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ECOLOGY
State of Washington

FINAL REPORT

LINKING TOXICS CLEANUP AND REDEVELOPMENT ACROSS THE STATES: LESSONS FOR WASHINGTON STATE

EXECUTIVE SUMMARY

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EXECUTIVE SUMMARY

Introduction

Toxics cleanup programs in state governments, the typical home of many brownfields programs, are situated within departments of environmental protection or ecology. State departments of environmental protection or ecology, developed in the 1970s spurred by the passage of the National Environmental Protection Act, were conceived primarily as regulatory agencies with a heavy orientation towards enforcement, monitoring and compliance. These first generation programs had little connection to state or local economic development departments or programs. By the 1990s, several states, recognizing the negative market impacts of inflexible programs and that brownfields policy requires an essential integration of cleanup and redevelopment efforts, began to develop “second generation” programs. These second generation programs, sharing the motivation and strategies of the reinventing government movement (Osborne and Gaebler 1992), incorporated more collaborative and market-oriented features. But several challenges remain, such as, administrative processes and adequate public incentives for multi-site community-wide efforts, and strategic, state-wide plans to address the backlog of brownfield sites. In this study, we develop the concept of “third generation programs”, which incorporate features of first and second generation programs but emphasize community-wide planning and stakeholder involvement, state-level strategic planning for brownfields reclamation, as well as integration within a broader sustainable development agenda.

The purpose of this research was to examine how Washington State’s regulatory processes and financial assistance as administered by the Department of Ecology’s Toxic Cleanup Program (Ecology) effects the cleanup of brownfield sites and to make explicit recommendations for how this program might better facilitate integrated cleanup and redevelopment of Washington’s brownfield properties and the necessary partnerships to accomplish this. In order to do this, the study investigated both federal and Washington state policies and processes; conducted studies of several state brownfields programs across the country to provide a basis for a comparative assessment of Washington’s brownfields efforts; inventoried the financial programs available in the state for brownfields; and developed several case studies of recent cleanup and redevelopment efforts in Washington State to identify current issues and concerns.

The report is divided into six main sections or chapters: Federal Policy Overview; State Policy Overview; Financial Resources; State Profiles; Washington Case Studies; and, Recommendations.

Chapter 1. Federal Policy Overview

Origins

Federal policy on Brownfields grew out of federal Comprehensive Environmental Response Compensation and Liabilities Act (CERCLA) or Superfund legislation (1980). The US Environmental Protection Agency (EPA) administers CERCLA. CERCLA was aimed at cleaning up the most hazardous abandoned properties in the country, the National Priority List (NPL), which currently includes about 1,300 sites. It imposed strict, joint and several liability provisions, to ensure that “the polluter pays” and established a fund (Superfund) to help pay for the cleanup of these sites, if the responsible parties were not found.

States established state legislation and programs modeled on CERCLA to cleanup hazardous sites in their states not included in the National Priority List. Washington State enacted such a statute in 1989, and established a Toxics fund, like Superfund, and developed processes to prioritize the cleanup of hazardous sites posing the highest risk to public health.

CERCLA reform efforts have included several changes to liability provisions, establishing protections for innocent purchasers, conditional on conducting an “all appropriate inquiry”, but this concept was not operationalized at the time.

Emerging Brownfields Policy

In 1993, EPA, through its Brownfields Economic Development Initiative, began to address the larger universe of contaminated or suspected sites not on the NPL and provided the first federal definition of brownfields: “abandoned, idled or under-used industrial and commercial facilities where expansion and redevelopment is complicated by real or perceived environmental contamination.”

In the late 1990s, EPA also recognized voluntary cleanup programs (VCP), which had been established by several states beginning in the early 1990s to streamline the process of cleanup for less contaminated sites. These programs were closely aligned with brownfields efforts, but the two are not synonymous, since many VCP programs lack a redevelopment emphasis.

EPA’s brownfields initiative provided the administrative foundation that led to the passage in 2002 of the Small Business Liability Relief and Brownfields Revitalization Act (the Brownfields Act) which authorized grants funds separate from Superfund.

With the passage of the Brownfields Act, several groups could claim liability protections: bona fide prospective purchasers, contiguous property owners, and innocent landowners, all contingent on the performance of an “all appropriate inquiry”. The Brownfields Act also required that EPA establish a standard defining all appropriate inquiries by the end of 2006. Lender or creditor exemption from liability had been provided in another act of Congress in 1996. These liability protections have been driven by the economic development concerns raised by the development community.

Federal policy on Brownfields, VCP programs and other state initiatives represent “next generation” policies of environmental protection, in line with the reinventing government movement of the 1990s.

The Brownfields Problem: The Basics

In contrast to the 1,300 Superfund sites, the estimates of the number of brownfields across the country range from 400,000 to a million sites. Many of these sites suspected of contamination are the result of the de-industrialization of the economy, which began in earnest in the 1970s. Poor, and, often minority communities are disproportionately burdened with adjacent brownfields, adding an environmental justice dimension to the brownfields problem. Responsible brownfields redevelopment could address this issue as well. CERCLA itself is credited with unintentionally adding to the brownfields problem through its stringent liability provisions.

Brownfields must meet the same cleanup standards that Superfund sites meet, but because these sites are typically less contaminated, they can meet these standards at lesser cost. Brownfields range in size from gas stations and dry cleaners to large-scale manufacturing or agri-business sites. Not all brownfields are urban. Brownfields in small town and rural communities typically have a greater impact on the economic health of these communities than equivalent brownfields in cities. The more recent Brownfields Act definition of brownfields as “real property” expands the application of the term beyond industrial and commercial facilities.

Institutional Aspects of the Brownfields Problem

State toxics cleanup programs, modeled on Superfund, have a mandatory approach to contaminated sites with a single purpose—cleanup. This fails to address the dual nature of the brownfields problem—cleanup and redevelopment. An integrated approach to brownfields requires both an integrated process and staff trained to administer such a process. The American Society for Testing and Materials (ASTM) has provided an integrated model of brownfields cleanup and

redevelopment, which begins the process with collaborative community engagement and planning. Changing a traditional toxics program from a technical cleanup orientation to a more integrated, collaborative one is difficult, like most institutional change. In addition to leadership from the top, it involves changing the mission of the program to incorporate redevelopment, and ensuring that staff is trained to integrate these two purposes in their daily operations.

Public Policy Aspects of Brownfields

Costs of inaction on brownfields include: costs of damage to human health, ecosystem damage costs, fiscal costs in the form of revenue losses to local governments, social costs of environmental inequality, costs of decreasing urban densities, and long-term costs of sprawl. Estimates of lost tax revenues to local governments stemming from inaction on brownfields are significant.

Brownfields redevelopment instead of the development on greenfields offers substantial greenfields savings, and is a key strategy for both the sustainable development and the growth management movements. In addition, brownfields can also be returned to greenfields after cleanup.

