qualifying projects are not part of the cost recovery requirements because the sites involved are only eligible for assistance if no viable responsible party has been identified or the services are not attributed directly to any one responsible party.
- **Sites Enrolled in DEC's Contaminated Sites Program:** As of June 2014, 2,306 "Open" sites were listed on DEC's Contaminated Sites Database. An additional 57 sites were listed as having "Informational" status; these are sites with environmental concerns, but for which no data have been collected to document confirmed contamination.
- **Sites Completed:** As of June 2014, 3,784 listed sites are identified as having a status of "Cleanup Complete," and 1,139 sites are listed with a status of "Cleanup Complete with Institutional Controls." http://dec.alaska.gov/spar/csp/db_search.htm.

FINANCIAL ELEMENTS

Assessment and Limited Cleanup Services

The R&R Program provides limited assessment or cleanup services to eligible applicants through its DEC Brownfields Assessment and Cleanup (DBAC) program, which targets conditionally eligible brownfield sites that may be in public or private ownership. The R&R Program also oversees assessment and cleanup projects at state-owned sites using state funding where activities will result in a public benefit and reduce the state's liability associated with the site.

<http://dec.alaska.gov/spar/csp/brownfields.htm#assess>
<http://dec.alaska.gov/spar/csp/bfprojects.htm>

Liability Relief Provisions

The principal tool for providing liability relief is the Prospective Purchaser Agreement (PPA). PPAs have been negotiated for specific sites that meet appropriate criteria, and where the existing site conditions have been investigated and established to an acceptable extent. A PPA is a legal instrument, which must be negotiated through the Alaska attorney general's office, designed to clarify the potential environmental liability a purchaser assumes when buying a property with pre-existing environmental conditions.

PROGRAM ELEMENTS

Methods/Standards/Controls

Responsible parties working under DEC's Contaminated Site Cleanup Rules, found under Title 18 of the Alaska Administrative Code, Chapter 75 (18 AAC 75) are required to conduct appropriate site characterization and cleanup activities under the oversight of a DEC project manager. The responsible party may propose alternative cleanup levels based on site-specific conditions for approval by the site project manager. Cleanup may be approved in some cases as being complete without achieving regulatory cleanup levels if institutional controls (ICs) are placed on the site that provide adequate protection for current and future users. These controls may be administrative or engineering controls. http://dec.alaska.gov/spar/csp/reg_rev.htm

Contaminants Covered

DEC has statutory authority over all releases to the land and waters of the state; however, DEC does not maintain a RCRA program and coordinates the management of hazardous waste with EPA oversight. Further, while the R&R Program addresses asbestos and lead paint as part of its brownfield assessments, the Contaminated Sites Program does not regulate asbestos-containing materials or lead-based paint in buildings.

Institutional Controls (IC)

DEC will, after consultation with each landowner of a site, determine whether the use of an IC is necessary as part of the cleanup process. ICs may be used on a site-specific basis, if DEC determines that controls are required to ensure compliance with an applicable cleanup level, protection of human health, safety or welfare, or the environment, or to maintain the integrity of site cleanup activities or improvements.

The Contaminated Sites Program uses an IC tracker database module to manage the long-term oversight for contamination that poses limited risk to human health and the environment. Currently, DEC monitors ICs on 1,300 sites, of which approximately 216 are active sites where the controls have been established to protect human health and the environment during ongoing cleanup actions.

PROGRAM HIGHLIGHTS

DEC's R&R Program works extensively with Alaska's federally recognized tribes, most specifically the recipients of EPA's Section 128(a) Tribal Response Program (TRP) funding. Beginning in December 2008, the Program has held an annual Alaska State & Tribal Response Program Brownfield Workshop, either in Fairbanks or Anchorage, attended by representatives from virtually all of the active Alaska TRPs and their EPA project officers. In preparation for the first workshop, Program staff developed the *Alaska State & Tribal Response Program – Brownfield Handbook*, which is now available online at: <http://dec.alaska.gov/spar/csp/brownfields.htm#handbook>. The handbook is updated before each annual workshop, and as new TRP programs are established. Another cornerstone of outreach efforts is a quarterly newsletter, available on DEC website (<http://www.state.ak.us/dec/spar/csp/brownfields.htm>), which is distributed through the brownfields announcements listserv.

Outreach efforts have been recognized by EPA at both the regional and national levels, and resulted in the Program's being honored with the receipt of a National Notable Achievement Award for Brownfield Teamwork in 2010.

