Chapter III

Brownfields Liability

A. Introduction

In an effort to cleanup and prevent hazardous waste contamination which, at times, includes brownfields, laws have been enacted at the federal and state levels. These pieces of legislation are intended to protect the public and the environment from hazardous substances, motivate cleanup or remediation and ultimately redevelop contaminated property. Often, these laws establish "potentially responsible parties" (PRPs) such as owners, operators, generators, and transporters in certain situations as liable for the remediation of brownfield(s). The potential liability attached to brownfield sites can be a significant barrier to the reuse of these properties.

Fearing responsibility for remediation expenses, some of those who might be interested in redeveloping old urban commercial or industrial sites have shied away. Indeed, at times, the uncertainty of these rehabilitation costs (see Chapter II) is enough to scare away many investors, lenders, and developers. To address some of these concerns, various statutory provisions and agency regulations, policies, and guidance documents have been developed as tools to minimize and manage risk.

To understand these concerns, it is necessary to review the applicable federal and state laws and how they mandate liability. **The information provided here does not describe all of the intricacies of the legal liability for brownfields. For this detailed information, obtain legal counsel**.

B. Federal Laws

For almost a century, industrial and hazardous wastes were virtually unregulated by any level of government. Several high profile environmental incidents in the late 1970's and early 1980's pushed the federal government into regulating waste. Two federal laws have had the largest impact on the redevelopment of brownfields: the *Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)* and *Resource Conservation and Recovery Act (RCRA).*

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), also known as **"Superfund,"** was enacted in 1980 by Congress to authorize EPA to respond to environmental emergencies involving hazardous wastes or pollutants and contaminants, initiate investigations and cleanups, and take enforcement action against responsible parties. Unlike RCRA, CERCLA does not create a regulatory program, rather it creates a liability system through which responsible parties must conduct or pay for the cleanup of sites contaminated with hazardous substances. Hazardous substances include a list of hundreds of contaminants compiled by the EPA. Therefore, CERCLA can impact a number of brownfield sites.

Essentially, CERCLA is a two part plan. First, it is designed to ensure that those who caused the pollution, rather than the general public, pay for the cleanup. Second, it established a trust fund (Superfund) originally financed by taxes on crude oil and specific chemicals to pay for remediation of contaminated properties, although taxes have not been levied since 1995. It is currently financed by appropriations from Congress, interest on investments, and cost recovery, penalties and fines paid by violators of CERCLA.

CERCLA Liability

One of the primary reasons why CERCLA can be a barrier to redevelopment is because it can make a variety of people responsible for cleanup expenses. In turn, it is important to review what groups are included on the list of potentially responsible parties. While the specifics of liability will be discussed in more detail later, generally, there are four groups of potentially responsible parties under CERCLA:

- **Present Owners and Operators**
  Present owners and operators can be held liable even if they did not cause the contamination.

- **Past Owners and Operators**
  Past owners and operators may be liable if the disposal of the hazardous material occurred while they owned the land or while they controlled the operation of the facility. People who sell contaminated land can be liable even when the purchaser agrees to take on all of the risks associated with the land. One can be responsible for remediation costs even if he or she no longer owns the property, he or she acted in accordance with the laws of the time, and even if the waste was disposed of decades ago.

- **Generators**
  Generators of hazardous waste are liable if they arranged for the disposal or the treatment of the hazardous substances found at the site.

- **Transporters**
  Transporters who move hazardous waste from generators to treatment, storage, or

disposal facilities **or sites selected by such person** can be held responsible for a contaminated piece of land[1].

It is clear from this discussion that one major source of confusion and fear for developers that surrounds Superfund is the definition of "owner." Under CERCLA, a wide variety of people can be considered the owner of a contaminated piece of land. Those deemed owners must assume the accompanying responsibility.

In addition, under CERCLA, liability is "strict," "joint and several," as well as, "retroactive." These three terms are critical to understanding why CERCLA puts fear in the hearts of potential investors and developers.