Costs of brownfields redevelopment for would-be developers, public and private, are multiple: site assessment costs, remediation planning costs, remediation costs, risk management costs, present value of potential future costs. Brownfields redevelopment also face multi-faceted risks: re-openers, natural resource damages, variability of cleanup costs, reduction in development potential and third party liability.

The condition of the real estate market has a significant effect on brownfields redevelopment. In strong real estate markets, the additional costs and risks of brownfields redevelopment can become just another dimension of a real estate deal. In areas of economic decline or soft markets, the costs to address cleanup can outweigh the value of the land itself.

The multiple, negative, social and environmental spillover effects of brownfields establish a presumptive public interest in their cleanup and redevelopment. Prioritizing the cleanup of contaminated property can be guided by two complementary but separable public interests: the public interest in safeguarding public health and the environment, which leads to the prioritization of the cleanup of most hazardous sites, as in Superfund; and the public interest in metropolitan growth management, ecosystem protection, and environmental justice, which can lead to the prioritization of brownfields redevelopment, including the provision of public subsidies and liability relief.

Chapter 2 Washington State's Model Toxic Control Act (MTCA)

MTCA as a First Generation Statute

Although MTCA's purposes are six-fold, including the rights to a healthful environment and protection of the environment, as well as efficient use of land, it was developed primarily as a toxics cleanup policy. There is no definition of brownfields in MTCA, although the legislation does recognize the need to promote the cleanup and reuse of vacant commercial and industrial property.

The metropolitan growth management argument for the cleanup and redevelopment of brownfields is particularly relevant in Washington State, since the State has a strong state-wide growth management program. Brownfields redevelopment addresses all the substantive goals of Washington's Growth Management Act (GMA), although there is no mention of brownfields in GMA.

Features of MTCA

The powers of the Department of Ecology under MTCA include investigation of releases, conducting remedial actions, issuing orders and consent decrees, requiring property holders to conduct remedial actions, providing informal advice and assistance regarding requirements and technical requirements, including site-specific advice for independent remedial actions. More recently Ecology is required to develop 10-year financial reports in coordination with local governments to identify needs and funding for cleanup.

MTCA's cleanup process uses a ranking method similar to CERCLA's to prioritize sites in the state not on the federal list, allows for cleanup levels—unrestricted(residential) and restricted (industrial), and uses three methods to determine cleanup standards, one geared to "routine" cleanups (Method A).

Liability under MTCA is also similar to CERCLA's, strict, several and joint. Under MTCA there are now two major administrative pathways for conducting cleanups, *formal* sites (worst sites), and *independent* cleanups. These two pathways offer different levels of liability protection. The formal process, where Ecology staff guide the process can provide greater liability protections, through prospective purchaser consent decrees, consent decrees for potentially liable parties, and agreed orders for potentially liable parties and innocent purchasers. As in CERCLA, liability protections are also conditional on all appropriate inquiries.

Brownfields typically follow the independent administrative pathway through the VCP program, which was developed to deal with less contaminated sites, and provides staff consultation and

comfort letters. However, the VCP cannot be completely identified with brownfields, since the VCP does not focus on redevelopment .

Prospective purchaser consent decrees are the gold standard of liability protection in the State. Potentially liable parties can avail themselves of consent decrees or agreed orders through the formal process. VCP can offer opinion or comfort letters on the adequacy of the cleanup proposal and the likelihood of obtaining a No Further Action determination at the completion of the cleanup.

Although MTCA, like CERCLA, also requires an all appropriate inquiry to establish due diligence; unlike CERCLA, the state has not provided rule guidance on AAIs.

The source of MTCA's funds are taxes levied on the wholesale price of petroleum and hazardous substances. The revenues are deposited into two accounts, State and Local Toxics Control Accounts. The Local Toxics Account is used for grants and loans to local governments for cleanup. The State Toxics Account is used by Ecology to carry out the purposes of MTCA. With increasing petroleum prices, the revenue flowing into the accounts has been growing, increasing the funding for remedial action grants and site hazard assessments.

MTCA Reforms

MTCA has undergone a number of reforms since 1989, including integration with the State's environmental protection review process under the State's Environmental Protection Act (SEPA)(1994); independent remedial actions(1997); and increased focus on future land use as a driver of cleanup levels(2001).

Reforms in 2007 (Substitute House Bill 1761 or 1761 amendments) are aimed at expediting cleanup of hazardous waste and also at creating incentives for the cleanup of the Puget Sound. Ecology is empowered to partner with local communities to expedite cleanups. Changes to the remedial action grants following the legislation, such as potentially decreasing the local matching requirement for local governments, have increased incentives for cleanup. Although brownfields are not mentioned in the 1761 amendments, redevelopment is highlighted and new funds under a pilot project have been made available for integrated cleanup and redevelopment plans for local governments.

Institutional Arrangements

EPA plays an important role in the Brownfields Program in the State through its initial capitalization of the State's Brownfields Revolving Loan Fund, through direct assessment grants,

technical assistance, and through grants to the Department of Ecology from the State and Tribal Response Program (STRP), which has provided funds to staff the Brownfields Program in the State.

The State's Brownfields Revolving Loan Fund is housed in the State's Community Trade and Economic Development Department, managed by the Brownfields Coalition, and a staff member who collaborates with the Brownfields Program at Ecology. Thus, Brownfields administration in the State directly involves the departments of Ecology, and of Community, Trade, and Economic Development(CTED), although the brownfields staff, which reorganized in 2008 as the Cleanup Enhancement and Revitalization (CLEAR) team is small, a total of three staff members.

Initiatives of the Brownfields Team

The brownfields program in the state is currently involved in several initiatives (funded by STRP) including: the development of an inventory of brownfields for the State in the form of an interactive information portal; establishing local environmental task forces to aid in coordinating staff from different agencies involved in the cleanup and redevelopment; and Targeted Brownfields Outreach Teams to assist smaller or rural communities to plan and execute brownfields redevelopment, and an economic forecasting model to assist public and private parties to assess the potential revenue generation and opportunity costs of given sites.

Institutional Challenges

Institutional challenges to the Brownfields effort in the State include: the length of the cleanup process; staffing issues; lack of an area-wide multiple site approach to brownfields; lack of capacity in small towns and rural areas to undertake brownfields redevelopment; and lack of integration between cleanup and redevelopment.

A significant problem facing the program is the length of the cleanup process, which is greatest for complex groundwater and sediment sites, and for the remedial investigation/feasibility study/legal negotiations phase of the cleanup process for formal sites. In general, formal cases take more than two times longer than VCP cases. However, recent research finds that formal and VCP average cases do not differ significantly in length, when hazard rating is controlled for, and complex cases are excluded; and that staff availability is directly related to length of process. The lack of significant difference in the length of time between the formal process and VCP for comparable non-complex cases suggests that brownfields cases could benefit from the greater liability protections offered by the formal process. However, EPA requires that EPA brownfields grantees enroll in the VCP process.

