



DEPARTMENT OF  
**ECOLOGY**  
State of Washington

## **Appendices A through D**

**for**

## **Model Toxics Control Act Remedial Action Grants**

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## **Alternative Financing Evaluation**

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by

Toxics Cleanup Program

Washington State Department of Ecology

Olympia, Washington 98504-7600

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# APPENDIX A

## OTHER STATE PROGRAMS SURVEY

Many states have established programs to support or incentivize cleanup and redevelopment of contaminated sites. To assist in the development of alternative finance concepts to improve Washington's Remedial Action Grant (RAG) program, the consulting team reviewed the published literature on brownfield redevelopment programs and selected ten states to research for examples of successful efforts to address the key concerns with the RAG.

This appendix presents summary information on the following state's programs.

California	New York
Connecticut	Oregon
Florida	Pennsylvania
Massachusetts	Wisconsin

### Grant Programs

Several of the states surveyed provide grants to local governments to support site assessment, investigation, and cleanup. Eligibility for grants is limited in these programs to local governments, public development authorities, or non-profit organizations, providing that they did not directly contaminate the property. State grant programs are funded either through EPA funds, general obligation bonds, or general tax revenues. The state of Pennsylvania established a tax on hazardous materials management and transportation that funds prevention, cleanup and management programs. The tax was enacted in 2007 and is set to expire in 2011.

New Jersey and Oregon were the only states surveyed that allowed private innocent purchasers to obtain state grants for site investigation and cleanup, economic development and community revitalization. Some states provide grants for up to 50 percent of eligible costs without a cap and others limit the maximum grant amounts to \$200,000 for site assessment and \$1 million for cleanup actions. While some states provide grants for 100 percent of eligible costs, most require a local match of 10 to 50 percent of the state funds. In New Jersey and Michigan, applicants must prepare redevelopment plans or demonstrate the market potential for the contaminated property. In Oregon, Assessment Grants are available to municipalities and private parties, and must also be linked to economic development or community revitalization. The Massachusetts Opportunity Relocation and Expansion (MORE) Program offers grants to municipalities and private developers for infrastructure-related projects that create jobs. These types of requirements allow the states to make funding decisions that factor in both environmental risk and economic benefits.

### Loan Programs

A number of states have established revolving loan funds for site investigation and cleanup similar. These loan programs are similar to Washington State's Department of Commerce's revolving loan fund and typically provide below market interest rates for up to 100 percent of site investigation and cleanup costs. The loans are made available to local governments, non-profits, and in some states to

private innocent purchasers. Most states that offer a cleanup grant program also provide a loan program. The loan programs in most states are capitalized through EPA State and Tribal Response Program funding, state general fund allocation, or bonds.

Some states also provide guarantees for private lender loans for cleanup and redevelopment. For example, the state of Florida provides loan guarantees for up to five years for redevelopment projects in designated brownfield areas. The loan guaranty applies to 50 percent of the primary lender loan. If the project creates affordable housing, the guaranty increases to 75 percent of the lender loan.

## **Tax Credits**

With limited budget to provide grants and loans, many states have developed tax incentives for private investment in cleanup and redevelopment. Various states surveyed in this study provided tax credits for expenses related to site investigation and cleanup. These credits ranged from 12.5 percent to 100 percent of eligible costs and could typically be applied to state corporate income taxes. Some states, such as Michigan and New York have expanded eligible expenses to include the redevelopment side of a brownfield project including hard costs of demolition, site preparation and construction

Massachusetts provides a tax credit: range from 25 percent to 50 percent of the “net response costs”. Cleanup costs must have been greater than 15 percent of the assessed value of the property prior to remediation. A credit could not be taken on funding the taxpayer received from another Massachusetts program.

## **Tax Increment Financing**

Tax increment financing (TIF) has traditionally been used to fund infrastructure projects, but a number of states have modified enabling legislation to include environmental investigation and site cleanup as eligible uses. For example, in Michigan, local governments are authorized to establish Brownfield Redevelopment Authorities that have taxing authority within a designated area that includes contaminated sites and surrounding properties. The redevelopment authority can generate revenue through TIF and issue bonds based on that revenue to finance site investigation, cleanup and some redevelopment costs including building demolition and site preparation. In Pennsylvania, the state can assist local governments by providing financing guarantees for brownfield projects financed with TIF proceeds. The state guarantee of up to \$5 million per project can enhance the credit of a local government leading to improved market access and lower capital costs (NEMWI 2008).

## **Area-Wide Programs**

To capture efficiencies of scale, a number of states are developing programs to address multiple contaminated sites in a geographic area. The area wide approach responds to issues of scale related to cleanup and redevelopment. On the cleanup side, contaminants may migrate in air or groundwater across property boundaries and multiple plumes of chemicals may intermingle. In these complicated situations, the problem is more readily addressed by investigating the entire extent of contamination rather than focusing on a single property. On the redevelopment side, the market potential of a property is inherently embedded in the surrounding area. There are strong land use

and community benefits to planning for an entire block or neighborhood to ensure that future development is coordinated and compatible. There are also practical efficiencies in applying redevelopment planning studies such as market assessments and transportation analyses to more than one property.

As mentioned previously, Michigan has authorized local governments to establish Brownfield Redevelopment Authorities to lead area-wide cleanup and redevelopment efforts. New York and New Jersey have both set up programs to provide state funding and resources to allow local governments to conduct site assessments and comprehensive redevelopment plans for areas around brownfields. These programs are credited with generating community and local political support for cleanup projects and initiating revitalization of older neighborhoods.

## **Environmental Insurance**

There are several types of environmental insurance products that address pollution risks associated with specific sites and the remediation of those pollutants. These risks include unexpected cleanup requirements, cost overruns on planned remediation projects, and third-party liabilities (for example bodily injury / property damage claims). These insurance products can also incorporate or combine with different funding mechanisms for financing the expected remediation costs.