- "**Strict**"
  This means that owners, operators, generators, and transporters can be held legally responsible for a contaminated plot, regardless of fault. Thus, if someone, or some entity, decides to bring a lawsuit against one of the potentially liable parties, negligence nor intent do not have to be proved.

- **"Joint and Several"**
  This means that the government can pursue all potentially responsible parties for cleanup expenses or reimbursement. Similarly, one potentially responsible party can be held responsible for all cleanup costs. Essentially, the government may sue one person for total cleanup expenses with the expectation that the individual will then in turn seek compensation from other responsible parties. First and foremost, the purpose is to cleanup the site and to protect human health and the environment.

- **"Retroactive"**
  This means that liability applies to hazardous substances which were released prior to the enactment of CERCLA[2]. It also means that a new owner can be held liable for contamination that occurred before he or she owned the site. Essentially, then, you can buy into liability, as intent nor negligence are not determining factors. Indeed, buyers can be held responsible for cleanup costs even if they were not aware of the problem at the time of sale.

Take the case of a developer. Under CERCLA, a developer who has in the past worked on, or is currently working on, a site that is found to be contaminated can be sued by EPA or those EPA has held responsible. State regulators, the city, neighbors, tenants, and employees may not have satisfied the requirements to bring a cost recovery or contribution action under CERCLA. Generally, to bring a cost recovery action under CERCLA a party must have had incurred

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[1]City of Chicago. Brownfields Forum: Recycling Land for Chicago's Future. Final Report and Action Plan. November, 1995. pg. 42.

[2]Ibid.

response costs.

New legislation adopted in January 2002, The Small Business Liability Relief and Brownfield Revitalization Act (H.R. 2869), provides clarification of the "innocent landowner" defense and provides liability protection for bonified prospective purchasers. It also gives liability protection to contiguous property owners who cooperate with and provide access for cleanup. Businesses with fewer than 100 employees are also exempt from liability where waste disposal involves only small quantities of non-hazardous waste. These provisions are detailed later in this section.

CERCLA, The National Priorities List, and Brownfields

Section 105 (a)(8)(B) of CERCLA requires that the statutory criteria provided by the Hazard Ranking System be used to create a list of the most dangerous sites with known releases or threatened releases of hazardous substances. This list is the **National Priorities List (NPL)**. These are the worst of the worst sites.

There are roughly 1,200 NPL sites nationwide[3]. There are three tools used to determine if a site should be placed on the NPL:

1. The primary tool is the EPA's Hazardous Ranking System (HRS). HRS scoring is based on a mathematical formula. Three categories of risk are used in the scoring process:
   - The probability that hazardous substances have been released, or have the potential to be released.
   - The characteristics of the waste, such as toxicity.
   - People or sensitive environments that might be affected by a release.
2. States and territories are permitted to designate one top-priority site.
3. A site may be included on the NPL if it meets all three of the following requirements:
   - The Agency for Toxic Substances and Disease Registry issues a health advisory that recommends removing people from the site.
   - EPA declares that the property is a significant threat to public health.
   - EPA predicts that it will be more economical to use its remedial authority (available only at NPL sites) than to use its emergency authority to respond to the site[4].

Superfund sites, in general, are significant health and safety hazards which require large amounts of time and money to restore.

If there is an immediate threat to human health and the environment, the EPA can implement **removal actions** to avoid or stymie disaster. The EPA has used removal actions to avert fires

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[3]http://www.epa.gov/superfund/sites/query/basic.htm. July 10, 2002.

[4]http://epa.gov/superfund/programs/npl_hrs/nplon.htm. July 10, 2002.

and explosions, prevent exposure to acute toxicity, and to protect drinking water supplies. Typically, removal actions to be funded by CERCLA must be implemented in less than a year and cost less than two million dollars. In comparison, remedial actions may be longer-term and are usually more expensive cleanups than removal actions[5].