During the 2007-09 biennium budget for the Toxics Cleanup Program in Ecology, 74% (of a total of 167.3 full-time equivalent staff) of the staff resources were dedicated to formal sites processing, 14% to VCP, and 12% for managing underground storage tanks to minimize releases. The brownfields program has two staff in Ecology and one in CTED. Lack of statutory recognition of brownfields impedes the assignment of staff to brownfields.

Despite the State Brownfields Program's efforts, Washington's Toxics Cleanup Program is still primarily a cleanup program and continues to face the challenge of developing a program that integrates cleanup and redevelopment. MTCA has a site-specific toxics cleanup approach, and the State lacks a planning-oriented, area-wide, multiple site approach to guide local governments in dealing with clusters of contaminated sites, although TCP's Puget Sound Initiative may offer an area-wide approach that could be adapted for the rest of the State. Small towns and rural areas lack administrative and financial capacity to undertake brownfields cleanup and redevelopment, although some of the initiatives currently under development, such as Targeted Outreach Teams, could address this problem.

Chapter 3 Financial Assistance and Risk Management

Primary Sources for Financing Brownfield Projects

Primary sources of financial assistance for brownfields projects in the State come from the federal government, through EPA grants and loans and the Department of Commerce, and from the State, through Ecology's Remedial Action Grants, and CTED's Brownfields Revolving Loan Fund. A majority of funds are available for one or two phases of a project, while a few, such as EDA and RLF loans are applicable to all phases. Most sources are available for local governments, with just a few, such as EDA, or SBA loans are available to the private sector as well. The State's Remedial Action Grants are a major source of funding for toxics cleanups, although there are no targeted funds for brownfields as such in the RAGs. Changes to the RAGs due to the 1761 amendments move the program towards a more integrated cleanup and redevelopment approach. These include requirements and funding for integrative project planning (up to \$200K), increased subsidies for redevelopment elements, such as economic development or habitat restoration. These changes are likely to increase the number of brownfields projects in the State.

Multiple sources of funding are available, but the funding under the programs for each project are limited, and most projects require multiple funding sources to make them viable. No program

exists in the State to assist public or private developers to learn about these programs, or to review the programs for eligibility and provide assistance with applications.

Risk Management and Environmental Insurance

Environmental insurance protects against environmental risks by calculating risk, and transferring it to the insurer through payment of a one-time premium. Many different kinds of environmental insurance exist, but three main types have been the focus of federal and state programs: pollution liability, cost cap and lender liability insurance. While pollution liability insurance protects against liability and third party claims, as well as previously unknown pre-existing pollution, re-openers, etc., cost cap insurance protects against the uncertainty of cleanup costs. Lender pollution liability protects lenders in the case of loan defaults. Four states have developed environmental insurance programs. Massachusetts's program provides up to 50% premium subsidy for qualifying brownfields projects open to both public and private parties. Recent research confirms the preference of private developers for affordable pollution liability and cost cap insurance programs over other public subsidies.

In Washington State, developers of brownfields projects without environmental insurance can obtain very good pollution liability and cost variability protection through the formal process by entering into a consent decree. Agreed orders also provide some good measure of liability protection. Under the VCP approach, an NFA letter provides a good measure of protection from liability after cleanup, but opinion letters do not address cost variability or pollution liability issues before cleanup is completed. For these protections, developers must turn to environmental insurance. EPA grants and loans, and the State remedial action grants, as of 2007, recognize environmental insurance premiums as eligible expenses. Washington, however, lacks a program, such as Massachusetts's or Wisconsin's, to assist private developers with the costs of environmental insurance.

Chapter 4. State Profiles

California, Colorado, Massachusetts, New Jersey, Oregon, Wisconsin

California has a complex interagency program with two state agencies, the Department of Toxic Substances Control, and the State Water Quality Control Board and its regional agencies, as well as state authorized local agencies including redevelopment agencies, handling the cleanup aspect, and its financial incentives. The state offers a statutory definition of brownfields and

recognizes the importance of brownfields in several statutes. It provides liability relief for qualified innocent landowners, bona fide purchases, and contiguous property owners, as well as prospective purchaser agreements. It has a VCP program and a registry of environmental assessors (a variation of the Massachusetts Licensed Site Professionals (LSP) program), and authorizes these licensed professionals to conduct one or more aspects of site investigation and remedial action. It provides limited state funds for assessment and cleanup of petroleum USTs to owners and eligible prospective buyers (public and private), and loans for assessment and cleanup for both public and private parties, through its CLEAN program. Innovative programs include the Schools assessment and cleanup program, environmental justice pilot programs, and its devolution of cleanup authority to local agencies, including redevelopment agencies.

Colorado's brownfields program was established as a VCP program through its 1994 Voluntary Cleanup and Redevelopment Act. Legislative relief consists of No Further Action letters at the end of the VCP process. Since 1994, no new legislation on brownfields has been passed, and guidance documents use the older EPA definition of brownfields. The program performs targeted site assessments on a priority basis and has a revolving loan fund available to public and private parties. Colorado offers a brownfields tax credit. An innovative feature of the program is its use of the Colorado Brownfields Foundation, a non-profit to provide outreach, and other redevelopment assistance including an environmental resource hot line.

Massachusetts has no codified definition of brownfields, but the “so called” Brownfields Act (1998) sets out liability relief for several types of eligible parties, including innocent owners, tenants, municipalities, redevelopment agencies and secured lenders, as well as Covenants Not To Sue for temporary solutions to cleanup. Its voluntary program is privatized through the Licensed Site Professionals program, which licenses site professionals and devolves cleanup authority to these licensed professionals, retaining auditing oversight. Massachusetts provides several financial incentives, including its Brownfields Redevelopment Fund, which includes site assessment grants for local governments, a revolving loan fund for site assessments and remediation available to eligible parties, including private parties, as well as the state’s Brownfields Tax Credits, and its subsidized environmental insurance program.

New Jersey's VCP program dates from 1992, and in 1998, the state passed the Brownfield and Contaminated Site Remediation Act, which uses the older EPA definition of brownfields. It provides liability relief through No Further Action letters and prospective purchaser agreements. Its Cleanup Stars Program is a registry of environmental professionals who are pre-qualified to investigate and remediate low-priority sites with limited oversight. Legislation introduced in the NJ

legislature is likely to move the Cleanup Stars program into a full-scale LSP program. NJ offers several financial incentives: grants for both municipalities and the private sector for assessment and remediation; loans for up to 100% of remediation with different loan caps for both public and private entities; Brownfields Development Area funding for municipalities and their partners to address multiple-site area wide revitalization efforts. NJ also developed the first tax reimbursement program in the country for non-labile parties. The state also maintains an inventory of brownfields, SiteMart, to facilitate the economic redevelopment of such sites. Most recently, the State's Economic Growth Strategy incorporates brownfields cleanup and redevelopment as a key strategy in its plans.

