

Connecticut

General Information

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Program Description (VCP, brownfields, or related)

Brownfields definition: “Brownfield” means any abandoned or underutilized site where redevelopment and reuse has not occurred due to the presence or potential presence of pollution in the buildings, soil, or ground water that requires remediation before or in conjunction with the restoration, redevelopment, and reuse of the property. (Public Act No. 07-233, section 3)

Program titles: The Remediation Division in the Bureau of Water Protection and Land Reuse is organized into six geographic districts and staff from these districts administer the Brownfields and Voluntary Response Programs. The boundaries of the six geographic districts for remediation in Connecticut can be explored by the following link:

[CT DEP Remediation Districts](#)

Brownfields and Voluntary Response in Connecticut are conducted under several state remediation programs are managed by the Remediation Division. All [remediation programs](#) in Connecticut utilize the same remedial goals—the [Remediation Standard Regulations](#). As projects are entered into any of the Remediation Division programs, staff are assigned from that geographic district are assigned as project managers.

The state established a centralized Office of Brownfield Remediation and Development (OBRD) in the Department of Economic and Community Development in 2006 (Public Act 06-184), and OBRD was expanded in 2007 (Public Act 07-233) to be the primary office that manages and administers state brownfield funding. The primary regulatory programs used as the vehicle for brownfields remediation are the Property Transfer, Urban Sites Remedial Action, and Voluntary Remediation Programs.

- Property Transfer Program – this program requires the disclosure of environmental conditions when certain real properties and/or businesses (“establishments”) are transferred. When an establishment is transferred, one of four Property Transfer Forms must be executed and a copy of the form must be filed with the department. When transferring an establishment where there has been a release of a hazardous waste or a hazardous substance, the party signing the Property Transfer Form certification agrees to investigate the parcel and remediate pollution caused by any release of a hazardous waste or hazardous substance from the establishment. [More Information](#)
- Urban Sites Remedial Action Program – DEP staff work closely with staff in the Office of Brownfield Remediation and Development to expedite the investigation and remediation of brownfield sites in this program. OBRD will suggest sites to DEP to enter into this program based on economic analysis and project review. DEP will then either provide expedited review and oversight, or DEP may request State Bond Funds to conduct the investigation and remediation of the site (when the responsible party is not known or unwilling to clean the property). Brownfield projects are entered into this program if OBRD identified the project as significant to the state’s economic development. State Bond Funds can only be spent on sites that are located in either a [Targeted Investment Community](#) or in a [Distressed Municipality](#). [More Information](#)
- Voluntary Remediation Programs – There are two voluntary remediation programs in Connecticut. Both programs are elective for property owners who wish to expedite the remediation of polluted property, thus enabling them the advantage of a remediated site should they ever decide to sell the property or expand on their site.
- CGS Section 22a-133x can be used by owners of sites that are: 1) owned by a municipality; 2) [defined as an establishment \[CGS 22a-134\(3\)\]](#) pursuant to CGS Section 22a-134; 3) on the inventory of [hazardous waste disposal sites](#) maintained pursuant to CGS Section 22a-133c; or 4) located in an area where the ground water is classified as GA or GAA.
 - In order to be eligible under CGS Section 22a-133y, real property which has been subject to a spill must be located in an area where the ground water is classified as GB or GC and the site must not be subject to any order, consent order or stipulated judgment issued by the Commissioner of the Department of Environmental Protection regarding such spill.
- Licensed Environmental Professional Program – In certain programs, DEP allows a Licensed Environmental Professional (LEP) to be responsible for the direct oversight of site investigation and remediation projects. The LEP program was established in 1995 pursuant to CGS §22a-133v. In the Property Transfer and Voluntary

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22a-133x Programs DEP or a LEP can have the oversight role. In Voluntary 22a-133y Program a LEP must maintain the oversight role. [More Information](#) and [Current LEP Roster](#)

- Other major [Remediation Programs](#) handled by staff in the Remediation Division are enforcement action projects (state enforcement for investigation and/or remediation), federal Superfund program, state Superfund program, Potable Water program, Underground Storage Tank (UST) Cleanup Account program, Significant Environmental Hazard program, Resource Conservation and Recovery Act (RCRA) Corrective Action (Connecticut has Primacy for this Program), and RCRA Closure program.

Liability Provisions

Legal authorities include strict, joint, several, and retroactive liability, orders for information and site access, subpoena authority, administrative and consent order authority, injunctive action and cost recovery authority. The preferred enforcement method is consent order, followed by administrative order or court action.

Civil penalties of \$25,000 per day are available under the hazardous waste program. Punitive damages (1½ times costs for negligent acts or two times costs for willful acts) are available in cost recovery actions.

Pursuant to CGS §22a-452a, any amounts paid by the state in cleanup costs shall be a lien against the property, and such liens take precedence over prior liens except in the case of residential property or property transferred pursuant to the state property transfer law. In these situations, the lien filed by the Commissioner does not take precedence over prior liens or previous transfers or encumbrances, respectively. The state is required to attempt cost recovery.

Limiting State Liability: Two types of Covenants Not To Sue (CNTS) (CGS §22a-133aa or CGS §22a-133bb) are available to prospective purchasers of contaminated property, current owners of contaminated property, or lending institutions, to provide relief from liability for additional remediation once a property has been remediated to current standards. Entities responsible for causing the contamination are not eligible for a CTNS pursuant to either CGS §22a-133aa or CGS §22a-133bb. Covenants Not To Sue pursuant to CGS §22a-133aa are at the Commissioner's discretion and require a fee in certain situations.

State law provides liability protection for "innocent landowners" as defined by [CGS §22a-452e](#).

A lender liability exemption is also provided by [CGS §22a-452f](#).

Limiting Third-Party Liability: Third-party liability is limited for non-responsible parties that own a contaminated property and investigate and remediate such properties pursuant to [CGS §22a-133ee](#).

Financial Incentives

- Urban Sites Remedial Action Program was originally capitalized with \$40,500,000 in state bond-funds for assessment/remediation of sites in "Distressed Municipalities" and "Targeted Investment Communities;" DEP can clean up and the state can acquire a site if it chooses, recovering costs from future users.

Two Types of Projects (Type I projects: DEP expedited review and approval; Type II: State Bond funded investigation and remediation).

- Type I – The owner or redeveloper of the property must be willing and able to conduct investigations and remediate the site. The site can be located anywhere statewide.
- Type II – Only sites located in Distressed Municipalities and Targeted Investment Communities are eligible for DEP assessment and/or remediation using State Bond Funds. State Urban Site Bond Funds can be used only when an owner cannot be identified, or is unwilling or unable to investigate and/or remediate the site.
- Special Contaminated Property Remediation and Insurance Fund (SCPRIF) provides low-interest loans to municipalities and private entities for Phase II and III investigations and demolition costs.
- Brownfield Pilot Program created by Public Act 07-233 will fund \$4,500,000 per year for 2008 and 2009 for brownfields investigation, remediation, and redevelopment. This grant program, administered by OBRD, will be awarded competitively to five municipalities that represent different populations. Recipients of this grant will be municipalities and economic development organizations. Projects utilizing the grant funds will be exempt from the Property Transfer program, if they clean up the property in accordance with the Remediation Standard Regulations.
- Brownfields Grants and Loans Program created by Public Act 07-233 provides OBRD with the ability to provide loans to private brownfields redevelopers and grants to municipal or economic development organizations. The funding for this program is \$2,500,000 per year for 2008 and 2009.
- Dry Cleaner Establishment Remediation Fund (managed by DECD) for financing soil and ground water remediation and prevention, up to \$50,000 per year, up to \$150,000 over three years.
- Underground Storage Tank Petroleum Cleanup Account (managed by DEP, Remediation Division) provides reimbursement for up to \$1,000,000, per release, for taking corrective actions and for third party liability costs. Notwithstanding such financial

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coverage, the responsible party for a release must bear all corrective action and third party liability costs less than ten thousand dollars.