Oregon provides access to environmental insurance through a capital access program which is funded through a credit enhancement fund and provides loan portfolio insurance for qualifying environmental evaluations and redevelopment projects.

Massachusetts allows for environmental insurance to be paid through state-level grants. Their Brownfields Redevelopment Access to Capital (BRAC) program is designed to back private sector loans with environmental insurance in order to ensure that sites are remediated to the extent planned, and that lenders are assured of the repayment of their loans. Funds in the program are used to pay insurance premiums, pay excess deductibles, provide loan guarantees and pay cleanup costs should a remediation project not be completed. Borrowers' risks are mitigated through the BRAC Pollution Legal Liability and Cleanup Cost Cap policies.

## **Contractual Agreements**

In Oregon, the State's Department of Environmental Quality and liable parties sign a letter of agreement that covers liability issues, indemnification, and, in accordance with the statute, requires the responsible party to pay for the state's involvement in the cleanup. Oregon's Voluntary Cleanup Program also works with potential purchasers of contaminated sites through Prospective Purchaser Agreements (PPAs). These offer property owners additional liability protection and provide site cleanup assistance. Oregon's Brownfield Redevelopment Assistance program aims to use PPA's and funding mechanisms to support flexible approaches to cleanup, performs project cleanup oversight, and provide liability protection for lenders.



California's cleanup and brownfield redevelopment program is structured through a cooperative effort between the Department of Toxic Substance Control, State Water Control Board as well as other regional agencies and development agencies. These organizations oversee cleanup and manage financial incentives.

The majority of California's brownfield projects depend on participation by the private sector. California's programs are designed to encourage cooperation between regulatory agencies and private organizations, and are flexible enough to address the wide range of brownfields sites (UW, 2009). Some of the innovative elements of this program include schools assessment and cleanup, environmental justice pilot programs, devolution of cleanup authority to local agencies (including redevelopment) and special consideration for community-wide or multiple-site approaches.

### Financial Programs

California provides low interest loans for cleanup through its CLEAN program to owners, developers, schools, and local governments. Loans are available up to \$100,000 to conduct investigations of qualified urban brownfield as well as low interest loans of up to \$2.5 million for cleanup and removal of hazardous materials at qualified urban properties where redevelopment is likely to boost property values, economic viability and quality of life of a community (UW, 2009).

Grant programs in the state include the Targeted Site Investigation (TSI) program is one of several initiatives funded through a \$1.5 million grant from the U.S. Environmental Protection Agency (U.S. EPA). The Department of Toxic Substances Control (DTSC), in collaboration with the Regional Water Quality Control Boards (RWQCB), will select a limited number of sites and by using U.S. EPA funds will perform site investigations at no cost to the applicant.

### Regulatory Mechanisms & Contractual Agreements

Regulatory mechanisms to support the brownfield program include:

- The California Land Reuse and Revitalization Act of 2004 (AB 389), which became effective in January, 2005, provides liability protections to brownfield developers, innocent landowners and contiguous property owners for eligible sites (UW, 2009).
- The California Land Reuse and Revitalization Act of 2004 (AB 389), which became effective in January, 2005, provides liability protections to brownfield developers, innocent landowners and contiguous property owners for eligible sites.

The California program includes liability relief for innocent landowners, bona fide purchasers, contiguous property owners, and prospect purchasers' agreements.

### Economic Impact

Preliminary estimates indicate that DTSC's successful implementation of site remediation and redevelopment has cleared more than 1,400 acres for reuse; created more than 21,000 jobs, with thousands more generated by pre- development and construction activities; increased current and

future tax revenues by nearly \$475 million annually; provided for some 5,200 housing units; and opened up over 13 million square feet of commercial, industrial and recreational space (UW, 2009).

The State of Connecticut addresses cleanup and brownfield redevelopment through multiple financing programs. Some programs are aimed at specific contamination, others at economic development in distressed areas, a specific phase of cleanup and/or redevelopment. The programs are implemented through interagency coordination and the oversight office is focused on both cleanup and redevelopment.

### Agency Structure and Regulatory Mechanisms

Connecticut established the Office of Brownfield Remediation and Development (OBRD) through [Public Act 06-184](#) in order to provide a “one stop” state resource for information on the programs and services available for brownfield redevelopment in Connecticut. The member agencies include; Connecticut Brownfields Redevelopment Authority (CBRA), Department of Economic and Community Development, Department of Environmental Protection, and Department of Health.

CBRA was formed in 1999 at the direction of the Connecticut State Legislature (Public Act 01-179) to create and administer programs that will bring about the remediation and economic redevelopment of the state’s many contaminated industrial sites. The CBRA is a wholly-owned subsidiary of the [Connecticut Development Authority](#). CBRA is a self-sustaining, quasi-public entity. In an evolving process, the CBRA has thus developed programs that encourage brownfields redevelopment by providing financing and assisting in the navigation of the agency/regulatory process. In 2001, the CBRA completed the first-ever inventory of the state’s brownfield sites. In addition to maintaining the inventory, CBRA is involved in case management services and communications with municipalities.

A Brownfields Task Force was developed to coordinate these agencies. In 2007, Governor’s Act implemented the recommendations of the Task Force which identified existing and created new sources of cleanup financing and expanding project coordination, including:

- Expand the ability to guarantee bank loans and issue bonds for brownfields development.
- Streamline project management of state-financed brownfields sites.
- Expedites brownfields inquiries through the creation of the web-site: [www.ctbrownfields.gov](http://www.ctbrownfields.gov)

### Financial Mechanisms and Implications

The state of Connecticut funds cleanup and redevelopment through multiple mechanisms including TIF, grant/cash, PDA, revolving loan, tax on polluters (dry cleaners), and liability insurance, including the following;

- Grants for dry cleaning remediation, funded through tax on dry cleaners
- [Urban Sites Remedial Action Program \(USRAP\)](#): Jointly managed by OBRD and DEP for projects that are significant to the Connecticut's economy and quality of life. Site must

be located in a distressed municipality. This program provides seed capital to facilitate the transfer, reuse and redevelopment of the property.