The NPL is based on a list of all sites that could potentially receive CERCLA assistance, the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) (see text box). The sites in this system have varying degrees of contamination[6].

For statutory and organizational reasons, EPA does not consider NPL sites brownfields. However, many people include NPL sites in what they consider to be brownfields. NPL sites are different from most brownfields because they are, first and foremost, serious public health problems, and generally not economic development opportunities in the immediate future. Properties on the NPL are referred to as Superfund sites because the money in the trust fund set up by CERCLA can only be used for properties on the NPL. Less contaminated brownfields do not receive this financial assistance, but still must be restored.

While most contaminated sites are not on the NPL, Superfund still requires all site owners and operators to cleanup any hazardous substances that exceed the EPA's definition of "reportable quantities." The EPA can access punitive damages of up to three times the cost of cleanup if an owner or operator fails to do an adequate job. In practice, the EPA has delegated the regulation of these less contaminated brownfields to the states if they have Voluntary Cleanup Programs (VCPs) or Superfund programs in place. To address brownfields problems, EPA in a multi-agency effort developed the Brownfields Economic Redevelopment Initiative designed to empower and encourage cooperation between states, communities, and other economic redevelopment stakeholders in the sustainable reuse of brownfields.

The Superfund law also permits the owners of adjacent properties (one of several possible "third parties") who have expended time and money to cleanup their property to take legal action against the owners of the contaminated sites which caused the problem.

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[5]United States Environmental Protection Agency. Handbook of Tools for Managing Federal Superfund Liability Risks at Brownfields and Other Sites. November 1998. pg. 7.

[6]Bartsch, Charlie. Testimony before the Unites States House of Representatives, Committee on Science, Space, and Technology, Subcommittee on Technology, Environment, and Aviation, On Reclamation and Reuse of Abandoned Industrial Sites. June 9, 1994. pg. 2.

The EPA Archives CERCLIS Sites

Even with the guidances issued and the reforms made by the EPA, substantial confusion about CERCLA exists. This confusion has worsened the stigma attached to Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) sites. Indeed, while many of the sites listed in the system are not beyond repair and could be returned to productive use, there is a reputation that comes with being included on CERCLIS. Lenders, for example, are automatically hesitant to support a redevelopment effort if they discover that the site is listed in CERCLIS. The reputation that accompanies this categorization is often unwarranted. As explained earlier, CERCLIS is not solely composed of sites that are of interest to the Superfund program. A large number of the properties listed are not as contaminated as the stigma attached to them suggests. Thus, all properties in CERCLIS, horribly polluted and only moderately damaged sites alike, are shied away from by investors and developers. Clearly, this has been a major barrier in the effort to redevelop brownfields.

In an attempt to solve this problem, ***EPA has removed 33,000 sites from CERCLIS****. All of the properties archived were found to meet one of the following criteria:*

- *The property was discovered not to be contaminated.*
- *The property could be sufficiently rehabilitated by the state in which it was located.*
- *The contamination was quickly remedied, and thus, the property was not a candidate for NPL.*

Each state will be responsible for keeping EPA informed on the status of the archived sites that fall within their respective boundaries. In particular, if further contamination is uncovered, EPA has to be informed, as the site may need to be returned to CERCLIS.

Contact*: RCRA/Superfund Hotline at (800) 424-9346.*

CERCLA Statutory Provisions

Third Party and Innocent Land Owner Defense

In 1986, Congress amended parts of CERCLA to protect people who acquired property with contamination without knowing, or having a reason to know, that contamination existed. This is often referred to as the "innocent landowner defense" even though it is actually a version of the "third-party defense". Specifically, this innocent landowner defense may be useful if contamination was caused by a third party who does not have an employment, agency or contractual relationship with the land owner.