In 2013, the R&R Program focused on multiple assessments in rural and urban Alaska. One project concluded that an historic church in Kwigillingok was safe for reuse through a modified Phase I and hazardous building materials survey, leading to plans for renovation of building for use by the tribe. Another project was designed to assist the Organized Village of Kake in seeking funding to save a National Historic Landmark that is one of the only surviving canneries from the 19th century. Another project teamed with workers from the City of Tanana to excavate, remove, and landfarm more than 2,500 cubic yards of petroleum contaminated soil, enabling the reuse of limited available property in the community for new construction of a multiplex office complex and senior residential housing.

OTHER LAND PROGRAMS

Leaking Underground Storage Tanks (LUST) Program

<http://dec.alaska.gov/spar/csp/leaking.htm>

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-mgmt-remediation.aspx>

Contact(s): Eric Traynor
Brownfields Response Program Manager
Eric.traynor@deq.idaho.gov
208-373-0565

Bruce Wicherski
VCP Program Manager
bruce.wicherski@deq.idaho.gov
208-373-0426

Program Overview

- Brownfields Program
- Cost to Enter the Program: \$250 Application Fee and \$2,500 Oversight Fee – these fees only apply to VCP, not brownfields
- Liability Relief Provisions
- Tax Incentives

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 reduction 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 brownfields and works to develop Web tools, authorities and guidance aimed at improving the efficiency of all DEQ remediation programs.

<http://www.deq.idaho.gov/waste-mgmt-remediation/brownfields.aspx>

- **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. There is no cost to participate in the brownfields site assessment program.
- **Sites Enrolled in VCP:** As of June 2014, 9 sites were participating in the VCP.
- **Sites Completed under VCP:** As of June 2014, 20 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).

Incentives

Voluntary Cleanup Program Tax Incentives—Sites are eligible for a property tax reduction (not to exceed seven years) that is applied to 50% of the difference in value between the property's pre-remediation and post-remediation land valuation. 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. This program is provided by the Petroleum Storage Tank Fund which is under the Idaho Department of Insurance.

PROGRAM ELEMENTS

Methods/Standards/Controls

Participants in DEQ remediation programs, including the VCP, choose between cleaning to established state standards such as the residential use screening levels for petroleum release sites specified in 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://adminrules.idaho.gov/rules/2012/58/0124.pdf> or cleaning to site-specific standards developed using DEQ's Risk Evaluation Manual and Software, Risk Evaluation Manual for Petroleum Releases, 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>.

Institutional Controls (IC)

Both the VCP and the Standards and Procedures for Application of Risk Based Corrective Action at Petroleum Release Sites (IDAPA 58.01.24) 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 at sites which are cleaned up under the oversight of DEQ.

- **IC Tracking:** Idaho tracks ICs and environmental covenants through internal processes that are part of the agency's document management system and posts a copy of the recorded covenant on the Terradex Facility Mapper that is available here: <http://wastesites.deq.idaho.gov/>.
- **IC Oversight and Monitoring:** Oversight and Monitoring of ICs is accomplished through a combination of periodic audits of sites by agency staff and self-reporting requirements contained in the environmental covenants applied to 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 ICs. This link also provides additional information regarding contaminated sites in the state.

<http://www.deq.idaho.gov/waste-mgmt-remediation/brownfields.aspx>

PROGRAM HIGHLIGHTS

In 2006, the Treasure Valley Institute for Children's Arts (TrICA) purchased a former Methodist church on the National Register of Historic Places in the hopes of cleaning up this historic church within Boise's North End Historic District. TrICA, a 501(c)3 nonprofit, contacted IDEQ's Brownfields Response Program and requested a Phase I environmental site assessment to quantify the amount of asbestos-containing materials and lead-based paint containing materials prior to cleaning up the property and remodeling. IDEQ used Section 128(a) Response Program funding to conduct a Phase I that identified areas with lead paint concerns, confirmed the absence of asbestos-containing materials, and discovered that an arrest occurred at the property, which was tied to methamphetamine consumption and manufacture. Additional assessment confirmed the presence of methamphetamine contamination throughout the church, which had been subjected to various stages of subdivision into residential apartments. TrICA entered into a voluntary remediation agreement with IDEQ's VCP to clean up methamphetamine and lead contamination in the former church. TrICA also applied for and was accepted into one of the open Pilot slots and acquired a loan and sub-grant from the Reuse Idaho Brownfield Coalition's Revolving Loan Fund (RLF). Cleanup was certified in late 2011 and a Pilot rebate of \$150,000 was issued to TrICA in June 2012. TrICA will issue a lump sum payment to the RLF in the amount of the Pilot rebate and is currently fundraising to complete their remodel. To date, remodeling activities include roof and wall stabilization, removal of all walls, floors, and framing not original to the church, replacement of damaged windows, and replacement of the original roof. TrICA now occupies the space and offers arts instruction to children in the Treasure Valley (Boise and surrounding communities).