- Connecticut Brownfields Redevelopment Authority (CBRA), a wholly owned subsidiary of the Connecticut Development Authority (CDA), provides the following direct and indirect financial assistance for brownfields remediation:
 - Direct Loans – CBRA will administer a direct loan for the remediation of a project.
 - Loan Guarantees (made in concert with qualifying financial institutions) – Guarantees may cover up to 30% of the loan amount made through a qualified lending institution.
 - Tax Increment Financing (TIF) – Up-front cash available to investors, developers, and business owners who undertake remediation projects. A financial tool using future increases in tax to finance the current improvements. TIF creates funding for projects that may otherwise be unaffordable to municipalities. Municipal authorities and CBRA collaboratively agree to the allocation of incremental tax revenues.
 - Eligibility – Any brownfield in any municipality in Connecticut is eligible for CBRA assistance.

[More Information](#)

Availability of Funds

- The state Superfund and the Urban Sites Remedial Action Fund are the two funds that are generally used by the DEP for investigation and remediation assistance.

State Superfund – The current balance in the state Superfund as of January 1, 2008 was unknown at the time this report was generated. The fund monies may be used for site investigation, studies and design, removals, remedial actions, Comprehensive Environmental Response Compensation and Liability Act (CERCLA) match, operations and maintenance, emergency response, victim compensation, grants to local governments, program administration, and natural resource restoration. In order to expend funds from the state Superfund, DEP must determine that a threat is unacceptable, and DEP must be unable to determine the responsible party (RP), or the RP must be in noncompliance with or appealing an order.

The Urban Sites Remedial Action Fund (USRAF) – The current balance of this fund as of January 1, 2008 is approximately \$6,400,000. The USRAF is used primarily for site investigation, studies and design, operations and maintenance, removals, and remedial actions.

- The Potable Water Grant Fund is used for grants to municipalities to provide long-term solutions for potable water contamination (typically through the extension of public water or the maintenance and monitoring of

treatment systems). The balance as of January 2007 was \$3,272,726 with an anticipated increase to \$8,272,726 in the near future.

- The Emergency Spill Response Fund (ESRF) was transferred into an identified account in the state general fund in 1995. The ESRF is administered in, and primarily used by, the Emergency Response and Spill Prevention Division of the Bureau of Materials Management and Compliance Assurance. The ESRF is funded by appropriations and cost recovery, and can be used for site investigation, studies and design, operations and maintenance, emergency response, removals, remedial actions, and natural resource restoration.
- In 1996, the state enacted legislation creating the Special Contaminated Property Remediation and Insurance Fund (SCPRIF). In February 1998, DEP was awarded \$1,000,000 for establishment of the fund. The fund is used by DEP and DECD for loans to municipalities, individuals, or firms for environmental site assessments and site preparation of contaminated properties. To date, approximately 75 loan requests have been reviewed and 21 loans totaling \$2,484,520 have been made.

Tax Incentives

The Department of Economic and Community Development administers the following tax incentives:

- Urban and Industrial Site Investment Tax Credit Program – Authorized by CGS §32-9t allows an investor, in a redevelopment project that is “industrial,” in a Distressed Municipality, in an Enterprise Zone, or in a municipality with a population in excess of 100,000 people. Industrial sites must be subject to a spill or have state obligations to remediate under the Property Transfer Program. The tax credit is for corporate taxes and is applied over 10 years and up to \$100 million per project could be claimed with a \$500 million cap on each project. The investment will return the property to a viable business condition that will add significant new economic activity, increase employment, and generate additional tax revenue to the state and the municipality in which the property is located.
- Enterprise Zone Program – Incentives provide tax abatement for five years and 80% of local property taxes on real estate improvements; 10 years/50% tax credit; and seven-year minimum deferral of increased taxes resulting from property value rise after remediation has been completed.
- Housing and Historic Tax Credit Program – Various incentives are available for housing and historic tax credits are available through the federal government, Connecticut Housing Finance Authority, and DECD.

Other Incentives

- Environmental Insurance – State assistance to redevelopers to obtain financial assurance is available

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through DECD's Manufactured Assistance Act program, the SCPRIF program, the new Brownfield Pilot program, and the new Brownfield Grants and Loans program.

- CBRA – Offers redevelopment grants, loan guarantee program (up to 30% of the loan guaranteed to the lender in case of default), assessment grants, financing, and the one-stop center for programs that encourage and stimulate the development of Connecticut's brownfield sites.

Program Elements

Technical Elements

Methods/standards/controls: Remediation standard regulations (Regulations of Connecticut State Agencies [RCSA] 22a–133k–1 through k3) were adopted in January 1996. These regulations provide 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 institutional controls that change cleanup requirements but ensure for the long-term stewardship of the site. Risk-Based Corrective Action (RBCA) process was used as a guide in developing the criteria.

Contaminants covered/excluded: 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, criteria must be proposed and submitted to DEP and the Department of Public Health (DPH) for review and approval. The Commissioner can require additional remediation.

Use of long-term stewardship and institutional controls (IC):

- **IC Tracking:** Environmental land use restrictions (as prescribed in the remediation standard regulations) can only 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. DEP's Web site lists all [Contaminated or Potentially Contaminated Sites](#) and identifies if a site that has been completed in the Brownfields and Voluntary Response Programs has an ELUR and, if so, what type.
- **IC Oversight:** DEP has an environmental land use restriction (ELUR) coordinator who reviews all ELURs for consistency, and conducts inspections of ELURs on a targeted basis.
- **IC Monitoring:** DEP's ELUR coordinator inspected properties with ELURs on an as-needed basis. DEP is currently considering options for long-term stewardship for all sites with institutional and engineering controls. In addition, DEP will soon have a stand-alone list on DEP's Web site that lists all ELURs.

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

Management & Implementation Elements

Voluntary Cleanup Program MOA with EPA: No

Costs to enter program or fees for service:

There are fees for:

- Participation in the Voluntary Remediation Program pursuant to CGS §22a–133x
- A Covenant Not To Sue pursuant to CGS §22a–133aa (fees can be waived in many instances per Public Act No. 07-233, section 12)
- Property transfer filings

There are no fees for:

- Participation in the Voluntary Remediation Program pursuant to CGS §22a–133y
- A Covenant Not To Sue pursuant to CGS §22a–133bb

Funding source for administrative costs and staff:

Funds for staff and administration are from state funds (approximately 65%) and federal grants (approximately 35%).

- DEP's, Bureau of Water Management and Land Reuse, Remediation Division includes 42 full-time equivalent (FTE) staff associated with remedial activities, most of who work on non-National Priorities List (NPL) site cleanups. The Attorney General's office provides legal support with two to three attorneys spending some portion of their time on state Superfund and enforcement of remedial action orders.

Cleanup Activities

Sites currently in Brownfields and Voluntary Response Programs:

- More than 93 sites are currently in the Urban Sites Remedial Action Program (private and state funded)
- 367 sites are currently in the Voluntary Remediation Programs
 - 309 in CGS §22a-133x
 - 58 in CGS §22a-133y
- 2,666 sites (Form III filings) are currently in the Property Transfer Program
- 171 sites (Form IV filings) are currently in the Property Transfer Program

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- More than 3,250 sites in Brownfields and Voluntary Response Programs

Sites Completed under the Brownfields and Voluntary Response Programs:

- More than 30 sites have been completed under the Urban Sites Remedial Action Program (private and state funded)
- 25 sites have been completed under the Voluntary Remediation Programs
 - 18 completed under CGS §22a-133x
 - 7 completed under CGS §22a-133y
- 216 sites (Form III filings) have been completed under the Property Transfer Program
- 27 sites (Form IV filings) have been completed under the Property Transfer Program

Benefits (incentives to participate, covenants not to sue, etc.):

- A full economic impact analysis of the state's Brownfield and Voluntary Response Programs has not been conducted.
- DEP has observed a notable increase in use of brownfields for parks, open space, schools, day-care facilities, and recreational uses since the legislature increased DECD's authority to address environmental liability concerns.
- Approximately 40 Covenants Not To Sue (CGS §22a-133aa) have been issued by the Commissioner to both property owners and prospective purchasers. Every site completed under the Brownfields and Voluntary Response Programs is afforded the protections of a Covenant Not To Sue pursuant to CGS §22a-133bb.
- Since the program's inception in 1992, more than \$24,000,000 of the \$30,500,000 provided has been allocated to investigate and remediate contaminated urban sites. It is estimated that the 11 state-funded sites will create 2,500 construction jobs and a minimum of 5,000 permanent jobs in manufacturing, service, retail, research, and entertainment. In addition, a minimum of \$6,000,000 in annual municipal tax revenue will be generated. Additional jobs and associated benefits will be gained through responsible party redevelopment of urban sites with the cooperation of DEP.