This defense cannot be used in the following circumstances:

- A landowner disposes of a hazardous substance on property that is already contaminated, even if they were unaware of the earlier contamination.
- A landowner learns of contamination on their property and sells it without informing the purchaser.
- A landowner contributes to a release of a hazardous substance on the property

To use the third-party defense, an innocent landowner must show that adequate precautions against the third party's acts were taken and that "due care" was exercised in regard to the hazardous substances involved. A landowner must not have invited the third party's actions through negligence. Also, the landowner must not have known or have had any reason to know that the property was contaminated with hazardous substances when it was acquired. These requirements are part of the common elements discussed below.

The March 6th 2003 EPA interim guidance summarized in the table below, provides some guidance on the "common elements" of three landowner liability protections: 1) innocent landowners, 2) contiguous landowners, and 3) bonafide prospective purchasers.

Summary of "Common Elements" to Bona Fide Prospective Purchasers, Contiguous Property Owners, and Section 101(35)(A)(i) Innocent Landowners

Common Element among the Brownfields Amendments Landowner Provisions	*Bona Fide Prospective Purchaser*	*Contiguous Property Owner*	*Section 101 (35)(A)(i) Innocent Landowner*
Did not cause, contribute or consent to contamination - part of CERCLA law	X	X	X
Conducted all appropriate inquiry at time of purchase, did not know of contamination	Can Know	X	X
No affiliation with person responsible for contamination	X	X	X
Compliance with land use restrictions and institutional controls	X	X	X
Took reasonable steps*	X	X	X
Provided cooperation, assistance, access to persons authorized to take response actions	X	X	X
Complied with information requests and administrative subpoenas	X	X	X
Provided legally required notices	X	X	X

**To stop continuing releases, prevent threatened future releases, and prevent or limit human, environmental, or natural resource exposure to earlier hazardous substances releases.*

EPA must provide, by January 2004, regulations establishing standards and practices for satisfying the "all appropriate inquiries" requirements. In determining "all appropriate inquiries" prior to when EPA issues new regulations, two standards apply depending on the date the property was purchased. For transactions completed before May 31, 1997, a court shall consider specialized knowledge of the defendant, relationship of purchase price to value of uncontaminated property, commonly known information, obviousness of contamination and ability of defendant to detect contamination by appropriate inspection. For transactions completed after May 31, 1997, the American Society for Testing and Measurement (ASTM) Phase I Environmental Site Assessment guidelines will suffice.

Protection for Owners of Contiguous Properties

The 2002 legislation provides liability relief to contiguous property owners who cooperate with and provide access for the cleanup of contamination on adjacent property. The new contiguous property owner provision, CERCLA 107(q)(1)(A) excludes from the definition of "owner" or "operator" a person who owns property that is "contiguous" or otherwise similarly situated to, a facility that is the only source of contamination found on his property. To qualify as a contiguous property owner, a landowner must meet the criteria set forth in CERCLA 107 (q)(1)(A), many of which are common elements shown in the table. This landowner provision "protects parties that are essentially victims of pollution incidents caused by their neighbors actions." S. Rep. N. 107-2, at 10 (2001).

Additional protections are provided against enforcement actions and for contribution immunity to parties meeting the above criteria. Note, EPA has separate policy dealing with groundwater and contiguous properties. See contaminated aquifer policy discussed later.

Prospective Purchaser Protection

Many prospective purchasers have avoided buying properties that are contaminated or merely perceived to be contaminated due to liability issues. Since 1989, EPA has negotiated agreements that provide a covenant not to sue for certain prospective purchasers of contaminated property prior to their acquisition, in order to resolve the potential liability due to ownership of such property. These are known as prospective purchaser agreements, or PPAs.