OTHER LAND PROGRAMS

Underground Storage Tanks (UST) Program

<http://www.deq.idaho.gov/waste-mgmt-remediation/storage-tanks/underground-storage-tanks.aspx>

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

Brownfields Financing Programs

Business Oregon
775 Summer St. NE, Suite 200
Salem, OR 97301
<http://www.oregon4biz.com/>

Contact(s): Karen Homolac, Brownfields Program Specialist
karen.homolac@biz.state.or.us
503-986-0191

Program Overview

- Brownfields Program
- Cost to Enter VCP: \$2,500, + oversight fees if DEQ costs exceed \$2,500
- Liability Relief Provisions
- Brownfields Redevelopment Authorities

PROGRAM

The Voluntary Cleanup Program (VCP) has two pathways: the Voluntary Cleanup Pathway and the Independent Cleanup Pathway (ICP). 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 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 June 2014, 1,542 sites have entered the VCP since its inception in 1991.
- **Sites Completed under VCP:** As of June 2014, 970 sites received NFA letters through the VCP.
- **PPAs:** From 1996 through June 2014, ODEQ issued 143 PPAs.

FINANCIAL ELEMENTS

Assessment and Cleanup Funding

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

- EPA has capitalized the Oregon Coalition Brownfields Cleanup Fund with over \$3.5 million; 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.
- The 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 brownfields. Limited technical assistance grants are available to public entities to either complete Phase I or II environmental site assessments (ESA) on publicly-owned sites or that are undertaking integrated planning activities involving brownfield properties.

- The state-funded Special Public Works Fund, also managed by OBDD, provides technical assistance grants and loans to municipalities for site assessments and cleanup on publicly-owned industrial brownfield 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, administered by ODEQ, 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 to present no unacceptable risk to human health or the environment. A PPA is a legally binding agreement between ODEQ and a prospective purchaser (or lessee), 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. PPAs that protect potential buyers/lessees from third party liability are also available from ODEQ. PPAs do not provide liability protection from the federal government or from any activities that may cause new contamination after the property is purchased or leased.

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, ICs 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 ICs 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 ICs. 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+Sitepercent20Information+Database>

PROGRAM HIGHLIGHTS

Program improvements based on customer feedback surveys

ODEQ is addressing program improvements through internal review and revision of its guidelines and policies, conducting staff trainings, and following up on responses to a 2012 program-evaluation survey and subsequent 2013 survey. ODEQ initiated annual surveys of Cleanup Program participants and their representatives in Fall 2012. The survey goals are to assess participant satisfaction with ODEQ oversight of cleanup work, including releases from petroleum-leaking underground storage tanks and past releases of hazardous substances. The survey requests feedback on accessibility of information, communications, project planning and collaboration, decision-making, and costs. ODEQ sent the 2013 survey to more than 600 individuals with active projects or projects that ended in the past year. Approximately 25% participated in 2013, about the same as the prior year. In general, survey responses in 2013 indicated a higher level of satisfaction with the cleanup program over 2012 results. While improvements were observed, ODEQ project oversight costs and decision-making remain as key areas of focus in the upcoming year.

Background levels of metals in soils for cleanups

To help improve assessment and eventual cleanup of metals-contaminated sites in Oregon, ODEQ's cleanup program issued a new fact sheet in Spring 2013 titled Background Levels of Metals in Soils for Cleanups. The fact sheet contains a data table specifying regional default background concentrations for 16 metals in Oregon soils, which replaced previous statewide background values.

Contaminant delineation decision-making guidelines

ODEQ is working to improve consistency in decision-making by ODEQ cleanup project managers while allowing flexibility for site-specific considerations. In early 2014, a team of cleanup staff issued guidelines and a decision matrix flowchart to help cleanup project managers consider when to conduct additional sampling or modeling to define the extent of contamination.