- **Brownfield Municipal Pilot Program**: A competitive program for municipalities with projects that have been complicated by brownfields but will on completion make a significant economic impact. Only municipalities and municipal entities are eligible to apply however, the project sites do not need to be owned by the municipality. The last round of funding occurred in the Fall 2008.
- Tax credit; under the program, the state may provide up to \$100 million in tax credits over a ten-year period to support projects that create significant jobs and capital investment in these underserved areas.
- **RGP Brownfield Fund: Regional Growth Partnership**: RGP provides Assessment and Remediation funds for projects in South Central Connecticut municipalities.
- **Naugatuck Valley Brownfields Pilot**: The Pilot provides Assessment and Remediation funds in Naugatuck valley towns, Danbury and others member towns.
- Loan Guarantees made in concert with qualifying financial institutions and through through a general revolving loan fund.
- Special Contamination load fund, assistance to municipalities, developers or owners for Phase II and III investigations, Remedial Action Plans (RAP), demolition of structures and remedial action activities
- Up-front TIF-based cash for developers that remediate and redevelop environmentally contaminated properties.

An Environmental Insurance Program is funded through the Manufacturing Assistance Act. This program provides loans and grants to subsidize the cost of Environmental Insurance Premiums. OBRD staff provides technical assistance to help clients choose the proper coverage for their project. Third party liability, covenant not to sue, CERCLIS 'comfort' letter, environmental land use restrictions are addressed in this process.

The Florida brownfields program provides a mix of incentives for public and private entities to promote cleanup and reuse of contaminated properties. The program has experienced dramatic growth in recent years in both public and private efforts. There are four major financial components to the state's brownfields program: brownfield redevelopment areas, voluntary cleanup tax credits, job creation tax refunds, and loan guarantees.

### **Brownfield Redevelopment Areas**

The Florida Brownfield Redevelopment Act authorizes local governments to designate multiple contaminated sites and surrounding properties as special revitalization areas. Properties within the designated area are eligible for financial incentives including sales and use tax exemptions and job creation tax refunds. In 2008, local governments designated 55 new brownfield areas, more than double the number designated in any previous year. As of December 31, 2008, there were a total of 222 brownfield areas designated in Florida, encompassing approximately 172,000 acres.

### **Voluntary Cleanup Tax Credits**

State law allows a tax credit of 50 percent of the costs of eligible voluntary cleanup activities with a maximum of \$500,000 per site per year. Tax credits may be applied to state corporate income tax. Over \$13 million in tax credits have been issued since the program began in 1998, representing a private sector investment of over \$26 million. The use of the tax credits has been increasing and in 2007 and 2008, the amount of approved credits exceeded the state-wide authorized limit of \$2 million per year. The tax credit balance is carried over to the following fiscal year, so a backlog and delay in use of the credits is accumulating.

In 2007, over \$3.3 million in tax credits was approved, and in 2008, over \$4.6 million in tax credits was approved. The Voluntary Cleanup Tax Credit program has issued over \$13.5 million in tax credits since it began in 1998.

### **Job Creation Tax Refunds**

For each new job created in a designated brownfield redevelopment area, eligible businesses receive a \$2,500 tax refund. The state limits eligibility for the tax refund to targeted business sectors which are defined by the state's economic development department. The jobs must be long-term, full time employee positions; construction jobs are not eligible.

### **Loan Guarantees**

Through this program the state guarantees primary lenders, up to 50% of the value of a loan on an eligible brownfield site, with a potential increase up to 75% if the property is redeveloped as affordable housing or a health care facility. The guarantees are available for up to five years.

## **Economic Benefits of Programs**

Florida's Department of Environmental Protection estimates the economic impacts of these programs include the following (FDEP 2008):

Year 2008: 2,232 new direct jobs, 5,872 new indirect jobs, \$407,922,598 in new capital investment

Cumulative: 10,872 new direct jobs, 13,137 new indirect jobs, and \$1,291,636,591 of capital investment.

The State of Massachusetts provides financial incentives for cleanup action and brownfield redevelopment through various mechanisms including tax credits, access to environmental insurance, loans and grants. In addition, Massachusetts was the first to privatize its waste site cleanup program in that direct oversight was shifted from the Department of Environmental Protection to private sector “Licensed Site Professionals”--increasing the rate of remediation of sites throughout the state. This program is described in further detail below.

### Financial Programs

The Brownfields Redevelopment Access to Capital (BRAC) program is designed to back private sector loans with environmental insurance in order to ensure that sites are remediated to the extent planned, and that lenders are assured of the repayment of their loans. Funds in the program are used to pay insurance premiums, pay excess deductibles, provide loan guarantees and pay cleanup costs should a remediation project not be completed. Borrowers’ risks are mitigated through the BRAC Pollution Legal Liability and Cleanup Cost Cap policies.

The Brownfields Redevelopment Fund (BRF) is targeted toward the assessment and cleanup of brownfield sites in “Economically Distressed Areas” (EDA’s). Low-interest loans and grants for these areas, with a maximum cap of \$50,000 per project site assessment, and \$500,000 per project site cleanup, with the exception of “priority projects,” which can receive up to \$2 million for site assessment and cleanup. In order to be eligible, proposed projects must 1) have a demonstrated need for BRF funds, 2) be located in an EDA, and 3) result in significant economic impacts in terms of new jobs or contribution to the economic or physical revitalization of the areas in which they are located. Loans are available with the recipient providing matching funds.

A tax credit is available which ranges from 25 percent to 50 percent of the “net response costs”. Cleanup costs must have been greater than 15 percent of the assessed value of the property prior to remediation. A credit can not be taken on funding the taxpayer received from another Massachusetts program.