The 2002 brownfields legislation provides a limitation on liability for persons who qualify as bona fide prospective purchasers ("BFPPs"). **EPA believes that, in most cases, the new legislation makes PPAs from the federal government unnecessary.**[7] The 2002 legislation codifies liability relief for prospective purchasers who (1) acquire ownership of property after January 11, 2002 and (2) establish that all disposal occurred prior to property acquisition. In

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[7]Bona Fide Prospective Purchasers and the New Amendments to CERCLA. Memorandum from Barry Breen, Director, Office of Site Remediation Enforcement, EPA.

order for the exemption to apply, the prospective purchaser must show they have done all the common elements shown in the table

The BFPP provisions represent a significant change in CERCLA. For the first time, a party may purchase property with knowledge of contamination and not acquire liability under CERCLA as long as that party meets the BFPP criteria.

The act also grants the United States a lien on the property if the EPA (1) conducts the response action, (2) does not recover its costs, and (3) the amount of the response action increases the fair market value of the property above previous levels.[8] The lein is limited by the increase in fair market value attributable to EPA response action.

Secured Creditor Exemption

Before 1996, lenders were hesitant to loan money to owners and developers of contaminated property for fear of exposing themselves to CERCLA liability. Key changes to CERCLA through the *Asset Conservation, Lender Liability, and Deposit Insurance Protection Act of 1996 (Lender Liability Act)* eliminates owner/operator liability for lenders who hold indicia of ownership in a CERCLA facility primarily to protect their security interest in that facility. They cannot participate in the management of the facility.

Under the Lender Liability Act, a lender or a fiduciary can only be held responsible if he or she is taking an active role, or "participating" in the management of the property and/or the operation of the facility. (A fiduciary is someone who acts for the benefit of another, such as a bona fide trustee. The liability of a fiduciary can not exceed the value of the assets which he or she holds in that capacity.) How do you determine that a lender or fiduciary is "participating"?
A lender is "participating" when:

- He or she exercises decision-making control over environmental compliance at the facility.
- He or she "exercises control at a level comparable to that of a manager of the vessel or facility, such that the person has assumed or manifested responsibility

    - for the overall management of the vessel or facility encompassing day-to-day decision making with respect to environmental compliance,

      or
    - over all, or substantially all, of the operational functions (as distinguished from financial or administrative functions) of the vessel or facility other than the function of environmental compliance"[9, 10].

[8]Small Business Liability Relief and Brownfields Revitalization Act. Public Law 107-188, Section 222 "Prospective Purchasers and Windfall Liens"

[9]"Participating in management" does not include simply having the capacity to influence, or the unexercised right to control, the operation of the vessel or facility. This was a problem prior to

This essentially means that lenders can conduct pre-loan activities, loan servicing activities, workout, and reorganization activities without becoming liable for the cost of cleanup.

The Act also details what a lender who is **foreclosing** can do without forfeiting his or her exemption by clarifying who is an "owner" or an "operator." According to the Lender Liability Act, these terms do not describe a lender who was not a participant in the management of the facility before the foreclosure, so long as:

1. He or she forecloses on the vessel or property, and

2. "After foreclosure [that lender], sells, resells, re-leases ..., or liquidates the vessel or facility, maintains business activities, winds up operations, undertakes a response action ..., or takes any other action to preserve, protect, or prepare the vessel or facility prior to sale or disposition, if the person seeks to sell, re-lease, or otherwise divest the vessel or facility at the earliest practicable, commercial reasonable time, on commercially reasonable terms, taking into account market conditions and legal and regulatory requirements"[11].

Under the Lender Liability Act, a **fiduciary** is someone who acts for the benefit of another, such as a bona fide trustee. **The liability of a fiduciary can not exceed the value of the assets which he or she holds in that capacity.** The 1996 Act amends section 107 of CERCLA and provides safe harbor to fiduciaries who hold property in trust and conduct standard activities[12]. Actions of fiduciaries which are permitted under the 1996 Act without the forfeiture of their liability exemption include:

- Providing financial or other advice to the settler or beneficiary.
- Redesigning and restructuring the terms of the fiduciary relationship.
- Inspecting or monitoring the property.
- Undertaking or directing a response action at the facility under CERCLA or other lawful means.
- Administering a vessel or facility that was polluted prior to the beginning of the fiduciary relationship.
- Ending the fiduciary agreement.