Public Participation

Public participation requirements (notice, comment periods, etc.): The state's voluntary cleanup law and the remediation standard regulations require public notice of certain activities, and an opportunity for comment, as well as public hearings if there is substantial public interest in the remediation or other activity. The regulations also provide for public notice and an opportunity for a public hearing when the Commissioner is asked to approve a request by a property owner for an engineered control, such as a cap, to address polluted soil. Public notice of proposed environmental land use restrictions (with opportunity to comment) is also required. For state-funded projects, DEP holds public meetings at various stages of the investigation and cleanup. DEP also keeps local officials informed of the status of state-funded projects.

Public participation activities (hearing, meetings, etc.): See previous section.

General Information

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<http://www.maine.gov/dep/rwm/vrap/index.htm>

Program Description (VCP, brownfields, or related)

Brownfields definition: No information available

Program titles: Voluntary Response Action Program (VRAP)

Liability relief provisions:

- Offers Certificate of Completion (COC) for all pollutants identified in site assessment and cleanup to the program's satisfaction.
- Legal authorities include: strict, joint and several, and retroactive liability; orders for information; site access and remediation orders; administrative order authority; cost recovery; liens and super liens; and punitive damages of treble the state's costs. The Commissioner must designate a site for a consent decree. Penalty authority is derived from the hazardous waste statute. DEP also has a property forfeiture provision.

Financial incentives (grants, loans, tax provisions, etc.):

- Targeted Brownfields Site Assessment grants (contractor services) to municipalities for site assessment of tax delinquent properties.

Legislative or program site eligibility requirements:

- Responsible parties at Resource Conservation and Recovery Act (RCRA) sites are not eligible.
- Responsible parties must conduct full cleanups of all identified contamination; non-responsible parties ((RP) buyers, etc.) may receive protections for partial cleanups.

Financial Elements

Assessment and cleanup funding (source, amount, relationship to VCP/brownfields programs, application process, eligibility requirements, dedication to special types of sites such as petroleum, dry cleaners, abandoned drug labs, etc.):

- Federal Section 128(a) Brownfields grant funding (~\$1.2M)
- State Uncontrolled Sites Fund for staff time. Voluntary Cleanup Program (VCP) has the authority to seek recovery of all costs paid out of this fund.

Tax incentives (abatements, credits, etc.): None

Other forms of support (environmental insurance, brownfields redevelopment authorities, etc.): The state's voluntary program is an alternative to the state's regular cleanup program. Some monies are dedicated to fund the state's participation; participants pay a \$500 application fee and are charged for time spent by the state. Site owners are able to get full or partial liability releases depending on the cleanup work carried out at the site. Incentives for participation include getting sites back into economic use and getting a certificate from the state indicating that cleanup was completed to the state's satisfaction. An inter-agency team is identifying potential resources to promote brownfields redevelopment.

Program Elements

Technical Elements

Methods/standards/controls: Draft cleanup guidelines consider three separate exposure scenarios for soil contact: residential, commercial/industrial, and trespasser. Alternatively, a site-specific goal may be established using the state's risk-assessment guidance document. If these options fail, applicants may follow a Risk-Based Corrective Action (RBCA)-like process, which always includes institutional controls.

Contaminants covered/excluded: All hazardous substances/wastes and petroleum.

Use of long-term stewardship and institutional controls (IC): Institutional controls are part of most certifications at VRAP sites. All institutional controls are completed and recorded at the registry of deeds pursuant to the states' Uniform Environmental Covenants Act (UECA).

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.maine.gov/dep/rwm/data/remdescriptanddata.htm>

Maine

Management & Implementation Elements

Voluntary Cleanup Program MOA with EPA: No, but the state has met the “Four Elements” and “Public Record” requirements.

Costs to enter program or fees for service: \$500 application fee and reimbursement of all staff costs.

Funding source for administrative costs and staff:

See “Financial Elements” above.

Cleanup Activities

Sites currently in VCP: 71 sites are underway.

Sites completed under VCP:

- 475 sites completed investigation and remedial action as of January 1, 2008.
- Since the VRAP’s inception in 1993, 579 sites have applied to the program, with final VRAP certification documents being issued at 475 sites. The program has collected about \$410,000 in fees.

Benefits (incentives to participate in the VCP, covenants not to sue, etc.): Economic impacts are not formally tracked, but the state documented specific sites, such as the Bangor Gas Works site, which increased state tax revenues by \$1,300,000 annually. A number of remediated sites are now parks, ball fields, and at least two marinas.

Public Participation

Public participation requirements (notice, comment periods, etc.): There is a guidance document, the “Voluntary Response Action Program Public Communication Decision Matrix,” that went into effect on January 1, 2008, that directs public communication at VRAP/brownfields sites.

Public participation activities (hearing, meetings, etc.): Hearings and/or meetings are viable methods in the matrix.

Statutory Authorities

The Uncontrolled Hazardous Substance Sites Act, Maine Rev. Stat., Title 38, §§1361 through 1371 (1983, as amended 1985, 1987, and 1990), establishes the Uncontrolled Sites Fund and authorizes DEP to clean up uncontrolled hazardous substances sites. The law provides for: enforcement; strict, joint, and several liability; cost recovery; and natural resources damages assessment and recovery. Maine Rev. Stat., Title 38, §§343–E (1993), creates a program for voluntary cleanup of hazardous waste sites.

General Information

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Program Description (VCP, brownfields, or related)

Brownfields definition: No official definition has been adopted in Massachusetts.

Program titles:

- Privatized, Voluntary Cleanup Program (1993)
- Massachusetts Brownfields Act (1998)

Liability relief provisions:

- Under state cleanup laws (Massachusetts General Laws, Chapter 21E) there is strict, joint, and several liability for current and past owners/operators of contaminated property.
- The Massachusetts Brownfields Act amended Chapter 21E to provide liability protection for several types of parties involved in brownfields projects:
 - Eligible Persons: Owners/operators who did not cause or contribute to contamination at the site who meet other statutory requirements receive liability protection upon the completion of a cleanup from Commonwealth claims for response action costs and third party claims for property damage.
 - Downgradient Property Owners: Exempts certain owners and operators from liability for contamination that has migrated onto their property provided statutory requirements are met. Owners and operators are eligible if they have had no connection with the property that contains the source of the contamination and they did not cause or contribute to the contamination.

- Tenants: Exempts certain tenants from operator liability provided certain statutory requirements are met. Those include the requirement that their tenancy must have begun after the release was reported to MassDEP, and they did not cause or contribute to the contamination.
- Redevelopment Authorities, Redevelopment Agencies, and Community Development Corporations (CDCs): Exempts redevelopment agencies and authorities, CDCs, and Economic Development and Industrial Corporations (EDICs) provided statutory requirements are met. Those include the requirements that they: did not cause or contribute to the contamination; respond to imminent hazards; and act diligently to divest themselves of the property.
- Secured Lenders: Exempts secured lenders who take ownership of contaminated property through foreclosure provided they meet statutory requirements, including acting diligently to divest of the property.
- The Brownfields Act created the Brownfields Covenant Not to Sue (CNTS) Program administered by the Massachusetts Office of the Attorney General to provide liability protection for projects not covered by liability protection offered directly under the statute. For example, the CNTS can be offered to a causally responsible party, someone who is not eligible for liability relief under the statute. Protection through the CNTS is also available to an eligible person who can reach only a temporary solution. Statutory protection is provided only when a permanent solution is reached. Liability relief is offered to applicants as an incentive towards, and in return for, cleanup, redevelopment, and settlement of cost recovery claims at the site.

Financial incentives (grants, loans, tax provisions, etc.):

- The state offers assessment and cleanup loans for brownfields projects located in economically distressed areas through the Brownfields Redevelopment Fund administered by MassDevelopment. Several tax incentive programs are available.
- The state dedicates a portion of its federal brownfields funding to implement site assessment and cleanup projects to facilitate property turnover and redevelopment.

Legislative or program site eligibility requirements:

- Permanent cleanup solutions must eliminate significant risk of harm to health, safety, public welfare, and the environment. Where remedial action is taken, cleanup to background conditions is required when feasible. Temporary solutions are required if a permanent solution is infeasible.

Massachusetts

- Activity and Use Limitations are required if the remediation levels are based on anything less than the most sensitive (i.e., residential) use. Use restrictions are implemented through a deed notice or deed restriction.
- Eligibility requirements for incentive programs created by the Brownfields Act differ, depending on the program.