The home of *Oregon's* brownfields program is the Department of Environmental Quality. Like Washington State, Oregon has both a VCP program and an Independent Remedial Action pathway. Oregon's liability relief consists of No Further Action letters for VCP participants and prospective purchaser agreements. Oregon uses EPA's newer definition of brownfields. Financial incentives, primarily loans, are administered by the State's Community Development Division.

With the passage of its Land Recycling Act in 1994, *Wisconsin* began to integrate the cleanup and redevelopment of brownfields. It has developed several institutional innovations aimed at coordinating multi-agency functions, including a blue-ribbon committee, the Brownfields Study Group which provides recommendations to the Legislature and the Governor; an Interagency Policy Group which meets on a monthly basis; and interagency Green Team Meetings that provide coordinated outreach to local communities, their consultants, and private partners. It provides liability relief for local governments, lenders, neighbors, as well as a liability exemption for voluntary cleanups. In addition to more traditional financial incentives, the Wisconsin program has also developed an innovative Environmental Remediation Tax Increment District (ER TIF) program, and has negotiated an environmental insurance program which provides discounts on premiums.

Issues/Trends

Outreach, especially to rural communities, remains a problem for many of the programs studied. The state programs examined have developed several innovations to address this issue. Colorado uses a non-profit foundation, in contract to the State to provide outreach. In Wisconsin, the requirement that a minimum number of brownfields grant be awarded to communities with a population less than 30,000, has provided an incentive for program staff to conduct outreach and education in less urban areas.

Most programs remain site-specific. New Jersey provides an area-wide program for local communities with substantial financial incentives, the Brownfields Development Area Initiative,

which follows closely the ASTM Guide for sustainable brownfields cleanup and redevelopment, emphasizing community engagement and planning. Through less direct means, Wisconsin enables an area-wide approach through ER TIFs, and California does the same by enabling local governments, including redevelopment agencies to manage the cleanup process. The benefits of area-wide approaches are at least three-fold: economies of scale at the technical or engineering level, as well as from risk pooling; community-wide involvement and planning; public benefits, such as the increase in property values and tax revenues over an entire neighborhood.

State programs that license site professionals to undertake cleanup activities with minimum state oversight have been developed to tackle large backlogs in toxics cleanup agencies. The programs have two elements, the licensing of professionals, and the extent of privatization of cleanup activities. Separate from the privatizing aspect, the licensing of professionals addresses EPA's new AAI requirement that licensed environmental professionals prepare AAIs. The devolution of state oversight to such professionals can be determined by the state from nearly total to programs restricted to specific types of sites.

State programs examined have shifted from 1st generation strict state oversight programs to 2nd generation, more customer-oriented programs, such as Voluntary Cleanup Programs, and have achieved varying degrees of integration of their cleanup and redevelopment functions. Most programs have passed laws that emphasize reuse and redevelopment aspects of brownfields; provide a definition of brownfields in their statutes and guidance documents; and offer various measures of liability relief and financial incentives. Since cleanup and redevelopment efforts typically take place in different state agencies, interagency coordination remains a challenge for most programs. A third generation type of program may be emerging, e.g., New Jersey, with distinctive programs enabling area-wide, community planning efforts, and state-level strategies to return brownfields to community use.

Chapter 5 Brownfields Case Studies in Washington State

Summary of Cases

Broadway Crossing, Seattle. This small urban infill site (less than 1/3 of an acre), former gasoline station and convenience store on the corner of the main street in Seattle's Capitol Hill neighborhood was cleaned up and redeveloped into a mixed used project, with a new Walgreens on the ground level and 44 low-income rental units above. The soil on the site had been contaminated by leaking petroleum tanks, and the cleanup, which occurred in two phases after the gasoline station

ceased operations, was straight-forward since the level of contamination was low, and there was no groundwater involvement. The success of the project involved a unique private and non-profit partnership: Walgreens, who originally bought the site from the gas station owner, and intended the site for a new store; its local developer, Grainger, who understood Walgreens needs and the local planning and community development environment; and, CHH, a local community development corporation with solid experience in developing and managing affordable housing. Although Walgreens, at first, just wanted to develop the site as its typical one-story footprint, community opposition to this plan led to the project's revision. The local developer brought in CHH, which put together a financing package that included low-income tax credits for the housing part of the project. The cleanup was handled through the VCP process in two phases. Chevron excavated and disposed of much of the contaminated soil in 2003, after it ceased operations, and was granted a Partial Sufficiency with a Further Action letter. The local developer for Walgreens, Grainger, assumed responsibility for the final cleanup at the time of construction for the new development in 2005. The major glitch in the process was the discovery of more contaminated soil on the site, as the project site was being excavated for a two-story underground garage. This tripled Grainger's estimated cleanup costs. But the ability to excavate the contaminated soil in tandem with the excavation for the garage (a 'two-fer') and the strong market conditions, enabled the developer to complete the cleanup successfully. The public benefit, 44 low-income rental units, achieved by the redevelopment was to a large extent the outcome of Seattle's strong neighborhood planning and participation tradition. This tradition, brought home to the developers through the local design review board, convinced the local developer and Walgreens that, in order to win City approval for its new store, it needed to meet the neighborhood's planning objectives for denser, mixed use development, especially its need for low-income rental units.

J.H. Baxter Site, Renton. Industrial lumber uses contaminated the 20 acre J.H. Baxter site which is located on the eastern shores of Lake Washington in Renton. The site is the northernmost portion of a larger 60 acre site, called Port Quendell, which was divided into three main parcels sharing a common pollution history, and two owners during the 1990s. The cleanup and redevelopment of the J.H. Baxter site was likely delayed by the prospects of assembling and cleaning up the three sites making up Port Quendell to make way for a mega-project mixing residential and commercial uses on the lakefront. Serious plans for such a mega-project were developed in the early 1980s, but contamination discovered on the site put the project on hold, while EPA considered whether to declare the site a Superfund site. When EPA in 1986 decided against Superfund designation for Port Quendell, Ecology took jurisdiction and tried to enforce the owners