Executive Office of Economic Development 105 (EOED) Massachusetts Opportunity Relocation and Expansion (MORE) Program offers grants to municipalities that partner with private developers for infrastructure-related projects that create jobs. Funding is available for site remediation and preparation work tied to infrastructure improvements.

### Contractual & Regulatory

The Brownfields Act that created financial incentives and liability relief for parties involved in cleanup also provides liability relief for some parties involved in cleanup. Owners and/or operators who did not cause or contribute to contamination at the site, downgradient property owners, certain eligible tenants who did not cause or contribute to contamination, certain redevelopment authorities, and community development corporations, and secured lenders who take ownership of contaminated property through foreclosure are included in this Act. Those not covered by the above (more complicated sites) may be covered under ‘Covenant Not to Sue’.

State programs involving brownfield cleanup and redevelopment in the Michigan have evolved a strong focus on economic development (Hamlin et al. 2008). A recent evaluation of the state's program indicates that stakeholders overwhelmingly believe that are essential for revitalizing the cities and economy of the state (Hamlin et al. 2008). The major financial programs supporting cleanup and redevelopment include: grants, loans, tax incentives, tax increment financing

### Grants and Loans

The grant and loan programs are supported through bond measures and a tax on refined petroleum products (MDEQ 2009). In 1998, Michigan voters approved the \$675 million Clean Michigan Bond, which allocated approximately \$335 million to cleanup and redevelopment of contaminated sites. This bond has been a major revenue source for the state's brownfield program and is now nearly exhausted. Program staff indicate that bond funds may be exhausted after 2010 and a replacement revenue stream has not yet been identified.

Key features of the Michigan grant and loans programs

- Prioritization of sites with economic development potential, including requiring applicants for some grants and loans to demonstrate job creation and private investment that will be leveraged by the public funds.
- Different funding programs for site assessment, cleanup actions, and waterfront projects.
- Eligible applicants include local governments, Brownfield Redevelopment Authorities and other public entities if they are not responsible for the contamination.

### Brownfield Redevelopment Authorities and Tax Increment Financing

The Michigan Brownfield Redevelopment Financing Act authorizes the creation of Brownfields Redevelopment Authorities (BRAs). Local governments have the authority to establish the boundary for a BRA that includes brownfield sites and adjacent lands in order to create special taxing districts. The BRAs have taxing authority and the jurisdiction to acquire municipal redevelopment bonds. To exercise its bonding authority, a BRA can generate revenue/repayment funds through TIF. TIF allows projects to capture state and local property taxes (including school taxes) to pay for costs related to brownfield sites. In addition to environmental activities, projects locating in certain designated areas may also be eligible for TIF to perform non-environmental activities, including demolition, lead and asbestos abatement, infrastructure improvements and site preparation. According to the Michigan Department of Environmental Quality (MDEQ), there are 261 BRAs located throughout the state (MDEQ 2009, NEMWI 2008).

### Economic Benefits

The state estimates that authorities statewide have spent more than \$900 million (from all sources) on roughly 1800 contaminated sites. These efforts have stimulated over \$3 billion of total



investment and created more than 15,000 jobs (EPA 2008). It is estimated that the private sector has invested approximately 20 private dollars per every dollar of grant funds.

New Jersey has developed a suite of complementary programs to support local municipalities and incentivize private investment in cleanup and redevelopment of contaminated properties. The financial instruments include: grants, loans, tax incentives and tax increment financing.

### **Hazardous Discharge Site Remediation Fund**

New Jersey has established the Hazardous Discharge Site Remediation Fund (HDSRF) to support public entities (municipalities, counties, and redevelopment agencies), qualifying private entities and non-profit organizations effort to investigate and/or remediate suspected or known contaminated sites (NJEDA 2009). The state legislature created the HDSRF in 1993 and capitalized the fund with bond revenues. Since 2003, a portion of the state's corporate business tax revenues have been dedicated to the HDSRF. The New Jersey Spill Act also imposes a tax on the transfer of petroleum with the revenues dedicated to cleanup actions.

The HDSRF is managed through a partnership between New Jersey Department of Environmental Protection (NJDEP) and the NJ Economic Development Authority (NJEDA). The NJDEP evaluates an applicant's preliminary eligibility requirements, the technical merits of the proposed project, and the estimated project costs. Grant funding is distributed upfront, rather than through reimbursement, so the state ensures appropriate allocation of the funds by critically reviewing cost estimates for projects. Upon NJDEP approval, the NJEDA evaluates an applicant's financial status, determines grant and/or loan eligibility, and awards funding.

Public entities that apply for funding must own the subject property and either have prepared a brownfield redevelopment plan or demonstrate that a property has a realistic opportunity of being redeveloped within three years of completion of the remediation.

Limits:

- Public entities—grants for up to 100% of remedial investigation costs and loans for up to 100% of cleanup action costs (capped at \$3 million per year).
- Private entities—grants for 50% or loans for 100% of investigation and cleanup action costs with a limit of \$1 million per year.

The interest rate for loans through the HDSRF is 2 points below the Federal Discount Rate with a minimum of 3%. The maximum term for any loan is 10 years.

### **Environmental Infrastructure Trust**

The Environmental Infrastructure Trust was created in August 1986 and is an independent state authority in but not of the NJDEP. Working in partnership with NJDEP, the Trust leverages state funds, federal funds and loan repayments with its own bond issue proceeds to make low cost loans available for environmental projects. The Trust funds infrastructure projects related to water quality, drinking water and brownfields. It is capitalized by federal Clean Water Act funds, state appropriations, proceeds from the sale of State General Obligation bonds, and payments on existing

loans. In 2009, \$30 million in loans have been set aside for brownfield projects. The loans are awarded on a competitive basis according to a prioritization system.