Financial Elements

Assessment and cleanup funding (source, amount, relationship to VCP/brownfields programs, application process, eligibility requirements, dedication to special types of sites such as petroleum, dry cleaners, abandoned drug labs, etc.):

- The Waste Site Cleanup Program is funded by the state general fund with support from federal grant programs.
- Bonds fund state response actions – roughly \$6,000,000 was expended from the bond fund during FY06, based on estimates as of July 2006. Of that total, \$4,900,000 was spent for non-National Priorities List (NPL) sites, with \$1,100,000 spent on NPL sites. Since 1983, MassDEP spent approximately \$183 million. As of July 2006, a balance of approximately \$42,000,000 remained in the bond fund. Bond funds may be used for site investigation, studies and design, removals, emergency response, remedial actions, Comprehensive Environmental Response Compensation and Liability Act (CERCLA) match, operations and maintenance, and grants to citizen groups and local governments for technical assistance.
- Brownfields and Related Economic Development Programs – The Brownfields Redevelopment Fund (BRF) Program provides interest-free site assessment financing of up to \$100,000. The borrower or project sponsor must be an “eligible person,” as defined by statute, with site control or evidence of the right to enter the site for purposes of conducting environmental testing. The BRF program also offers low-interest financing of up to \$500,000 for cleanup. Remediation loans are secured by a mortgage (or other substantial collateral), and the borrower must be the owner of the site. Terms are flexible and determined on a case-by-case basis.
- Approximately 10% of the state’s federal brownfields grant funding is dedicated to site-specific assessment and cleanup projects as an incentive to redevelopment. As of July 2007, the state initiated or completed 21 site assessments and three site cleanups using such funding.

Tax incentives (abatements, credits, etc.):

- Brownfields Tax Credit for remediation—25% (with reuse restrictions) or 50% (without reuse restrictions), for eligible persons who complete projects in Economically Distressed Areas (EDAs).
- Municipal Tax Abatement—Municipalities can negotiate back taxes on contaminated sites in exchange for commitment by a new owner to clean and restore site to tax rolls.

- Economic Development Incentive Program (EDIP)—Tax increment financing, abandoned building tax deduction, and investment tax credit for revenue generating projects located in Economic Target Areas (ETAs).

Other forms of support (environmental insurance, brownfields redevelopment authorities, etc.):

Brownfields Redevelopment Access to Capital (BRAC)—State subsidized, volume discounted environmental insurance provided through a private insurer and administered by MassBusiness. Pollution Legal Liability and Cleanup Cost Cap coverage is available. The state subsidizes premiums on policies up to 50%.

Program Elements

Technical Elements

Methods/standards/controls:

- A risk-based regulatory program is in place; it offers a choice of a chemical-specific approach with numerical standards, or a cumulative-risk approach based on site-specific information.
- Regulations (the Massachusetts Contingency Plan) set out three methods for establishing cleanup standards at disposal sites. The first method relies on numeric cleanup standards for 120 chemicals in three ground water categories and three soil categories. The second method allows modification of the Method 1 numeric standards based on site-specific fate and transport information. The third method establishes cleanup goals based on site-specific conditions and a quantitative risk assessment. For sites where a quantitative risk assessment is used to determine cleanup standards, any applicable or suitably analogous Massachusetts health and environmental standards must be met, and cumulative receptor risk limits must be achieved. The cancer risk limit is a cumulative excess lifetime cancer risk of 10⁻⁵. The non-carcinogen risk limit is expressed as a Hazard Index of 1.

Contaminants covered/excluded:

Petroleum, asbestos, volatile organic compounds (VOCs), semi-VOCs, metals, PAHs and polychlorinated biphenyls (PCBs), perchlorate, RDX, and HMX are covered. Lead paint at the point of application, and pesticides that were properly applied, are excluded.

Use of long-term stewardship and institutional controls (IC):

- Activity and Use Limitations (deed notices/restrictions) are used.
- Activity and Use Limitations are filed at county land record offices (Registry of Deeds).
 - **IC Tracking:** Activity and Use Limitations are tracked through publicly available databases, as well as GIS and KML/KMZ files.

Massachusetts

- **IC Oversight:** The state has a Long-Term Stewardship goal of conducting periodic follow-up inspections.
- **IC Monitoring:** There is a state legislative mandate to audit all sites with Activity & Use Limitations. An unfavorable audit may re-open cleanup.

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

<http://www.mass.gov/dep/cleanup/sites/siteactu.htm>

Management & Implementation Elements

Voluntary Cleanup Program MOA with EPA: No

Costs to enter program or fees for service:

Annual Compliance Fees are assessed each year a site until a site is permanently remediated. Permit fees apply to waste site cleanup submittals.

Funding source for administrative costs and staff:

Waste Site Cleanup Program: DEP's Waste Site Cleanup Program has a total of 203 full-time equivalent (FTE) staff. The Bureau of Waste Site Cleanup is the program lead. The Bureaus of Waste Prevention and Resource Protection also have staff dedicated to the program. In addition, 11.5 FTE attorneys from DEP's Office of General Counsel and several attorneys in the Commonwealth's Attorney General's office provide enforcement support. Scientists in DEP's Office of Research and Standards provide risk assessment support at specific sites and in regulation and policy development.

Cleanup Activities

Sites currently in VCP: As of July 2007, 35,927 release notifications have been made to DEP, with about 5,170 still active. Approximately 1,800 new releases enter the program each year.

Sites completed under VCP: From a universe of 35,927 sites that have been reported to DEP, 30,757 sites have been closed out. Beginning in 2002, the number of cleanups per year has surpassed the new notifications.

Benefits (incentives to participate in the VCP, covenants not to sue, etc.): Liability protection is available under Chapter 21E and through the Brownfields Covenant Not to Sue Program.

Public participation requirements (notice, comment periods, etc.): The statute and regulations require public notice of all classifications of disposal sites and applications for Tier I permits for response actions. When citizens petition for community involvement in response actions, a public involvement plan must be prepared. Local officials are informed of key site activities throughout the cleanup process. The person conducting the response action is required to implement required public involvement activities. The CNTS

program requires notice of third parties as part of the covenant negotiation process. The BRF program requires community support letters for all applications.

Public participation activities (hearings, meetings, etc.):

See above

Statutory Authorities

- The Massachusetts Oil and Hazardous Material Release Prevention and Response Act, MGL Chapter 21E: authorizes DEP to ensure the cleanup of sites contaminated by oil or hazardous material. Law provides for: enforcement; strict, joint, and several liability; cost recovery; public participation; natural resources damages assessment and recovery; and voluntary cleanups.
- The Massachusetts Brownfields Act MGL Chapter 206 (1998) authorizes several agencies at the state level to administer financial and liability programs created through this program.

New Hampshire

General Information

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Web site: <http://www.des.state.nh.us/hwrb/hwrbbfld.htm>

Program Description (VCP, brownfields, or related)

Brownfield definition: New Hampshire defines brownfields in statute to be “properties which have been environmentally contaminated, subject to limitations of RSA 147–F:4, II. These limitations include requiring that the property be in compliance with any corrective actions or compliance orders and the property can not be eligible for cost reimbursement from the oil discharge and disposal cleanup fund, the fuel oil discharge fund or the motor oil discharge cleanup fund unless it receives substantially less than full reimbursement from these funds.” In addition, the state uses EPA’s definition as its working definition for broader brownfields redevelopment efforts (including those outside the Voluntary Cleanup Program (VCP).

Program titles: Brownfields Covenant Program (1996)

Liability relief provisions:

- Program offers No Further Action (NFA) letter, Certificate of Completion (COC), and Covenant Not to Sue (CNTS).
- State law provides for strict, joint, and several liability. The state is authorized to issue administrative orders, including orders for information, site access, and site cleanup. The state also has subpoena and consent order authorities. New Hampshire may take injunctive action to induce a generator to clean up a site, may impose criminal penalties, and may bring an action to recover costs. New Hampshire has a first priority lien on: 1) real property (other than residential property) where hazardous waste or hazardous material is located; 2) the business revenues generated from the facility on the real property where the hazardous waste or hazardous material is located; and 3) all personal property located at this facility. A lien without priority, effective as of the date and time of recording and filing, can be established against all other property.