to undertake remedial investigations and cleanup the sites. In the late 1990s, Vulcan, Inc., a real estate development company owned by Paul Allen, revived the mega-project plans, and began to negotiate the acquisition of the 3 parcels. Vulcan established a subsidiary, the Port Quendall Company (PQC) to develop the project. But a mega-development on Renton's waterfront would have required addressing lack of highway interchange capacity and a railroad right of way slicing the eastern edge of all three properties. Enlisting Vulcan's help, the City of Renton went to work on this problem, conducting transportation studies and lobbying the state. It also devised a plan to buy the middle, most polluted parcel in Port Quendall for \$0 in exchange for cleanup of the site, to ensure the assembly of the land for the project, and to reduce the cleanup burden of the developers. But it was not to be. Negotiations between PQC and the owner of the southernmost parcel broke down. However, PQC went forward with its interest in the Baxter property, entered into a prospective purchaser agreement with Ecology, and bought the J.H. Baxter site in 2000. PQC agreed to assume responsibility for cleaning up the site. The Baxter family had carried out remedial investigations on the site, and PQC was able to develop a CAP based on this earlier work. The site most likely would have been developed as a smaller-scale mixed used project, but then in 2001, the market suffered a recession, and it was no longer clear what would be feasible for the site. PQC, however, carried out the cleanup without a definite redevelopment plan, until another of Paul Allen's companies, the Seahawks, came up with the idea of a practice facility and headquarters for the property. In 2006, PQC announced these plans, and the Seahawks moved in for spring training in 2008. Around this time, the owner of the southernmost parcel cleaned up his land and sold it to a residential developer, who subsequently developed the site into luxury waterfront homes, while the most polluted middle parcel has been declared a Superfund site. The JH Baxter case illustrates the challenges local governments face in ensuring integrated redevelopment when facing large-scale, multi-property, multi-site brownfields. It also offers insights on the influence of market conditions, type of developer, and local strategies on brownfields redevelopment.

ASARCO, Everett. In this complicated and litigious case, the American Smelting and Refining Company (ASARCO) Incorporated, the responsible party in the case, acquired an existing smelter on a 44-acre site in 1903, ceased operations in 1912, and dismantled the smelter by 1915. Around this time, ASARCO began to sell off the property in several parcels to several buyers without informing them of the former use of the site. Over time, a neighborhood with residential and other uses developed on the former smelter site and its surroundings. In 1990, Weyerhaeuser, the owner of one of the parcels on the former smelter site discovered some suspicious slag and informed Ecology. Upon conducting an initial investigation, Ecology found that a total of 684 acres

showed some contamination, with the heaviest contamination around the historic site of the smelter. In 1992, Ecology issued the first of six enforcement orders to ASARCO, as the responsible party, requesting that the company conduct a full RI/FS. At about the same time, ASARCO began to buy back residences in the historic smelter tract, to tear down the houses, and to fence the area (the Fenced Area). In September 1995, ASARCO delivered the RI/FS which confirmed the presence of arsenic, cadmium and lead in the soil, and arsenic and lead in groundwater and surface water above standards, and continued to buy out residences. In 1996, ASARCO presented a phased framework for conducting cleanup on the site, Ecology agreed with much of the plan which called for removal of the most contaminated soil, but not with the phasing. This was followed by more enforcement orders, mediation, litigation, finally a court injunction for ASARCO to begin cleanup of the most contaminated soil by June, 2004 and to complete it by August of 2004.

ASARCO, at the time, was a besieged company, facing 25 lawsuits in 12 states. As a result of a federal EPA suit against the company, which had been bought in 1999 by Grupo Mexico(headquartered in Mexico City), ASARCO/Grupo Mexico had to pay \$100 million into an Environmental Trust Fund with proceeds from Grupo Mexico/ASARCO to pay for ASARCO's liability claims in the U.S. At the same time ASARCO was dealing with the Everett case, it was also embroiled in the much larger and complex Superfund case in Ruston, WA, where it had formerly operated another polluting smelter. The Superfund case was led by EPA. The Everett smelter case became entangled with the Ruston case in at least two ways: first, ASARCO proposed to dispose of the excavated soil from the Everett case by disposing it in the Ruston site, after it disposed of the contaminated soil from the Ruston site (this disposal plan, according to ASARCO would save it \$3 million), but the Everett disposal plan required EPA approval; second, ASARCO was counting on at least \$1million to be released from its Environmental Trust Fund to conduct the cleanup at the Everett site, but EPA had to approve ASARCO's disposal plan for Ruston, and then its plan for Everett before it approved disbursement from the Environmental Trust Fund. Consequently, even though the Everett Asarco case was not a Superfund site with EPA oversight, it depended on EPA decisions in order for the responsible party to move forward with the cleanup.

ASARCO through the legal suits it brought against the State (which limited its liability to its historic smelter property), and finally by declaring bankruptcy (which prohibits expending cleanup funds on property the bankrupt company does not own) was able to avoid responsibility at the time for cleanup of the larger contaminated site. The company, did, however, finally clean up the most contaminated soils in its former historic property through the propitious intervention of the Everett Housing Authority (EHA). In December of 2003, EHA agreed to buy for \$3.3 million the land

inside the fence and homes outside the fence that ASARCO had acquired, ASARCO agreed to remove the most contaminated land in the site, and EHA agreed to contribute to ASARCO's cleanup costs and to assume the remaining costs of the cleanup of the historic smelter area (not the greater site) after ASARCO's removal of the most contaminated soil. Ecology issued two prospective purchaser agreements with EHA providing it with liability protections in April 2004. The prospective purchaser agreements resulted in the release to ASARCO of \$1M from the Trust Fund, and EHA contributed another \$1million obtained as a match from Ecology to ASARCO's cleanup expenses. This infusion of funds helped ASARCO meet the deadlines in the injunction to begin cleanup in June 2004, and complete it by end of October 2004. None too soon, since ASARCO filed for bankruptcy protection less than a year later in August of 2005. The same month, the City approved EHA's sale of a seven-acre parcel of the land it bought from ASARCO to a developer for \$3.2 million. In order for the developer to proceed with the medium density residential development he had proposed for the site, EHA had to complete the cleanup of the site. This cost an additional \$900K to which the City of Everett and EHA contributed \$450K and Ecology contributed \$450K in matching grant funds. The sale went through in January of 2006, and the city approved the developer's plans. Bonterra Homes constructed a total of 90 units in 2-,3-,4-unit townhouses on the site. As to the larger, less contaminated site, much of it still remains contaminated. Ecology has proceeded to clean up this area at a manageable pace, since the State has had to assume the costs of cleanup.

Washington State has filed a total claim of \$600 million against ASARCO, more than half of it associated with the Ruston Superfund Site. In the meanwhile, ASARCO's bankruptcy case has been wending its way through federal bankruptcy court and some relief may be in sight. In August of 2008, ASARCO agreed, pending federal bankruptcy court approval, to pay \$200 million to Washington State to clean up the toxic contamination around the Ruston site, and six other sites in Washington State, including the Everett site.