In the Trust financing program participants obtain two loans

- 25% from a zero percent interest loan from NJDEP and
- 75% from a market rate loan from the Trust

A separate classification is established for projects where a developer, LLC, partnership or other private entity is involved and a local government unit serves as the applicant on the private entity's behalf to statutorily qualify for loans from the Department and the Trust

## **Brownfield Development Areas**

Local governments can apply to NJDEP to designate Brownfields Development Areas to coordinate cleanup and reuse of multiple sites in a community. The Brownfield Development Area approach involves a comprehensive planning process involving the local and state agencies, technical experts, owners of contaminated properties, potentially responsible parties, developers, and community members. Designated Brownfield Development Areas are eligible for funding set aside in the HDSRF and the EIT programs.

## **Tax incentives**

Tax rebates from the state allow up to 100% reimbursement of cleanup costs through redevelopment agreements with developers.

## **Tax Increment Financing**

New Jersey state law allows local governments to establish Redevelopment Areas and apply incremental tax increases to fund infrastructure, remediation and demolition. The state's TIF statute allows Redevelopment Area TIF districts to create debt that is not subject to the same debt limitations as other local bond issuances. Redevelopment Area bonds, rather than counting against municipal debt limitations, are allowed to use alternate sources of security, such as Payment in Lieu of Taxes and special assessment districts.

## **Economic Benefits of Programs**

In 2008, the HDSRF allocated 114 grants totaling over \$38 million and 5 loans totaling approximately \$1.5 million.

### Grants

The major source of grant funding for contaminated site cleanup in New York State is the million Clean Water / Clean Air Bond Act that was passed in 1996 (NYDEC 2009, NEMWI 2008). A portion of the revenue from the bond is allocated to the the Environmental Restoration Program that funds site assessment and cleanup activities by public agencies on publicly owned sites. Public agencies (if not responsible for contamination) can receive up to 90 percent of eligible costs for on-site and up to 100 percent of eligible costs for off-site remedial activities. To date, more than \$162.2 million in Bond Act funding has been committed for 253 investigation and cleanup projects at brownfield sites throughout New York State. As of March 31, 2009, 284 sites have been accepted into the Environmental Restoration Program. All of the \$200 million authorized under the 1996 Clean Water/Clean Air Bond Act for the ERP was committed as of March 31, 2009 (NYDEC 2009). Approval of new applications has been put on hold until additional funding is allocated to the program

### Tax Incentives

A comprehensive package of tax incentives is available to private parties cleaning up sites under the state's voluntary cleanup program (NYDEC 2008). These incentives offset costs associated with site preparation and property improvements and include tax credits based on real property taxes and the purchase of environmental insurance. These tax credits can apply to business or personal income tax. Tax credits range from 22-50% of costs for site preparation and remediation costs and 10-24% of redevelopment costs (with a cap related to the remediation costs).

In order to be eligible for any of these tax incentives, a certificate of completion stating that remediation requirements have been achieved for the site must be received from the state.

### Area-Wide Planning

The 2003 Superfund/Brownfield law created the Brownfield Opportunity Areas Program, which provides financial assistance of up to 90 percent of eligible costs to municipalities and community-based organizations to conduct area-wide planning around brownfields and site specific assessments (NYDEC 2009). The program is jointly administered by the state Department of Environmental Conservation (NYDEC) and Department of State (NYDOS), and legislation passed in 2008 shifter responsibility for the program entirely to the NYDOS. NYDEC will continue to provide NYDOS advice in its areas of expertise and oversee site assessments performed by grantees under Step

As of March 31, 2009, 103 applications to the Brownfield Opportunity Area program have been approved and a total of \$16.4 million in grants have been awarded. In fiscal year 2008-9, 14 applications to the program have requested over \$6.6 million for new planning efforts.

## **Economic Benefits**

New York's brownfield cleanup and redevelopment programs are designed to address environmental issues and create community benefits and economic development. Research conducted for this study was unable to develop program-wide evaluations of the economic benefits of these programs.

Oregon has voluntary and independent cleanup program as well as a Brownfield Redevelopment Assistance program. These programs support multiple project types through a flexible approach to create focused and efficient efforts. Oregon has identified several funding strategies to assist in these efforts.

### Financial Programs

Oregon provides access to cleanup funding through the following financial mechanisms:

- **Capital Access Program** provides loan portfolio insurance for environmental evaluations and brownfield redevelopment projects.
- **Credit Enhancement Fund** offers loan guarantees to individual businesses for environmental evaluations and brownfield redevelopment projects.
- **Brownfield Redevelopment Loan Fund** finances eligible environmental evaluations.
- **Special Public Works Fund** is available to local and tribal governments for environmental evaluations on municipal property.
- **DEQ Assessment Grants** or the **City of Portland Brownfield Revolving Loan Fund**. These funds are available to municipalities and non-municipalities, including private parties- must be linked to new site uses leading to economic development or community revitalization.

### Contractual Elements & Regulatory Mechanisms

The DEQ Brownfield Redevelopment Assistance operates by providing liability relief through PPAs, supporting flexible approaches to cleanup, performing oversight, and providing liability protection for lenders. The program also facilitates partnerships for the reuse of brownfield properties; coordinating technical resources and financial mechanism (Ecology, 2009) Pennsylvania

Pennsylvania's Land Recycling Program received awards for innovation when it was established. The Land Recycling Program attempts to incentive cleanup and redevelopment by addressing four major challenges: uniform cleanup standards, liability relief, standardized reviews and time limits, and financial assistance. For this study, research focused on the financial aspects of the program.

### Grants and Loans

Pennsylvania's Industrial Sites Reuse Program provides grants and low-interest loans to finance environmental site assessment and cleanup actions. Public entities, non-profit economic development organizations, and private companies are eligible for funding. Entities that caused or contributed to contamination are not eligible.

Limits:

- Up to \$200,000 for site assessment per project

- Up to \$1 million for cleanup actions per project

Match requirements: 25% match required for grants and loans.