Financial incentives (grants, loans, tax provisions, etc.):

- Municipally-owned sites are eligible for state clean water revolving fund loans (as of October 1, 1999).

- EPA-capitalized Brownfield Cleanup Revolving Loan Fund (RLF) provides low-interest loans and some direct financial assistance to brownfields cleanup. Five loans have been made. Sites statewide are eligible. Loan amounts are typically between \$50,000 to \$500,000, but any amount can be requested and will be considered. Interest rates and terms are negotiable. Interest rate for loans to date is 3%. Loans for environmental remediation may have terms of up to 10 years, but preference is given to shorter term or bridge loans.
- Site investigation and remedial action planning services available to municipalities through DES Brownfields Program (with EPA grant money used to pay state environmental consulting contractors).
- DES established a Cleanup Grant Program under its RLF. The program allows DES to issue cleanup sub-grants up to a maximum of 40 percent of DES’ RLF grant. At present, a total of \$400,000 is available for grants to clean up petroleum sites and a total of \$200,000 is available for grants to clean up hazardous waste/hazardous building materials contaminated sites. No site can receive more than \$200,000 in cleanup grants. Applications for the 2008 grant competition were due February 15, 2008.
- DES cost recovers for staff time associated with the management of contaminated sites. DES has an agreement with EPA which allows DES to use cost recovery income to fund targeted assessments and cleanups at brownfields sites.

Legislative or program site eligibility requirements:

- Cleanup levels must meet or exceed any federal standards. Sites must achieve existing federal standards for ground water and surface water. The state developed a Risk Characterization and Management Policy for soils, which provides for a three-tiered approach to selecting cleanup standards. The first two tiers incorporate established values, while the third tier involves site-specific risk assessment. The state uses risk levels of 10-6 (individual) or 10-5 (cumulative) for carcinogens and a Hazard Index of 1. Where land use assumptions are a basis for establishing cleanup standards, the state may require that “Activity and Use Restrictions” (AUR) be recorded on the deed. In addition, NHRSA Chapter 485 authorizes the state to designate Ground Water Management Zones as a component of ground water remediation, and the law requires that Ground Water Management Zones be recorded in the registry of deeds.
- New Hampshire enacted legislation creating a Brownfields Covenant Program in July 1996. Any property contaminated with hazardous waste, hazardous materials, or oil is eligible, except sites that are being cleaned up through one of the state’s petroleum reimbursement funds and sites that are under an environmental or corrective order (unless participation in the program will bring about compliance). A CNTS which protects against liability under state law, may be issued to participants other than those

New Hampshire

who caused or contributed to the contamination. Cleanup is underway or completed at 23 sites participating in the Brownfields Covenant Program.

- New Hampshire law provides general authority for voluntary cleanups. The state considers voluntary cleanups to be an integral part of its program and essentially all non-National Priorities List (NPL) site cleanups to be voluntary cleanups.

Financial Elements

Assessment and cleanup funding (source, amount, relationship to VCP/brownfields programs, application process, eligibility requirements, dedication to special types of sites such as petroleum, dry cleaners, abandoned drug labs, etc.):

- The Waste Management Division of the DES administers the Hazardous Waste Cleanup Fund (HWCF). The Division's Hazardous Waste Remediation Bureau is primarily responsible for work on federal Superfund and all non-Superfund state sites.
- The balance in the HWCF at the end of FY04 was \$2,894,425. The HWCF is derived primarily from quarterly fees paid by generators of hazardous waste, recovered costs, fines, and penalties. An average of \$1,400,000 is collected each fiscal year. The HWCF can be used for site investigation, operations and maintenance, studies and design, removals, emergency response, remedial action, program administration, and grants to local governments. State law requires that the governor certify that circumstances require use of the fund. NHRSA Chapter 147-B provides for issuing bonds, to be paid from the HWCF, to fund remedial investigation and cleanup. A separate capital bond is appropriated for Comprehensive Environmental Response Compensation and Liability Act (CERCLA) match for each fiscal year.
- DES has established a Cleanup Grant Program under its RLF. The program allows DES to issue cleanup sub-grants up to a maximum of 40 percent of DES' RLF grant. At present, a total of \$400,000 is available for grants to clean up petroleum sites and a total of \$200,000 is available for grants to clean up hazardous waste/hazardous building materials contaminated sites. No site can receive more than \$200,000 in cleanup grants. Applications for the 2008 grant competition were due on February 15, 2008.
- DES cost recovers for staff time associated with the management of contaminated sites. DES has an agreement with EPA which allows DES to use cost recovery income to fund targeted assessments and cleanups at Brownfields Sites.

Tax incentives (abatements, credits, etc.):

- "Qualified holder" provisions of hazardous waste and petroleum statutes provide protection to lenders and municipalities (for tax deeding).

- Brownfields sites are exempt from state hazardous waste generator fees.
- Municipalities can abate taxes at brownfields sites.

Other forms of support (environmental insurance, brownfields redevelopment authorities, etc.): No information available

Program Elements

Technical Elements

Methods/standards/controls: Risk characterization and management policy includes a three-tiered risk-based approach. Contaminant-specific generic soil and ground water cleanup standards are provided in table form; alternatives can be developed based upon site-specific information.

Contaminants covered/excluded: Petroleum, asbestos, lead paint, polychlorinated biphenyls (PCBs) all OK.

Use of long-term stewardship and institutional controls (IC):

- AURs are used when the risk characterization depends upon the restriction of site activities and uses to achieve or maintain protection of human health and/or environment. After completion of active remedial measures, a ground water management permit (an institutional control itself) is typically issued to monitor ground water quality until it meets standards.
- When properly applied, AURs are protective and provide for cost-effective risk management. Use of AURs has helped make site redevelopment feasible at some sites.
- **IC Tracking:** Require responsible parties (RPs) to submit draft Notices of Activity and Use Restriction to the Department. Groundwater use is addressed under Groundwater Management Permits and a Notice of Groundwater Management Permit is recorded in the chain of title for each property located within the permit Groundwater Management Zone. Copies of Recorded Notices of Activity and Use Restriction and Notices of Groundwater Management Permit bearing the County Registry of Deeds stamp are required. The Department posts all draft Notices, Groundwater Management Permit Applications, Final recorded Notices of Activity and Use Restrictions, and Groundwater Management Permits on our OneStop database for public access.
- **IC Oversight:** The Department reviews and approves all draft Notices of Activity prior to recordation in the chain of title for a site.

New Hampshire

- **IC Monitoring:** The Department does not currently have a program for monitoring compliance with Notices of Activity and Use Restriction. However, the Department is considering instituting a trial monitoring program in the future. RPs and subsequent site owners are required to submit self-certification forms to the Department on an annual basis to demonstrate continued compliance and awareness of the Notice of Activity and Use Restriction. Groundwater Management Permits require periodic submittal of ground water monitoring results and Annual Groundwater Monitoring Summary Reports.

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://www2.des.state.nh.us/OneStop/>

Management & Implementation Elements

Voluntary Cleanup Program MOA with EPA: No

Costs to enter program or fees for service: There is a \$750 application fee and a \$4,500 participation fee for the Brownfields Covenant Program. The state also exercises its statutory authority to recover actual personnel and overhead costs for DES staff who work on contaminated sites investigation and remediation within the voluntary cleanup program.

Funding source for administrative costs and staff:

The Bureau has 25 full-time equivalent (FTE) staff, 15 of whom work on non-NPL sites. The Department of Justice (Office of the Attorney General) provides legal support through 4.5 FTE attorney positions and receives an annual appropriation from the HWCF. The program's funding comes from the HWCF (20%) and federal grants (80%).

Cleanup Activities

The state generally does not undertake remediation at non-NPL sites. About 83 non-NPL sites are currently being cleaned up. Approximately 158 sites have been cleaned up on a voluntary basis since the start of the program, with about 17 completed in the past fiscal year. In addition to staff and administration, the HWCF has been used for emergency removal activities and for various hydrogeological studies at sites in the preliminary stages of investigation.

Sites currently in VCP: Since inception, 40 sites have enrolled in program.

Sites completed under VCP: Site remediation has been completed and covenants have been issued at 17 sites in the Brownfields Covenant Program.