Brownfield and prospective purchaser agreements

ODEQ is increasing its efforts to link site cleanups with community-enhancing property reuses throughout Oregon, often in partnership with other state/local agencies. This work includes technical assistance to property owners and developers, limited financial assistance through grants, community outreach, and prospective purchaser agreements to address liability concerns. For example, in 2013, ODEQ:

- Participated in Beaverton's Brownfields Redevelopment Roundtable with 100+ attendees, focused on renewing the city's Creekside District.
- Negotiated a prospective purchaser agreement with MC Chuckwagon LLC to facilitate conversion of a vacant gas station in downtown Lakeview into an attractive tourist center featuring the actual chuckwagon from the old MC Ranch for educational and historical benefit.
- Completed a prospective purchaser agreement for the City of Salem to ensure its acquisition of 302 acres of former industrial land on Minto Island for wildlife habitat restoration. The project includes plans for a pedestrian bridge from the existing Riverfront Park (also a brownfield cleanup) to the island to allow easy public access to the park and wildlife viewing.

OTHER ODEQ LAND QUALITY PROGRAMS

Tanks Program

<http://www.deq.state.or.us/lq/tanks/index.htm>

Dry Cleaning Program

<http://www.deq.state.or.us/lq/cu/drycleaner/index.htm>

Orphan Sites Program

<http://www.deq.state.or.us/lq/cu/orphans.htm>

Prospective Purchaser Program

<http://www.deq.state.or.us/lq/cu/ppa.htm>

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): Jodi Gearon
Acting Brownfields Program Manager
360-407-7188

Brownfields Redevelopment Loan Fund

Department of Commerce
P.O. Box 42525
Olympia, WA 98504
<http://www.commerce.wa.gov/Programs/Infrastructure/Brownfields-Revolving-Loan-Fund>

Contact(s): Bill Mandeville
Brownfields Coordinator
360-725-3051

Program Overview

- Brownfields Program
- Cost to Enter the Program: Oversight fees
- Liability Relief Provisions
- State Remedial Action Grants
- Integrated Planning Grants

PROGRAM

The development of Washington's brownfields program began with the adoption of the Model Toxics Control Act (MTCA), a citizen-mandated law that governs cleanup of hazardous waste sites in Washington, originally enacted through a voter's initiative. Cleanup standards under MTCA include appropriate cleanup levels for industrial sites. In 2013, a legislative update to MTCA statutorily defined the term "brownfield" in Washington and further defined and expanded components of the existing brownfields program, making new tools available for brownfields cleanup and reuse. Washington State has a cooperative approach to brownfields cleanup and redevelopment, and the state provides technical assistance, grants, and a revolving loan program. Parties conducting cleanups using those resources can also seek private consultants. <http://www.ecy.wa.gov/programs/tcp/cleanup.html> and 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 June 2014, 4,637 total VCP sites.
- **Sites Completed under VCP:** As of June 2014, 2,536 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)

ICs 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:** ICs are tracked in the Integrated Site Information System Web reporting database.
- **IC Oversight:** When ICs 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 ICs. This link also provides additional information regarding contaminated sites in the state.

<https://fortress.wa.gov/ecy/gsp/> and http://www.ecy.wa.gov/programs/tcp/sites_brochure/SiteLists.htm

PROGRAM HIGHLIGHTS

Washington State Department of Ecology's Integrated Planning Grants provide up to \$200,000 to local governments without requiring local matching funds. These grants allow local governments to conduct due diligence on a brownfield site and create a well-developed strategy for cleanup and redevelopment before investing local funds. Integrated plans establish a vision for a contaminated property's future use that energizes the redevelopment effort and drives the cleanup process. Integrated plans outline a strategy to solve multiple problems that stem from contamination. The plan may address habitat restoration, recreational opportunities, and infrastructure development as part of the overall cleanup process. The plan would also include funding strategies that leverage multiple grant and loan opportunities to carry a project through to completion.

Sample Integrated Planning Grant Activities

- Redevelopment planning
- Environmental site characterization
- Land use and regulatory analysis
- Economic and fiscal analysis
- Administrative costs

Who is Eligible? The grant applicant must be a local government. Integrated Planning Grant awards follow prioritization and eligibility criteria outlined in the “Remedial Action Grants and Loans Guidelines.” [http://www.ecy.wa.gov/programs/tcp/grants/explore-tcp.html#App Info](http://www.ecy.wa.gov/programs/tcp/grants/explore-tcp.html#App%20Info)

To complement the Integrated Planning Grants, Ecology’s “Guide to Leveraging Brownfield Redevelopment for Community Revitalization” and brownfield workshops provide an opportunity for training and leadership on cleanup and redevelopment of brownfields. Often these properties are former gas stations, industrial properties, or similar sites where past use of chemicals has created a concern about environmental liability. 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 related to brownfield sites.