Loan Terms: 2% interest rates. Terms of up to 5 years for site assessments and 15 years for remediation projects.

Pennsylvania has established a number of economic development and job creation grant, loan, and loan guarantee programs that can potentially be applied to brownfield sites.

### **Tax Increment Finance**

Pennsylvania state law authorized local governments to establish districts and apply TIF revenue to infrastructure and remediation costs. The state provides a loan guarantee program to assist local TIF districts that meet eligibility requirements for blighted areas (NEMWI 2008). The guarantee program is designed to assist small communities in capitalizing on TIF. The state guarantee of up to \$5 million per project can enhance the credit of a local government leading to improved market access and lower capital costs. The state gives priority to brownfields sites as one of several program criteria.

### **Economic Benefits**

An evaluation of the Land Recycling Program conducted in 2006 estimated that the program supported cleanup of 2,194 contaminated and abandoned industrial sites, creating or retaining as many as 76,000 jobs since 1995 (PDEP 2006).

The State of Wisconsin's cleanup and brownfield consists of strong coordination between various departments. The Department of Natural Resources and the Department of Commerce who monthly meetings and have a Memorandum of Understanding for coordination of grants and loans. Other agencies are involved in the effort including; Wisconsin Department of Administration (DOA), Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP), Wisconsin Department of Commerce (Commerce), Wisconsin Department of Health and Family Services (DHFS), Wisconsin Department of Natural Resources (DNR), Wisconsin Department of Revenue (DOR), and the Wisconsin Department of Transportation (DOT).

### Financial Implications

Wisconsin provides a combination of financial mechanisms to meet cleanup and brownfield redevelopment needs. The following is a summary of these programs:

- DNR Land Recycling Loan Program (LRLP): As of May 2006, the DNR has entered into LRLP financial assistance agreements for zero percent loans totaling nearly \$12.7 million, with approximately \$7.3 million remaining.
- Environmental Remediation Tax Incremental Financing (ERTIF): A financing tool that local governments can use to fund brownfield cleanup projects. ERTIFs allow for a community to pay for project expenses through future increases in property taxes in the district.
- The Department of Commerce promotes the redevelopment of contaminated properties through the use of state funds federal Community Development Block Grants (CDBG) environmental remediation tax credits
- Brownfields Site Assessment Grant (SAG) to a local government to help prepare a brownfield property for cleanup and redevelopment. With SAGs, local officials can eliminate the uncertainty associated with brownfield investment by investigating environmental contamination and removing dilapidated buildings or underground storage tanks
- DNR's Green Space and Public Facilities Grants provide a unique opportunity for local governments to clean up contaminated properties for reuse as public spaces. Since the best reuse for some brownfields may not be commercial, industrial or residential redevelopments, Green Space grants often provide the best way to incorporate these properties into the needs and requirements of many neighborhoods
- The DOA's Coastal Management Program (CMP) provides grants to assist with the protection, enhancement and restoration of the state's coastal areas, including funding for the economic components to comprehensive planning grants.
- Wisconsin's Brownfields Insurance Program (WBIP) was authorized by SB 472 in 2004. The bill gave broad power to WDNR to develop an insurance program. The program went into effect in November 2006. It uses a single insurer, AIG Environmental, to provide a 10%



discount on premiums for pollution liability insurance to developers. Any developer with a WDNR-approved Phase I and Phase II site investigation is eligible for the discount. The state itself does not provide any subsidies for insurance.

## **Regulatory Context**

Through legislative and policy changes, Wisconsin began to see hundreds of sites cleaned up each year. Public and private entities began utilizing the array of brownfield tools available through the Brownfields Initiative (Ecology, 2009).

One unique approach to area-wide or community-wide cleanup is the SUDZ (Sustainable Urban Development Zone) program which allowed for a larger planning area and funding for visioning and strategic planning in addition to cleanup. This program was only funded once by the legislature despite its popularity among the community.

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# APPENDIX B

## LIST OF WASHINGTON STATE TAX INCENTIVES

Tax exemptions, exclusions, deductions and credits considered to be tax incentives for purposes of Department of Revenue reporting requirements.

RCW 36.100.090	Baseball stadium deferral
RCW 36.102.070	Football stadium deferral
RCW 48.14.020(3)	Tax rate for ocean marine insurance
RCW 48.14.029	Tax credit for international services
RCW 66.24.290(3)(b)	Beer tax exemption for microbrewers
RCW 82.04.050(1)(d)	Ferrosilicon
RCW 82.04.062	Precious metals and bullion
RCW 82.04.110	Aluminum master alloys
RCW 82.04.120	Processors of seafood
RCW 82.04.2403	Fish cleaning
RCW 82.04.260(5) and (6)	Nuclear fuel assemblies
RCW 82.04.260(8)	Charter and freight brokers
RCW 82.04.260(9)	Stevedoring
RCW 82.04.272	Resellers of prescription drugs
RCW 82.04.290(1)	International investment management
RCW 82.04.315	International banking facilities
RCW 82.04.317	Wholesale auto auctions
RCW 82.04.421	Memberships to purchase at discount
RCW 82.04.4295	Manufacturing completed in Washington
RCW 82.04.4333	Job training services
RCW 82.04.4334	Sale of alternative fuel
RCW 82.04.4335	Sale of wood biomass fuel
RCW 82.04.434	Testing and safety labs
RCW 82.04.4452	Research and development; high technology firms
RCW 82.04.44525	International services
RCW 82.04.447	Natural gas purchases by direct service industrial customers
RCW 82.08.0255(1)	Fuel for aircraft research
RCW 82.08.02565	Manufacturing machinery
RCW 82.08.02566	Equipment for designing aircraft parts
RCW 82.08.02567	Electric generating equipment; renewable resources
RCW 82.08.02568	Anodes and cathodes for aluminum production
RCW 82.08.0315	Film and video production equipment
RCW 82.08.810	Air pollution control facilities
RCW 82.08.811	Coal for thermal generating plants
RCW 82.08.820	Tax remittance for warehouse expansion
RCW 82.08.955	Distribution of biodiesel/alcohol fuels
RCW 82.08.960	Distribution of wood biomass fuel
RCW 82.12.024	Natural gas purchased by direct service industrial customers
RCW 82.12.0256(1)	Fuel for aircraft research