Benefits (incentives to participate in the VCP, covenants not to sue, etc.):

- About 1,600 jobs were created or retained. Redevelopment uses included hotel/conference center, multi-tenant office, small businesses, light manufacturing, town office complex, public parks, residential town houses, and a variety of other uses. In excess of \$50,000,000 in new capital investments in sites was leveraged.
- New Hampshire state and local governments have seen increased business and property tax revenues, but these have not been quantified. A good example—the former Whitney Screw site project in Nashua, New Hampshire—won an Environmental Merit Award in 2002. It used the Brownfields Covenant Program, Brownfields Cleanup RLF program, and state petroleum reimbursement funds to leverage private redevelopment investments in excess of \$3,500,000.

Public Participation

Public participation requirements (notice, comment periods, etc.): The state is working to develop public participation procedures in conjunction with its grant funding under the CERCLA 128(a) State and Tribal Response Program Grant. DES continues to maintain and update its inventory of brownfields sites. A list of active brownfields sites regardless of the funding source can be accessed by the public from DES' Web site at www2.des.state.nh.us/OneStop/ORCB_Brownfields_Results.aspx. A list of closed Brownfields Site regardless of the funding source can be accessed by the public at www2.des.state.nh.us/OneStop/ORCB_Closed_Brownfield_Results.aspx. These two search features are being revised to capture the full universe of sites managed under the Brownfields Program umbrella. The revisions to these search features are expected to be completed May 30, 2008.

A "Master List" of contaminated sites currently being managed by DES and sites closed by DES can be viewed in DES' OneStop database at www2.des.state.nh.us/OneStop/DES_Master_Query.aspx. This database allows the public to search for a listing of sites by the municipality in which they are located.

DES' OneStop database also allows the public to search for sites with Groundwater Management Permits and Release Detection Permits (two forms of Institutional Control) by the municipality in which they are located. Please refer to www2.des.state.nh.us/OneStop/ORCB_Query.aspx?Project=GWP for this search feature. The OneStop database also allows the public to search for sites at which remedial actions and initial response actions were completed. Please refer to www2.des.state.nh.us/OneStop/ORCB_Query.aspx?Project=CST for this search feature. These Web site search features do not currently allow the user to generate a statewide list of sites with ground water management permits or completed remedial actions or initial response actions. DES is in the process of revising the Web site to allow for statewide listings. These revisions are expected to be completed May 30, 2008

New Hampshire

REGION 1

DES also continues to update its Brownfields Program Web site at www.des.state.nh.us/BrownfieldsNH. The Web site now provides the following: (a) a tabular list of all brownfield sites at which CERCLA 128(a) funds have been spent to complete site assessments and/or cleanups using DES contractors (Table I); (b) a tabular list (Table II) of all brownfield sites closed during the last grant period regardless of the funding source; and (c) a tabular list (Table III) of all brownfields sites regardless of the funding source where DES anticipates cleanup activities will be completed in 2008.

To make the Web site more informative to the public and EPA, DES is in the process of adding the following information to the Brownfields Program Web site: (a) a tabular list of all brownfield sites regardless of the funding source where contaminant exposure hazards have been managed via recordation of a Notice of Activity and Use Restriction (a form of institutional control); (b) a tabular list of all Brownfields sites that are the subject of long-term groundwater monitoring under a Groundwater Management Permit (a form of institutional control); and (c) a tabular list of all brownfield sites that have received a "Covenant Not To Sue." These search items will be dynamic and will be linked to the OneStop database. DES anticipates completion of these Brownfields Program Web site revisions by May 30, 2008.

Public participation activities (hearing, meetings, etc.):

DES participates in public meetings on a site specific basis. Publication of a notice of approved remedial action plan and a 30-day public comment period are required for all sites participating in DES' Brownfields Covenant Program. Public meetings are also held on a site specific basis for non-covenant sites based on the complexity of the proposed remedial action and/or the level of public interest/concern.

Statutory Authorities

- The New Hampshire Hazardous Waste Cleanup Fund Act (HWCF), NHRSA Chapter 147-B (1981, as amended 1983, 1985, 1986, 1987, 1990, 1991 and 1996), establishes the Hazardous Waste Cleanup Fund and authorizes the DES to use the fund for expenses directly associated with cleanup of hazardous waste or hazardous materials. The law provides for: enforcement; strict, joint, and several liability; and cost recovery. NHRSA Chapter 147-B and Chapter 147-A (hazardous waste management), provide general authority for voluntary cleanups.
- NHRSA Chapter 485 (1996) and the Groundwater Protection Rules, ENV-Ws 410, authorize the designation of Ground Water Management Zones as a component of the remediation of contaminated ground water and provide for the issuance of permits for the remediation. The law also requires recipients of a permit to record notice of the Ground Water Management Zone designation with the registry of deeds.
- NHRSA Chapter 147-F (1996), establishes the state's brownfields program.

- Env-Or 600 establishes rules for the reporting, investigation, and remediation of contaminated sites and establishes soil and ground water remediation standards. Copies of Env-Or 600 can be downloaded at www.des.state.nh.us/rules/Env-Or600.pdf
- Env-Or 800 establishes rules for participation in, and management of, DES' Brownfields Covenant Program. Copies of Env-Or 800 can be downloaded at www.des.state.nh.us/rules/Env-Or800.pdf

Rhode Island

General Information

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Web site: <http://www.dem.ri.gov/brownfields>

Program Description (VCP, brownfields, or related)

Brownfields definition: Rhode Island does not define a brownfields in statute or regulations, but DEM relies on the Brownfields Law definition.

Program titles: Industrial Property Remediation and Reuse Program (1995)

Liability relief provisions: Under state law, all parties responsible for contamination at a site (“responsible parties” or “RPs”) 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. A person or entity can become a liable RP simply by acquiring ownership of or using a site that was contaminated by past activities. In addition to becoming liable for site cleanup, RPs may also be subject to administrative or judicial legal action, civil and criminal penalties, treble damages, and payment of costs incurred by the state in its handling of the contaminated site. An RP that participates in a cleanup, can receive a Letter of Compliance from DEM indicating that the remediation is complete. The brownfields program allows non-RPs—typically prospective purchasers or users—to protect themselves from liability of a contaminated site. Under the brownfields program, a non-RP that is interested in buying, using, developing, or remediating a contaminated site can become eligible to receive a Covenant Not to Sue (CNTS) that protects against liability from the state following completion of a DEM-approved cleanup, performed pursuant to a Brownfields Remedial Agreement. (Settlement Agreements and Covenants Not To Sue were removed from Brownfield statute and were replaced by Remedial Agreements). Although one or more RPs or potential responsible parties (PRPs) are often the parties that actually perform the cleanup, RPs and PRPs are not eligible to receive a CNTS.

Financial incentives (grants, loans, tax provisions, etc.): EPA-capitalized Brownfields Cleanup Revolving Loan Fund (RLF) provides low-interest loans for site cleanup.

RIDEM received funding for site assessment work for municipalities and nonprofit associations, through EPA Brownfield Assessment grants and the EPA Section 128(a) funding to the state. Applications are accepted on a rolling basis.

The Rhode Island Mill Building and Economic Revitalization Act offers a 10% tax credit on the cost of substantial rehabilitation for certified sites.

Incentives are available to lenders that provide financing to mill developers.

Legislative or program site eligibility

requirements: Cleanup levels are determined on a case-by-case basis, using water quality criteria, Maximum Contamination Level/Maximum Contamination Level Goal (MCLs/MCLGs), ground water standards, background levels, EPA guidelines and generic risk-based soil standards developed by the state. The state also uses site-specific risk assessment. The remedial objective for each carcinogenic substance cannot exceed a 1×10^{-6} excess lifetime cancer risk level and the cumulative excess lifetime cancer risk posed by the contaminated-site cannot exceed 1×10^{-5} . The remedial objective for each non-carcinogenic substance does not exceed a Hazard Index of 1 and the cumulative Hazard Index posed by the contaminated-site does not exceed 1 for any target organ. The state considers assumptions about future land use in establishing cleanup levels. Where remediation standards are based on land use restrictions, the state requires that environmental land usage restrictions (ELURs) be recorded with the title and that restrictions are annually monitored in order to ensure compliance with the Remediation Regulations.

Voluntary cleanups are handled under the regular cleanup program. Although anyone is eligible, non-PRPs may obtain a CNTS and protection from contribution actions. The brownfields program targets any underutilized site where contamination or suspected contamination impedes development. Participating sites may receive liability protection.