Wyckoff Site, Bainbridge Island. This 50 acre upland property, including its aquifer, is part of a 500 acre Eagle Harbor/Wyckoff Superfund site designated by EPA in 1987 in the City of Bainbridge Island. The rest of the Superfund site is aquatic, including the East and West sides of Eagle Harbor. Lumber and shipbuilding activities using creosote from 1904 to 1988 contaminated the Wyckoff property, and the Harbor, primarily with PAHs. The Superfund site is a complex site in that it involves land, aquifers, marine sediments and aquatic areas. EPA held the Wyckoff Company, which had operated a wood treatment facility on the property from the mid-1960s to its closure in 1988, liable for the contamination. After the Wyckoff Company settled its liability with

EPA by transferring all its assets, including the land, into an environmental cleanup trust, the trust auctioned off the land to partly pay for the site's cleanup. This settlement left EPA responsible for the cleanup of the Superfund site, and the City of Bainbridge Island began a phased purchase of the Wyckoff property in 2001 after EPA had conducted a certain amount of cleanup. The City, which undertook a strong participatory visioning and planning process for the property, was successful in finding partners and funding for the purchase of the property and the redevelopment of the property into parkland, including a memorial park recognizing the internment of Japanese Americans during WWII. The City obtained prospective purchaser agreements from EPA and Ecology to protect its future liability. In this Superfund case, the City's redevelopment of this complex site has relied on EPA to carry out the remedial investigations and cleanup of the Wyckoff property. The cleanup is now complete, except for the final cleanup of the most polluted parcel, Bill Point. The City and Ecology on the one side and EPA on the other have disagreed over the final cleanup of this parcel. EPA, having spent over \$125 million on the cleanup of the overall Superfund site, has selected a containment method for cleaning up the remainder of the Wyckoff property that will require maintenance and operations for decades and cost in the tens of millions. Maintenance and operations cost would be the responsibility of Ecology and the City. Ecology and the City have argued for more complete cleanup methods with fewer requirements for ongoing maintenance and operations. Although the City has purchased environmental insurance, insurance has a time limit, and depending on the final cleanup strategy, the City may be faced with additional costs for cleanup 20 or more years in the future. As a Superfund case with EPA managing the cleanup and a local government the redevelopment, this case illustrates the different and potentially conflicting interests of federal and state and local governments. As importantly, the case demonstrates the benefits of a strong participatory community planning process in the cleanup and redevelopment of a contaminated site. The City led and conducted an extensive citizen participation and visioning process, which led to successful negotiations with EPA on the purchase of the property, and in its ability to enter into useful partnerships, to raise funds, and obtain federal and state grants.

Custom Plywood, Anacortes. This waterfront site on the western shores of Fidalgo Bay in Anacortes has had multiple waterfront industrial uses since 1900, from sawmill, box factory, to its last use as a plywood mill, which ceased operations in 1992. Soon after, the site was devastated by a fire. The contaminated site is composed of 8 parcels and is estimated to be 6 acres of upland, and 28 acres of aquatics. Pollution from industrial operations included oil and gasoline, arsenic, cadmium, lead, chromium, and PCBs. Several scientific samples from 1993-2000 revealed levels of these toxics above MTCA standards. Since 2002, there have been several attempts to cleanup the site

without success thus far. In 2002, the City of Anacortes organized itself to develop a plan for cleanup and redevelopment of the site by establishing a public development authority for this purpose. The city devised a phased approach to the cleanup, partnering with the new development authority and the landowners to cleanup first the upland area, sell the land after cleanup, and then use the City's portion of the land sale to clean up the aquatic part of the site. In order to do this, the City needed Ecology to provide liability protection through a consent decree, but Ecology did not agree, and the City also failed to come to an agreement with the landowners. Subsequently, a new owner, Concorde, was willing to cleanup the site through a consent decree, but needed financial help. Lacking funds, at first, Ecology steered him to the VCP pathway, but within a year decided that the site was too complex to handle through the VCP. Confusion over eligibility for grant and loan funds from CTED under the two administrative pathways also played a part in delaying the process. Finally, in late 2007, Ecology negotiated an Agreed Order with Concorde that the company would conduct an RI/FS and draft a CAP. But by December of 2007, another company acquired the site, and this new company is currently negotiating an Agreed Order with Ecology.

Jimmycomelately Creek, Jamestown S'Klallam Tribe. The Jimmycomelately Creek (JCL) cleanup and restoration was part of a larger restoration project of wildlife habitats in Sequim Bay, off Washington's Olympic Peninsula. From 1892-2001, the mouth of the JCL Creek was used for storage and shipping of logs. Logs were tied to pilings, and pilings (about 100), were treated with creosote, which is composed primarily of PAHs. This area comprised 7.6 aquatic acres out of the 15.4 square miles of the total JCL watershed. In the late 1990s, the Tribe, with the assistance of Washington's Department of Fish and Wildlife, and of Transportation began to acquire land and easements with the purpose of restoring the Creek. The cleanup phase of the project took about two years to complete (2003-2005). The site was cleaned up under Tribal jurisdiction with US EPA and other federal agencies' oversight. This is a case illustrating the restoration of a rural industrial site to improve the aquatic environment for endangered salmon, and other species. It involved the Tribe's collaboration with multiple state and federal agencies in a multi-phased area-wide planning financing process. The case also indicated the lack of State water quality standards for total PAH contamination levels—the project used NOAA standards, and the lack of information on the horizontal distribution of contamination in aquatic sites.

Kendall Yards, Spokane. Operated as a Union Pacific locomotive repair and servicing complex from 1914 to 1955, the 78 acre Kendall Yards site was primarily contaminated by leaks and spills of Bunker C oil. The site was also contaminated with metals such as arsenic, cadmium, and lead. After Union Pacific ceased operations, the rail corridors were abandoned over a period of time

through the 1980s. The 14-parcel property then came under the ownership of Metropolitan Mortgage and Securities Company. Planning for a mixed development on the site, Metropolitan conducted a Phase I and II ESA for parcels 1-2 in 1990-91, and in 1992, conducted additional sampling for most of the 14 parcels. Independently from Ecology, and without its supervision, Metropolitan developed a Cleanup Action Plan in 1993-94 for the site, and some remedial activities took place at the time. In 2004, Metropolitan declared bankruptcy and the site was auctioned off in bankruptcy court to Marshall Chesrown of River Front Properties. Chesrown planned to reuse the site as a mixed use development, very much in line with Metropolitan's plans for the site, and began to plan the cleanup for unrestricted uses on the site right away. In May of 2005, the site began the cleanup process by entering the VCP pathway. The developer obtained a \$2.4 M loan from CTED's Revolving Loan Fund, and the planning of the cleanup was completed within 6 months. Cleanup began on September 2005, and was completed in January 2006. 22,000 tons of contaminated soil was removed from the site. The site was removed from the State's Hazardous Sites list in May of 2006. At the time, the developer planned 2,600 units and one million square feet of retail and commercial space. The cleanup and redevelopment of the site is an excellent example of collaboration between a private sector developer and state and local agencies, and EPA in 2006, gave the project a national award for outstanding remediation activities. The positive relations with the City, and other city and civic entities led the City to approve in 2007 a tax increment district to finance part of the cost of the development's infrastructure. The softening of the real estate market in the past year or so, however, has delayed the start of construction of the project to at least 2009, and forced the cutting back of phase I. Site preparation and construction of infrastructure, including streets is proceeding through the end of 2008.