RCW 82.12.02565	Manufacturing machinery
RCW 82.12.02566	Equipment for designing aircraft parts
RCW 82.12.02567	Electric generating equipment; renewable resources
RCW 82.12.02568	Anodes and cathodes for aluminum production
RCW 82.12.0315	Film and video production equipment
RCW 82.12.810	Air pollution control facilities
RCW 82.12.811	Coal for thermal generating plants
RCW 82.12.820	Tax remittance for warehouse expansion
RCW 82.12.955	Distribution of biodiesel/alcohol fuels
RCW 82.12.960	Distribution of wood biomass fuel blend
RCW 82.16.0495	Credit for electricity purchased by direct service industrial customers
RCW 82.16.055	Cogeneration facilities and renewable resources
RCW 82.29A.130(14)	Professional baseball stadium
RCW 82.29A.130(15)	Professional football stadium
RCW 82.29A.130(16)	Public facilities districts
RCW 82.29A.135	Gasohol production facilities
RCW 82.35.050	Cogeneration facilities
RCW 82.60.040	Rural county deferral
RCW 82.62.030, 82.62.045	New jobs in rural counties and community empowerment zones
RCW 82.66.040	Horse race track deferral
RCW 84.36.590	Vitrification equipment
RCW 84.36.635	Alcohol/biodiesel fuel production facilities
RCW 84.36.640	Wood biomass fuel production facilities

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# APPENDIX C

## INVESTMENT LETTER SAMPLE

\_\_\_\_\_, 2010

[Bank]

Re: Interim Financing for Port of \_\_\_\_\_  
\_\_\_\_\_ Improvement Project

USDA RD RUS – Loan \$ \_\_\_\_\_

Dear \_\_\_\_\_:

Reference is made to a request from the Port of \_\_\_\_\_ for interim financing from your bank to proceed with their \_\_\_\_\_ Improvement Project at the terms and conditions agreed upon in your letter dated \_\_\_\_\_, 20\_\_\_. Your interim financing is not to exceed the Rural Development loan amount of \$\_\_\_\_\_.

This letter is to confirm understandings on behalf of Rural Development.

Final plans and specifications have been prepared and approved, bids have been taken, and the District is prepared to award the construction contract to the qualified low bidder. It has been determined by the applicant and Rural Development that the conditions of closing can be met.

Funds have been obligated for the project by Rural Development, as evidenced by the attached copies of:

- Letter of Conditions
- Form 1942-46 “Letter of Intent to Meet Conditions”
- Form 1940-1 “Request for Obligation of Funds”



It is proposed by the District, with the approval of Rural Development, that the bank advance funds in accordance with the agreed terms and conditions stated in your letter, as needed to pay for construction and other authorized and legally eligible expenses incurred by the District upon presentation of proper statements or work estimates approved by their authorized representative and the authorized official of Rural Development.

We have scheduled the Rural Development loan to be closed when construction to be financed with loan funds is substantially complete, so that funds will be available to pay off the total amount of advances your bank has made for authorized approved purposes, including accrued interest to the date of closing.

We appreciate your assistance to the community and look forward to working with you on this project. If you have any questions, please call \_\_\_\_\_, Community Programs Specialist, at (\_\_\_\_) \_\_\_\_\_, Ext. \_\_\_\_.

Sincerely,

Name:

Title:

Attachments: (3)

Letter of Conditions (1)

Form 1942-46 "Letter of Intent to Meet Conditions" (1)

Form 1940-1 "Request for Obligation of Funds" (1)