Highlights of the changes to the state brownfields legislation:

- **Establishment of Remedial Agreement:**
 - No new proposals for settlement agreements after 12/31/2006
 - No execution of settlement agreements after 6/30/2007
 - New remedial agreements after 6/30/2007
 - Remedial agreement boilerplate format is currently under development. The remedial agreement is intended to be far simpler than the settlement agreement and is intended to improve the time involved by limiting unnecessary negotiations.

- **Deferral of Cleanup Obligations During Marketing:**
 - A responsible party may defer their cleanup obligations for up to three (3) years if they conduct, or allow another party to conduct, an investigation of the site; provided, however, that: (1) the site has not been subject to previous notification; (2) any imminent threat to human health, public safety, or the environment, as determined by the department; and (3) any contamination found that is migrating off-site, or presents a threat to migrate off-site within one year. A responsible party may only defer cleanup obligations when the delay will not aggravate or contribute to a release at the site and the results of those investigations are submitted to the department of environmental management in a timely manner.
- **Due Diligence Requirements for Sensitive Reuse Scenarios:**
 - Addresses a high priority concern regarding development of brownfields sites by requiring a new public participation process for sensitive reuse scenarios (e.g., schools, day care facilities, and recreational facilities for public use) that prohibits investigation, remediation or construction until the conclusion of a public comment period (except for imminent public health and/or environment hazards and off-site migration scenarios). Allows for greater public participation by residents when brownfield sites are going to be re-developed for a clear public use—schools, parks, and recreational facilities being important examples.

Financial Elements

Assessment and cleanup funding (source, amount, relationship to VCP/brownfields programs, application process, eligibility requirements, dedication to special types of sites such as petroleum, dry cleaners, abandoned drug labs, etc.): The Rhode Island Targeted Brownfields Assessment (TBA) Program is funded by EPA and administered through DEM's Office of Waste Management. The purpose of the TBA program is to provide environmental site assessments of brownfield properties in order to determine the actual extent and severity of contamination—if any is present. This program is targeted specifically at government, tribal, and nonprofit organizations that are not considered RPs relative to the contaminated property. The TBA is conducted by one of DEM's technical assistance contractors (TACs) with direct oversight and control by Department personnel. The TBA Report, generated by the performance of the TBA, fully meets the Site Investigation requirements of Section 7.0 of the Rules and Regulations for the Investigation and Remediation of Hazardous Material Releases (Remediation Regulations). The TBA Report also provides a preliminary cost estimate for any remediation that may be required to bring the site into compliance with the Remediation Regulations. Due to

the fact that the DEM generates the TBA Report, it enjoys a higher level of acceptance with the business and environmental communities and eliminates the uncertainty surrounding the required cleanup of the property, thereby facilitating its redevelopment and reuse.

Tax incentives (abatements, credits, etc.):

- There are Mill Building Tax Credits for investors in 11 participating municipalities. The Economic Development Corporation (EDC) oversees the program aimed to assist developers in renovating certified mill buildings.
- There are Historic Mill Building Tax Credits for the rehabilitation of historic commercial structures. The Rhode Island Historic Preservation and Heritage Commission administers both the federal and new state tax credit programs. The state tax credit may be altered or eliminated during the current legislation due budget issues.

Other forms of support (environmental insurance, brownfields redevelopment authorities, etc.):

- The state EDC in coordination with DEM administers a Brownfields Cleanup Revolving Loan Fund. EDC acts as the Program Manager and DEM acts as the site manager. Grants are available to nonprofits and municipalities under the RLF.

Program Elements

Technical Elements

Methods/standards/controls: The Remediation Regulations were amended on February 24, 2004. The changes include the following: 1) revised arsenic standards for residential and Industrial/Commercial Direct Exposure Criteria both raised to 7.0 mg/kg; 2) special requirements for managing arsenic in soil—Section 12; and 3) additional revisions and clarifications in Sections 1 through 14, including the appendices.

Contaminants covered/excluded: Petroleum and polychlorinated biphenyls (PCBs) are included under the site Remediation Regulations. Lead-based paint from industrial/commercial properties also are covered under the regulations, but only in cases where they are in the environment and not still on a structure. Lead-based paint contamination at residential properties falls under the jurisdiction of the Department of Health when the source of the contamination is the residence. Some jurisdiction remains under the Remediation Regulations if the source is from some other structure such as a water tank or a bridge.

Use of long-term stewardship and institutional controls (IC): State supports the use of Environmental Land Usage Restrictions (ELURs) on industrial/

Rhode Island

commercial properties when warranted. Monitoring wells and annual ELUR compliance monitoring usually are required. Benefits of institutional controls are that more sites are being cleaned and reused. Community concerns are being addressed by mandatory public notice requirements at various points in investigation and remedy selection and there are special 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.
- **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 self-monitoring of the ELURs by the property owners since approximately 1999.

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.dem.ri.gov/brownfields/documents/#pubrecrd>

Management & Implementation Elements

Voluntary Cleanup Program MOA with EPA: February 1997

Costs 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.

Funding source for administrative costs and staff: Previously the majority of the program was supported by out-of-state funds, however brownfields funding, from EPA Subtitle C of the federal Brownfields Law, is currently paying for some administrative costs and staff.

DEM Bureau of Environmental Protection, Office of Waste Management, has 47 full-time equivalent (FTE) staff. Federal grants provide the majority of funding for staff and administration, with the remainder coming from the state general fund.

Cleanup Activities

Sites currently in VCP: 785 sites are currently underway; 133 sites entered into settlement agreements and CNTS—totaling 1150 acres.

Sites completed under VCP: 41 sites completed the Voluntary Cleanup Program (VCP) program during the last fiscal year. Approximately 875 sites completed the VCP.

Benefits (incentives to participate in the VCP, covenants not to sue, etc.): An estimated 2,014 jobs were created; 133 businesses were created or retained on brownfields sites;

based on the 133 sites with agreements in place, new value of remediated properties is \$108,998,486; they generated approximately \$2,496,000 in sales and property taxes, and \$6,992,278 in income tax revenues.

Public Participation

Public participation requirements (notice, comment periods, etc.): State law and regulations require community involvement in investigation and remediation of contaminated sites, including notification to nearby residents of proposed site investigations, availability of records, notice, and comment on proposed settlement agreements, and notice and comment on the technical feasibility of proposed remedies. DEM policy is to expand public participation opportunities; DEM sought to implement this policy through the public notice and comment process, as well as through agency program planning meetings. DEM expanded Public Notice requirements on sites in environmental justice (EJ) areas during the last fiscal year. The current policy guiding these sites will be adjusted based on practical experience gained through use and is expected to be adopted into Statute or Regulation at some point in the future.

Public participation activities (hearing, meetings, etc.): Based on the proposed reuse and nature of the site, DEM has the flexibility in its public notice requirements to require public meetings and hearings. DEM found the need to require public meetings when brownfield properties are being redeveloped as schools, daycare facilities, and recreational facilities for public use.

Statutory Authorities

- The Hazardous Waste Management Act, R.I. Gen. Laws, §§23–19.1–1 through 23–19.1–33 (1978, as amended, 1979, 1984, 1987), establishes the Environmental Response Fund and authorizes DEM to clean up abandoned, uncontrolled, and/or inactive sites. The law provides for: enforcement; joint and several liability; cost recovery; natural resources damages assessment and recovery; and public participation.
- The Industrial Property Remediation and Reuse Act, R.I. Gen. Laws §§23–19.14–1 through 23–19.14–19 (1995), provides for voluntary cleanup and brownfields cleanup, and clarifies enforcement authorities and public participation.

General Information

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<http://www.anr.state.vt.us/dec/wastediv/SMS/brownfields-home.htm>

Program Description (VCP, brownfields, or related)

Brownfields definition: Vermont's Redevelopment of Contaminated Properties Program (see below) defines brownfields as properties at which there is an actual or threatened release of a hazardous material, and which are vacant, abandoned, or substantially underutilized, or are to be acquired by a municipality.