Chevron Bulk Terminal, Morton. The Chevron Bulk Terminal site is a one-acre site divided into two parcels with different owners in the small rural town of Morton. Chevron maintained a bulk facility with rail and then truck distribution facilities from 1929 to 1982. Twenty years after Chevron ceased operations on the site, in 2003, a citizen call alerted Ecology to potential pollution on the site. Once Ecology conducted an initial investigation, it took about three and a half years to cleanup one of the parcels on the site for which Chevron assumed liability under an enforcement order. The other parcel, with unknown and deceased PLPs, is also contaminated, but has not been cleaned up. At the time of discovery, the city had various community plans for economic revitalization, including the attraction of tourists. Two of the town's economic development goals were to restore a historic train depot as part of its tourism strategy (a project of the Cowlitz River Valley Historic Society (CRVHS)), and to expand rail service through the area. The location of the

historic train depot, however, stood in the way of train service expansion, and the CRVHS seized the opportunity to relocate the train depot to one of the parcels, the one undergoing cleanup. CRVHS bought the parcel in 2005. The Morton site was processed through the formal pathway, and facilitated on the town's side by a project coordinator hired by the Historic Society, who coordinated the process with Ecology and the town's multiple agency partners, as well as secured funding for the project.

Length of the Cleanup Process

The cases varied in length from initiation to completed cleanup, with two of them taking about 3 years, Broadway Crossing, Seattle, a VCP case, and the Chevron, Morton case, a formal case. The ASARCO, Everett case, from the first enforcement order in 1992 to the completed cleanup of the most polluted area of the site took 12 years, but most of the site is still polluted, and Ecology is still cleaning up the larger site. Scientific samples showing contamination above standards began to be drawn at the Custom Plywood site from 1993, but it was first listed on the State's Hazardous Sites List in 2001. Thus, depending on when initiation is perceived to begin, the site has been in process 15 or 7 years. The Wyckoff site was listed as a Superfund site in 1987, and cleanup continues as of 2008; the site has been in process 21 years and counting. The results of scientific samples drawn at the larger Port Quendall site in 1983, of which the JH Baxter property was part, indicated severe pollution. This prompted EPA to consider listing the site as a Superfund site. In 1992, Ecology decreed formal orders on the Baxter property, and the property was cleaned up by a new owner by 2005. Depending on when initiation is perceived, the site was in process either 22 years, or 13 years. Quendall Terminals, the most polluted property in the site, now a Superfund site is still not cleaned up, and thus it has been in process for 25 years and counting. Kendall Yards, under a new owner, entered the VCP process in 2005, and completed cleanup in 2006, record time. However, Metropolitan, the previous owner of the Kendall Yards site began an independent site assessment in 1990, and conducted considerable cleanup of the site. This previous work is an important factor in explaining the subsequent fast cleanup of the site.

Issues Raised by the Cases

- 1. Community Planning and Stakeholder Involvement.*** Community planning and stakeholder involvement, in various forms, were part of most of the successful cases studied. In the Broadway Crossing case, community-wide planning had taken place sometime before the

case, but a community group--a local design review board--brought the plan to bear on the developer's project, and successfully changed the project to provide a substantial public benefit. Community planning and stakeholder involvement was extensive in the Wyckoff, Jimmycomelately Creek, Kendall Yards, and Chevron cases. Community planning and stakeholder involvement was not as significant in the ASARCO, Everett case, the Custom Plywood case and the JH Baxter case, although the developer in the JH Baxter case conducted its own community involvement process.

2. ***Applicability of Area-wide, Multiple Site Approach.*** Several of the cases would have benefitted from an area-wide approach led by the city involved and benefiting from public incentives, e.g., JH Baxter; Custom Plywood, Anacortes; Chevron, Morton; Kendall Yards; and Wyckoff site. In effect, many of the cities involved in these cases developed their own area-wide processes, with uneven success, to deal with these sites.
3. ***Public-private Partnerships.*** Most of the cases involved beneficial public-private partnerships. In the ASARCO, Everett case, the Everett Housing Authority and the City of Everett negotiated a purchase deal with ASARCO that resulted in the cleanup of the most polluted area of the site. In the Broadway Crossing case, a national retailer, a local private developer, and a local community development corporation entered into a partnership resulting in the cleaning up of the site, and a successful redevelopment. In the Kendall Yards site, the partnership between the private developer and the City of Spokane led to the forming of a tax increment finance district to finance the infrastructure for the site. In the Morton case, the City and a non-profit, a local historical society entered into a successful partnership that managed the cleanup and redevelopment of part of the contaminated site.
4. ***Use of Financial Tools.*** Several cases illustrated the use or need of financial tools. A TIF used by Kendall Yards to partially finance the infrastructure needed for its redevelopment is a tool that could be used by other projects during strong market conditions. EHA obtained a remedial action grant from Ecology for \$1.45 million to purchase the ASARCO property. Kendall Yards obtained a \$2.4 million RLF loan from CTED, the largest EPA brownfields loan at the time. But this also indicates the lack of sufficient RLF capacity to help finance large-scale projects, for example, EHA's purchase of the ASARCO site. Instead, EHA obtained a line of credit for over \$5 million from a private bank.
5. ***Market Conditions.*** Market conditions played an important role in several projects. Strong market conditions led EHA to purchase the ASARCO property, and enabled it to turn around and sell part of it to a private developer; the same strong conditions led the Kendall Yards

developer to purchase the property and clean it up with his own funds and Vulcan to pursue a mega-project in the 1990s in Port Quendall. Downturns in the market led to the abandonment of the mega-project at Port Quendall, and currently, are delaying or stopping the redevelopments at Kendall Yards and at the Everett site.

6. ***VCP versus Formal Process.*** Broadway Crossing benefited from the VCP process, it was a small site, with only soil contamination, and was able to complete the process in three years. The Morton site, although a small site benefited from the formal process in terms of liability protection. The new owner of the Kendall Yards project was able to complete the process in record time, but the site had already undergone a formal process and much cleanup in the 1990s. Thus, it is not clear whether a large site without such previous work could undergo the VCP process in such record time.
7. ***Issues of Coordination.*** Ecology led the ASARCO, Everett case, while EPA led the ASARCO, Ruston case. The two cases were intertwined, and it is not clear the extent of coordination between Ecology and EPA. In the Wyckoff case, there have been disagreements between Ecology and EPA on the final remedy for the most polluted parcel. In the Custom Plywood case, there was a lack of coordination between Ecology and CTED on which administrative pathway would be best for the owner to follow.
8. ***Infrastructure Limiting Redevelopment Options.*** In several of the cases studied, infrastructure capacity set limits to redevelopment options. In the JH Baxter case, transportation infrastructure problems were main obstacles to the mega-project concept. In Kendall Yards, infrastructure deficits would have been a problem, but the developer and the City agreed to designate the area a tax increment finance district to partly pay for the infrastructure required. The Wyckoff site lacked adequate infrastructure capacity for significant residential or commercial development.
9. ***Containment Strategies and O & M Costs and Risk.*** The Wyckoff site makes clear that containment strategies can have considerable operations and maintenance costs for owners for long periods of time, and face considerable risk of reopeners and natural resource damages. This is of particular concern for local governments that assume ownership of a site after cleanup.
10. ***From Brownfields to Greenfields or Bluewaters.*** Two of the cases, the Wyckoff property and the Jimmycomelately Creek site are good examples of contaminated areas returned to parklands or clean shorelines.