However, if negligence on the part of the fiduciary causes or contributes to the release or

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the Act, as lenders who were found to be capable of influencing the operation of a facility were ruled to be liable as an "owner."

[10]http://www.epa.gov/brownfields/html-doc/lendliab.htm July 18, 2002

[11]Ibid.

[12]Ibid.

threatened release of hazardous substances, he or she is no longer protected by safe harbor or the limited liability.

Protection of Government Entities That Acquire Property Involuntarily

CERCLA exempts state and local government entities from owner/operator liability if they involuntarily acquire contaminated property while performing their normal government functions[13]. If such a governmental unit makes an involuntary acquisition, it is exempt from owner/operator liability under CERCLA. CERCLA also provides a "third party" defense[14] for any governmental entity that acquires contaminated property involuntarily or through the exercise of eminent domain if certain conditions are met:

- The contamination occurred before the government entity acquired the property.
- The government entity exercised due care with respect to the contamination (e.g. did not cause, contribute to, or exacerbate the contamination).
- The government entity took precautions against certain acts of the party that caused the contamination and against the consequences of those acts.

To meet the criteria of involuntary acquisitions, government units need not be completely passive in order to acquire property. The EPA considers an acquisition to be involuntary if the government interest in, and ultimate ownership of, the property exists only because the conduct of a non-governmental party gives rise to the government's legal right to control or take title to property. Involuntary acquisitions by government entities include the following:

- Acquisitions made by a government entity functioning as a sovereign (such as acquisitions following abandonment or tax delinquency).
- Acquisitions made by a government entity action as a conservator or receiver pursuant to a clear and direct statutory mandate or regulatory authority (such as acquisitions of the security interests or properties of failed private lending or depository institutions).
- Acquisitions by a government entity through foreclosure and its equivalents while administering a governmental loan, loan guarantee, or loan insurance program.
- Acquisitions by a government entity pursuant to seizure or forfeiture authority.

A government entity will not have a CERCLA liability exemption or "third party" defense if it has caused or contributed to the release, generation, or transportation of hazardous substances.

De Minimis Waste Contributor

At a CERCLA site, some parties may have contributed only minimal amounts of hazardous substances compared to the amounts contributed by other parties. Under CERCLA these contributors of very small amounts may enter into *de minimis* waste contributor settlements with

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[13] CERCLA § 101(20)(D), 42 U.S.C. 9601(20)(D).

[14] CERCLA § 101 (35)(A)(ii), 42 U.S.C. 9601 (35)(A)(ii).

EPA. Such a settlement provides the waste contributor with a covenant not to sue and contribution protection from the United States. As a result, the settling party is protected from legal actions brought by EPA or other parties at the site. This liability relief is in exchange for providing funds, based on its share of total waste contribution, toward cleanup, or to undertake some of the actual work.

De Micromis Waste Contributor

De micromis waste contributors, a subset of *de minimis* waste contributors, receive additional protection from the EPA based on volumetric cut-offs. De micromis parties have generated or transported a minuscule amount of waste to a Superfund site, an amount even less than that contributed by *de minimis* parties. EPA used to provide covenants not to sue to de micromis parties, but under the Small Business Liability Relief Act, it was codified that parties are exempt from Superfund response cost liability at NPL sites as generators and transporters if the party can demonstrate that:

- the total amount of the material containing hazardous substances they contributed was less than 110 gallons of liquid materials or 200 pounds of solid materials and
- all or part of disposal, treatment, or transport occurred before April 1, 2001.

Exceptions include:
- materials contributed or could contribute significantly, either individually or in the aggregate, to the cost of the response action or natural resource restoration;
- the party fails to comply with an information request;
- the party impedes or impeded, through action or inaction, a response action or natural resource restoration at the facility; and
- the party has been convicted of a criminal violation for conduct to which the exemption would apply.