Program titles:

- Redevelopment of Contaminated Properties Program (RCPP), 10 V.S.A. §6615a. This brownfields program provides participants with a limitation of environmental liability in exchange for cleanup of a contaminated property. Participation in the RCPP is open to prospective purchasers and 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. As indicated by the above definition, a property must be vacant, abandoned, or substantially underutilized, or to be acquired by a municipality, in order to be enrolled in the RCPP. National Priorities List (NPL) sites are excluded, as are sites subject to Resource Conservation and Recovery Act (RCRA) corrective action requirements and sites regulated under the Leaking Underground Storage Tanks (LUST) program. As indicated below, many brownfields redevelopment projects in Vermont take place outside of the RCPP, through the use of a less formal, voluntary cleanup process. In those instances, the property owner does not receive the broad level of environmental liability protections afforded by the RCPP, but rather receives a state sign-off that is subject to re-openers. Participation in the RCPP also enables access to the state's Brownfields Revitalization Fund (see below).

- Vermont does not have a formal Voluntary Cleanup Program (VCP) for responsible parties that do not otherwise qualify for participation in the RCPP. However, the state does encourage and support voluntary cleanups, and many brownfields projects are handled in this manner. In those instances, the property owner receives a Sites Management Activities Complete (SMAC) letter. This letter is issued when the state is satisfied with the work performed at the property. However, the state reserves the right to re-open the matter and require additional work in the future.

Liability relief provisions:

- The RCPP provides participants with a Certificate of Completion (COC). The COC limits the property owner's environmental liability by eliminating the possibility of future enforcement actions by the state (with limited exceptions, such as fraud or releases which occur subsequent to the cleanup). The limitations conferred by the COC are permanent and benefits include the following: the liability limitation applies to the entire property; is transferable to successor owners; and extends to cover future regulatory changes which may result in more stringent cleanup standards or the designation of previously unregulated materials as hazardous. COC recipients are also protected from contribution claims brought by responsible parties. Protection from third-party claims is not provided. For participants that enter the RCPP prior to acquiring the brownfield property, the COC may be issued upon "substantial completion" of the cleanup contemplated by the approved Corrective Action Plan. For participants that own the property at the time of entry into the RCPP, the COC is issued upon completion of all activities identified in the Corrective Action Plan.

Financial incentives (grants, loans, tax provisions, etc.):

- The RCPP contains a cleanup cost increase protection provision. This provision applies to RCPP participants that enroll in the program prior to acquiring a brownfield property and limits the state's ability to unilaterally modify an approved CAP when that modification would result in a cleanup cost increase of more than 30% of the estimated costs of completing the original CAP.
- The Brownfields Revitalization Fund (BRF) provides grants and loans to eligible parties for site investigation and cleanup at brownfield properties. With very limited exception, applicants for a grant or loan must be enrolled in the RCPP. Applicants must also have a state approved work plan for the phase of the project for which assistance is sought. The state initially capitalized the BRF with \$400,000 and subsequently received a \$1,000,000

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Revolving Loan Fund grant from EPA. As of December 2007, approximately \$250,000 of the state funds had been committed and a loan for approximately \$85,000 of the EPA funds was pending closing.

- The state has a Direct Assistance Program for municipalities, nonprofits, and private parties involved in brownfields reuse projects. Under this program, the state contracts with qualified environmental professionals who perform the work for which assistance is sought. This work may include site investigation, cleanup planning, and actual cleanup. Applications are scored based on the project's ability to accomplish state brownfield reuse goals. Primary goals are protection of environmental and human health along with economic development – which may include job creation or retention, creation of affordable housing and creation of greenspace. Additional goals include smart growth, green development, and ecological enhancement.
- The state's Petroleum Cleanup Fund (PCF) has been utilized in connection with brownfield projects. The PCF reimburses eligible parties for the costs of investigating and remediating accidental releases from above-ground and underground storage tanks.

Legislative or program site eligibility requirements:

- See discussion on RCPP, above.

Financial Elements

Assessment and cleanup funding (source, amount, relationship to VCP/brownfields programs, application process, eligibility requirements, dedication to special types of sites such as petroleum, dry cleaners, abandoned drug labs, etc.):

- See financial incentives, above.

Tax incentives (abatements, credits, etc.):

- Tax incentives for rehabilitation of existing properties in designated "downtown" areas; not specific to brownfields, but contaminated properties are eligible.
- Participants in the RCPP 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.

Other forms of support (environmental insurance, brownfields redevelopment authorities, etc.):

- The Vermont Community Development Program, using Housing and Urban Development (HUD) grant funds, accepts applications for assistance with brownfields investigations and cleanups as part of a qualified community development project. Applications are only accepted from municipal entities who may then sub-grant funds to nonprofits or loan funds to for-profit entities.
- The BRF will provide grants to assist with the purchase of environmental insurance in connection with implementation of a state approved work plan.

Program Elements

Technical Elements

Cleanup standards are determined on a case-by-case basis. The state uses water quality criteria (based on the state ground water statute), Maximum Contamination Level/ Maximum Contamination Level Goal (MCLs/MCLGs), and EPA guidelines (e.g., soil cleanup standards) in conjunction with risk assessments. The state uses a risk level of 10-6 for excess cancer cases and a Hazard Index of 1 for non-carcinogens. The state considers assumptions about future land use in establishing cleanup standards. Zoning restrictions are used to support land use assumptions, and the state utilizes deed restrictions.

Methods/standards/controls: No formal Risk-Based Corrective Action (RBCA) or comparable/informal process in place. State uses EPA Preliminary Remediation Goals (PRGs) as screening values, and allows for site-specific or risk-based evaluations of alternative standards. DEC is developing a procedure for determining site-specific remediation standards that consider the future land use, appropriate use of institutional controls, environmental media, requirements for source removal, treatment or containment, and other related issues.

Contaminants covered/excluded: Asbestos, lead paint, and polychlorinated biphenyls (PCBs) are covered, as is petroleum.

Use of long-term stewardship and institutional controls (IC): Specifically provided for in the statute.

- **IC Tracking, Oversight, and Monitoring:** DEC is in the process of implementing a system for monitoring landowner compliance with institutional controls.

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

http://www.anr.state.vt.us/dec/wastediv/sms/RCPP/pubs/Brownfield_Sites_List.pdf

Management & Implementation Elements

Voluntary Cleanup Program MOA with EPA: No

Cost to enter program or fees for service: All applicants to the RCPP must pay a non-refundable application fee of \$500. Upon enrollment in the RCPP, parties who are current innocent owners must deposit \$5,000 to be used for DEC project review and administration fees and costs. These administration fees are waived for parties that enroll in the RCPP prior to purchasing the brownfield site.

Funding source for administrative costs and staff: DEC, Waste Management Division, Hazardous Materials Program has 14 full-time equivalent (FTE) staff members. That section handles all hazardous waste work including Comprehensive

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Environmental Response Compensation and Liability Act (CERCLA), RCRA, pre-remedial, and state list work. Four attorneys in the Attorney General's office, two attorneys in DEC's Enforcement Division, and one program attorney work on hazardous waste cases, for a total of about three FTE positions. Staff and administrative costs come from federal grants (75%), the state general fund (23%), and state cleanup funds (2%).

Cleanup Activities

Sites currently in VCP: As of March 31, 2008, there were 15 active projects enrolled in the RCPP.

Sites completed under VCP:

- As of March 31, 2008, six projects received Certificates of Completion through the RCPP and three projects withdrew or were removed from the RCPP.
- In addition, cleanup activities have been completed outside of the RCPP at approximately 120 non-petroleum sites since the start of the state program.

Public Participation

Public participation requirements (notice, comment periods, etc.): DEC meets with town officials and holds public meetings. The state brownfields law requires public notice of a proposed corrective action plan and a minimum 15-day public comment period.

Public participation activities (hearing, meetings, etc.): No information available

Statutory Authorities

- The Water Pollution Control Law, Vt. Stat. Ann., Title 10, §§1282–1283, establishes the Environmental Contingency Fund for emergency responses, studies and design, and remedial actions.
- The Waste Management Act, Vt. Stat. Ann., Title 10, §§6601–6618 (1977, as amended 1981, 1985, 1987, 1995 and 1996), establishes the state's hazardous waste program and authorizes DEC to take removal and remedial actions to clean up sites contaminated by the release of hazardous materials. The law provides for strict, joint, and several liability for responsible parties, and for cost recovery. The law was amended in 1995 to establish a brownfields cleanup program (Vt. Stat. Ann, Title 10, §6615a).
- An Act Relating to Administrative Enforcement of Specified Environmental Laws (Act 98), Vt. Stat. Ann., Title 10, §§8001–8221 (1989), provides additional enforcement authorities.