11. Lack of Power to Force Cleanup before Property Transfers. All the cases studied demonstrate the lack of statutory power to force the cleanup of, or at least to identify, brownfields before property is transferred. And yet all of the cases studied had historical industrial uses that release toxic pollutants. This lack of statutory power makes it more difficult to identify responsible parties early on, as well as allows the pollution to threaten public health and the environment for long periods of time.

12. Large Complex Sites with High Cleanup Costs. Large, complex sites with high cleanup costs are often beyond the ability of responsible parties, EPA and Ecology to cleanup. The Eagle Harbor/ Wyckoff site has cost EPA over \$125 million so far, and the operations and maintenance costs for Ecology and the City are projected to be in the tens of millions. The ability of these agencies to clean up such sites may also depend on the lack of effective cleanup technology, as in the Eagle Harbor/Wyckoff site. Quendall Terminals, another heavily contaminated shoreline site may be very costly to cleanup. At the time of the mega-project concept, the cleanup was estimated to be more costly than the price of the land.

Chapter 6. Recommendations

Drawn from the findings on Washington State's program, the other state programs studied, and the Washington State case studies, the recommendations aim to shift Washington State's Toxics Cleanup Program from a first generation program with several second generation features, such as the VCP, to a third generation program with a strategic approach to brownfields at the state level, and a set of programs that enable local communities to deal comprehensively with the brownfields in their midst, and that facilitate cleanup and redevelopment by the private sector. A major objective of the recommendations is to address the length of the cleanup process and the backlog of brownfield properties in the State.

Recommendations on Statutory Changes

The State should develop and enact a new statute, a *Brownfields Revitalization Act*, to include :

1. *A definition of brownfields, following EPA's most recent definition, which acknowledges that any type of property can be a brownfield, not just industrial or commercial. Such recognition will enable the State program to provide staffing and direct funds for brownfields cleanup and redevelopment from the Toxics Accounts.*
2. *In general, the new Act should recognize the dual nature of the brownfields challenge, and the clear purpose of the statute should be to ensure the cleanup and reuse of brownfields.*
3. *The independent remedial action clause should be incorporated into the new Act and revised to include staff advice and assistance on redevelopment.*
4. *Transfer and Closure Clause. At minimum, this clause should require that prior to sale of property, or closure of operations, an owner with property used for industrial or commercial activities likely to release hazardous substances (a list of such activities should be pre-specified by the State) should notify Ecology of their intent to sell or close operations, of the contamination status of their property certified by an environmental professional (see Recommendation 7), and of the plans for cleanup of the property. Ecology can review and approve such transfers through a permit. More ambitiously, MTCA could require that property owners with contaminated properties cleanup such properties at the close of operations or before transfer, or certify that the buyer would cleanup such properties.*
5. *The proposed Brownfields Act should make a strong statement in its objectives and throughout the Act of the connection between the cleaning up and reuse of brownfields and the goals of growth management, as well as the brownfield connection with sustainable development. GMA should also be revised to acknowledge the problem of brownfields.*
6. *The proposed Act should include a clause establishing a community-wide process for local governments that face multiple brownfields and providing public incentives for this purpose, in particular, a new category of Remedial Action Grants. This community-wide program should be accompanied by a revision to GMA to include an optional brownfields reuse plan element for local comprehensive plans.(RCW36.70A.80)*
7. *The proposed Act could include liability relief as broad as protection for innocent brownfield redevelopers within areas designated by community brownfields plans, as well as to innocent redevelopment agencies, public authorities, and community development corporations. In the alternative, more particular forms of liability relief could be fashioned to address situations considered appropriate after careful study.*

8. *The State should establish a state licensing program for environmental site professionals. This will ensure the quality of site professionals through testing and continuing education and respond to EPA's new AAI Rule.*
9. *Beyond the licensing of professionals, the State should consider devolving the power to investigate, cleanup and certify simple cases of soil contamination that meet the standards of Method A for unrestricted uses, with the State retaining auditing authority.*

Recommendations on Administrative Changes

10. *The State should consider establishing a one-stop shop for brownfields incorporating VCP technical staff from TCP, the current brownfields staff and CTED staff (both from the economic development and growth management divisions), to provide assistance with both cleanup and redevelopment aspects of the process, including permitting assistance.*
11. *To accomplish such an end, TCP should provide training on brownfields reuse and redevelopment, including on financial issues, to the more technically oriented site managers in the VCP and throughout TCP.*
12. *TCP should establish regular monthly meetings between brownfields staff in both Ecology and CTED, other relevant CTED staff and site managers to discuss status of cases and issues raised by the cases.*
13. *TCP should consider establishing a partnership with a non-profit, such as ECOSS, to provide brownfields outreach services throughout the State for both public and private parties.*

Recommendations on Financing

14. *CTED and Ecology should seek to substantially increase the capitalization of the State's Revolving Loan Fund.*
15. *The State should consider targeting a certain percentage of remedial action grants for small towns and rural communities.*
16. *The State should consider establishing an environmental insurance program.*
17. *The State should consider establishing a new brownfields reclamation purpose for tax increment financing districts. This can be accomplished by including the cleanup of contaminated land as a public improvement eligible for financing (RCW 39.89.02). Such*

Recommendations for a State Brownfields Strategy

18. The State should develop a State Brownfields Strategy to identify and cleanup and redevelop or return to their natural state the backlog of brownfields in the State. The Plan should set a timeline, increase funding, and financial tools to accomplish this.

National Initiative

19. The State should propose and lobby for a Brownfields Reclamation Corps as part of a national works program. The mission of the Corps would be to cleanup large, complex sites on the NPL list or which rank 1 and 2 in states' hazardous sites list.

The strategies included in the recommendations are meant to reduce the backlog of brownfields in the State, by requiring owners or operators as they stop activities that release hazardous substances to report and cleanup their sites, by licensing and authorizing site professionals to investigate and cleanup simple, lightly contaminated sites, by providing a process and public incentives for local governments to deal with multiple sites through a community planning process, by increasing staff focused on both cleanup and redevelopment, and by advocating the establishment of a National Brownfields Reclamation Corps to clean up large, complex sites. The State itself can coordinate and prioritize its own resources to confront the brownfields challenge by developing a state-wide strategy incorporating many of the recommendations proposed above. We see the reduction of the backlog of utmost importance for the sake of a more sustainable future where use and release of hazardous substances is minimized, and addressed as they occur, as well as to prepare for climate change, which is likely to increase the risks from contaminated sites.