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# APPENDIX D

## REMEDIAL ACTION GRANT HISTORICAL SUMMARY

Summary Information																			
Oversight Remedial Action Grants																			
Year	Number of Oversight Grants	Oversight Percentage of RAG Grants	Total Statewide Remedial Project Cost	Total State Share of project Cost	Average Project Cost	Average State Match	Average Length (in years)	number of project where cost > 2mil	sum of project where cost > 2mil	percentage of annual oversight grant total	number of project where cost >10 mil	sum of project where cost > 10 mil	percentage	Landfill	Port	city/county	Public Utility	School Dist	
1989	10	100%	\$11,528,661	\$5,050,201	\$1,152,866	\$505,020	8	5	\$5,895,362	51%	0	\$0	0%	100%	0%	0%	0%	0%	
1990	5	100%	\$39,275,145	\$14,024,848	\$7,855,029	\$7,855,029	14	5	\$39,275,145	100%	1	\$18,784,449	48%	100%	0%	0%	0%	0%	
1991	7	100%	\$7,640,966	\$5,109,302	\$1,091,567	\$729,900	5	1	\$3,261,142	43%	0	\$0	0%	0%	21%	79%	0%	0%	
1992	7	100%	\$28,702,692	\$14,340,846	\$4,100,385	\$2,048,692	7	2	\$27,302,898	95%	1	\$21,809,950	76%	0%	0%	100%	0%	0%	
1993	9	96%	\$13,863,239	\$12,497,056	\$3,716,162	\$1,864,055	6	2	\$8,550,037	62%	0	\$0	0%	0%	8%	92%	0%	0%	
1994	9	98%	\$33,445,458	\$16,776,494	\$3,716,162	\$1,864,055	6	4	\$32,286,618	97%	2	\$23,311,618	70%	81%	16%	3%	7%	0%	
1995	13	90%	\$13,817,480	\$5,999,641	\$1,062,883	\$1,062,883	6	2	\$5,419,248	39%	0	\$0	0%	0%	7%	86%	7%	0%	
1996	12	97%	\$26,332,402	\$11,235,339	\$2,393,855	\$1,022,313	9	4	\$21,336,635	81%	0	\$0	0%	0%	30%	70%	0%	0%	
1997	9	56%	\$11,094,073	\$5,976,535	\$1,232,675	\$664,059	9	2	\$7,972,074	72%	0	\$0	0%	48%	18%	31%	1%	0%	
1998	12	91%	\$25,683,765	\$19,168,226	\$2,140,314	\$1,270,387	11	4	\$18,676,804	73%	0	\$0	0%	0%	71%	27%	2%	0%	
1999	9	71%	\$12,845,218	\$7,955,908	\$1,427,246	\$883,990	11	1	\$6,311,268	79%	0	\$0	0%	22%	1%	74%	3%	0%	
2000	7	67%	\$18,607,804	\$9,337,460	\$2,658,258	\$1,333,923	11	0	\$0	0%	1	\$15,060,930	81%	85%	14%	1%	0%	0%	
2001	9	58%	\$15,364,934	\$8,947,968	\$974,825	\$566,733	5	2	\$10,823,750	70%	0	\$0	0%	8%	0%	90%	1%	0%	
2002	13	85%	\$35,338,915	\$21,561,794	\$2,208,682	\$1,347,612	11	5	\$29,645,406	84%	1	\$10,585,024	30%	25%	59%	15%	1%	1%	
2003	13	94%	\$38,447,457	\$19,933,052	\$2,746,247	\$1,423,789	11	4	\$30,977,999	81%	1	\$14,085,188	37%	5%	31%	64%	0%	1%	
2004	11	81%	\$15,823,971	\$12,613,012	\$1,438,543	\$1,146,637	9	4	\$13,923,460	88%	0	\$0	0%	1%	73%	6%	0%	0%	
2005	9	93%	\$5,618,578	\$3,132,584	\$624,286	\$348,065	12	0	\$0	0%	0	\$0	0%	0%	32%	68%	0%	0%	
2006	12	92%	\$82,933,075	\$48,374,783	\$6,911,090	\$4,031,232	10	10	\$79,487,096	96%	3	\$58,811,446	71%	1%	92%	7%	1%	0%	
2007	6	99%	\$65,945,749	\$35,262,373	\$4,760,358	\$2,353,454	8	3	\$64,082,285	97%	1	\$52,094,282	79%	18%	82%	0%	0%	0%	
2008	30	85%	\$71,405,377	\$35,301,816	\$4,760,358	\$2,353,454	8	24	\$70,247,077	98%	1	\$13,187,700	18%	0%	71%	16%	13%	0%	
2009	30	97%	\$62,733,593	\$32,921,100	\$2,091,120	\$1,097,370	5	11	\$47,281,239	75%	1	\$12,936,376	21%	16%	40%	33%	13%	0%	
<b>1999-2009 avg</b>	<b>14</b>	<b>85%</b>	<b>\$41,221,945</b>	<b>\$41,221,945</b>	<b>\$2,917,377</b>	<b>\$1,600,227</b>	<b>9</b>	<b>6</b>	<b>\$34,646,831</b>	<b>69%</b>	<b>1</b>	<b>\$17,966,668</b>	<b>34%</b>	<b>16%</b>	<b>49%</b>	<b>30%</b>	<b>3%</b>	<b>0%</b>	
<b>1989 - 1998 avg</b>	<b>9</b>	<b>91%</b>	<b>\$20,384,464</b>	<b>\$10,739,491</b>	<b>\$2,717,195</b>	<b>\$1,797,308</b>	<b>8</b>	<b>3</b>	<b>\$16,026,112</b>	<b>72%</b>	<b>0</b>	<b>\$6,580,579</b>	<b>18%</b>	<b>32%</b>	<b>17%</b>	<b>51%</b>	<b>2%</b>	<b>0%</b>	
<b>SHA and VCP grants 20 yr avg.</b>		<b>15%</b>						2006-2009	\$65,274,424	92%		\$34,257,451	47%						
<b>20 yr Mean</b>	<b>12</b>	<b>88%</b>	<b>\$30,307,074</b>	<b>\$16,453,349</b>	<b>\$2,812,520</b>	<b>\$1,703,460</b>	<b>9</b>	<b>5</b>	<b>\$24,893,121</b>	<b>71%</b>	<b>1</b>	<b>\$11,460,332</b>	<b>25%</b>	<b>25%</b>	<b>32%</b>	<b>41%</b>	<b>2%</b>	<b>0%</b>	
Median	9	93%	\$25,683,765	\$12,613,012	\$2,208,682	\$1,270,387	9	4	\$18,676,804	79%	0	\$0	0%	0%	21%	31%	0%	0%	
Standard Deviation	7	14%	\$22,653,846	\$12,139,307	\$1,973,461	\$1,637,405	3	5	\$23,576,603	29%	1	\$16,829,989	32%	32%	31%	37%	4%	0%	
Range	25	44%	\$77,314,497	\$45,242,199	\$7,230,743	\$7,506,964	9	24	\$79,487,096		3	\$58,811,446	81%	81%	92%	100%	13%	1%	
Minimum	5	56%	\$5,618,578	\$3,132,584	\$624,286	\$348,065	5	0	\$0	0%	0	\$0	0%	0%	0%	0%	0%	0%	
Maximum	30	100%	\$82,933,075	\$48,374,783	\$7,855,029	\$7,855,029	14	24	\$79,487,096	100%	3	\$58,811,446	81%	81%	92%	100%	13%	1%	
Sum	<b>242</b>		<b>\$636,448,552</b>	<b>\$345,520,338</b>	<b>\$59,062,911</b>	<b>\$35,772,654</b>	<b>183</b>	<b>95</b>	<b>\$522,755,543</b>		<b>13</b>	<b>\$240,666,963</b>							