OTHER LAND PROGRAMS

Underground Storage Tanks (UST) Program

<http://www.ecy.wa.gov/programs/tcp/ust-lust/tanks.html>

APPENDIX

Region	State	Brownfields Program	Fee to Enter Program	MOA with EPA	Liability Relief Provisions	Tax Incentives	Grantee or Technical Assistance	Environmental Insurance	Licensed Environmental Professional Program	Brownfields Redevelopment Authorities (or Similar)	Institutional Controls Program or Processes
1	Connecticut	✓	✓		✓	✓	✓		✓		✓
	Maine	✓	✓		✓		✓			✓	✓
	Massachusetts	✓	✓		✓	✓	✓	✓	✓	✓	✓
	New Hampshire	✓	✓		✓	✓	✓				✓
	Rhode Island	✓	✓	✓	✓	✓	✓			✓	✓
	Vermont	✓	✓		✓	✓	✓	✓		✓	✓
2	New Jersey	✓	✓		✓	✓	✓			✓	✓
	New York	✓	✓		✓	✓	✓				✓
	Puerto Rico	✓			✓						
	Virgin Islands	✓	✓			✓					
3	Delaware	✓	✓	✓	✓	✓				✓	✓
	District of Columbia	✓	✓		✓	✓					
	Maryland	✓	✓	✓	✓	✓	✓				✓
	Pennsylvania	✓	✓	✓	✓	✓	✓			✓	✓
	Virginia	✓	✓	✓	✓	✓					
	West Virginia		✓	✓	✓		✓		✓	✓	✓
4	Alabama	✓	✓		✓	✓	✓				✓
	Florida	✓		✓	✓	✓					✓
	Georgia	✓	✓		✓	✓					✓
	Kentucky	✓	✓	✓	✓	✓				✓	✓
	Mississippi	✓	✓		✓	✓	✓				✓
	North Carolina	✓	✓		✓	✓					✓
	South Carolina	✓	✓		✓	✓	✓				✓
	Tennessee		✓		✓	✓	✓				✓
5	Illinois	✓	✓	✓	✓		✓				✓
	Indiana	✓	✓	✓	✓	✓					✓
	Michigan	✓	✓	✓	✓	✓	✓		✓		✓
	Minnesota	✓	✓	✓	✓		✓				✓
	Ohio	✓	✓	✓	✓	✓	✓				✓
	Wisconsin	✓	✓	✓	✓	✓	✓	✓			✓

Region	State	Brownfields Program	Fee to Enter Program	MOA with EPA	Liability Relief Provisions	Tax Incentives	Grantee or Technical Assistance	Environmental Insurance	Licensed Environmental Professional Program	Brownfields Redevelopment Authorities (or Similar) Program or Processes
6	Arkansas	✓		✓	✓					
	Louisiana	✓	✓	✓	✓					✓
	New Mexico	✓	✓	✓	✓					✓
	Oklahoma	✓	✓	✓	✓	✓	✓			✓
	Texas	✓	✓		✓	✓	✓			✓
7	Iowa	✓	✓	✓	✓	✓	✓			✓
	Kansas	✓	✓	✓	✓		✓			✓
	Missouri	✓	✓	✓	✓	✓	✓			✓
	Nebraska		✓	✓						✓
8	Colorado	✓	✓	✓	✓		✓		✓	✓
	Montana	✓			✓		✓			✓
	North Dakota	✓			✓		✓			✓
	South Dakota	✓			✓		✓			✓
	Utah	✓	✓		✓					✓
	Wyoming	✓	✓	✓	✓		✓			✓
9	American Samoa	✓							✓	✓
	Arizona	✓	✓		✓		✓			✓
	California	✓	✓		✓		✓			✓
	Guam	✓					✓		✓	
	Hawaii	✓	✓		✓		✓			✓
	Nevada	✓	✓		✓					✓
	Northern Mariana Islands	✓							✓	✓
10	Alaska	✓			✓		✓			✓
	Idaho	✓	✓		✓	✓	✓	✓		✓
	Oregon	✓	✓		✓		✓		✓	✓
	Washington	✓	✓		✓	✓	✓			✓



United States
Environmental Protection
Agency

Office of Solid Waste
and Emergency Response

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