Private parties seeking contribution bear the burden of proof that the exemption does not apply. Private party contribution plaintiffs are liable for costs and fees if the defendant is not liable under this exemption.[15]

Municipal Solid Waste Exception

Municipal solid waste can be generated by a household or commercial, industrial, or institutional entity. It is defined as essentially the same waste normally generated by a household; it contains no higher amount of hazardous substances than a normal household would generate and typically is collected and disposed of by normal municipal solid waste collection services.

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[15]*EPA Summary of the Small Business Liability Relief and Brownfields Revitalization Act,* **http://www.epa.gov/brownfields/html-doc/2869sum.htm**., July 2002.

The new legislation exempts persons from Superfund response cost liability as generators for the disposal of municipal solid waste if the person is:

- an owner, operator, or lesseeof residential property
- a business that employed on average not more than 100 individuals in the three years prior to notification of potential liability and is a 'small business concern' as defined by the Small Business Act
- a nonprofit organization that employed not more than 100 individuals during the preceding years at the location from which the municipal solid waste was generated.

The same exceptions apply here as in the de micromis exception.

Managing CERCLA Liability Risks - EPA Policies and Guidance

As part of EPA's Brownfields program, designed to facilitate the cleanup and reuse of brownfields, an array of tools in the form of policy and guidance documents have been developed. These documents help address parties' concerns of being potentially liable by owning or developing contaminated properties. Individuals and parties should find comfort in the fact that EPA will act in a manner consistent with the policy. Indeed, a policy or guidance document is the strongest statement EPA can make, short of regulation creation, when considering the circumstances in which EPA may bring CERCLA enforcement actions against particular parties[16].

Contaminated Aquifer Policy

The contaminated acquifer policy addresses the concerns of owners of property that contain an acquifer contaminated by an outside source or sources fearing EPA would hold them responsible under CERCLA. How this may change with the 2002 legislation is unclear. If the owners did not cause and could not have prevented the groundwater contamination, EPA's policy states it will not take action under CERCLA to require cleanup or the payment of cleanup costs. To qualify for protection under this policy, a landowner must meet *all* of the following criteria:

- The hazardous substances found in the acquifer must have resulted solely from subsurface migration from a source or sources outside of the landowners property;
- The landowner did not cause, contribute to, or intensify the contamination through any act or omission on his/her part;
- The person responsible for contaminating the acquifer is not an agent or employee of the landowner, and was not in a direct or indirect contractual relationship with the landowner (exclusive of conveyance of title); and
- Under CERCLA, the landowner may not be considered a liable party for any other reasons such as contributing to the contamination as a generator or transporter[17].

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[16]United States Environmental Protection Agency. Handbook of Tools for Managing Federal Superfund Liability Risks at Brownfields and Other Sites. November 1998. pg. 25.

[17]Ibid, p. 30.

This policy may not apply in cases where:

- A groundwater well on the property may influence the migration of contamination in the affected aquifer; or
- Directly or indirectly, the owner acquires property from the person or persons who caused the initial release[18].

The EPA may choose to enter into a *de minimis* settlement with parties protected under the contaminated acquifer policy, if a third party who caused or contributed to the contamination sues or threatens to sue.

Comfort/Status Letter Policy

Uncertainty concerning the environmental status of properties has resulted, in some cases, in underutilized or unused properties. EPA's comfort/status letter policy assists parties who seek to reuse brownfields by clarifying the likelihood of EPA involvement at a potentially contaminated site including what EPA's intentions are in terms of a Superfund response. To address the most common inquiries received by EPA about contaminated or potentially contaminated property, four model comfort/status letters were developed. These comfort/status letters are for informational use only: they indicate EPA's intent to exercise its enforcement and response authorities under Superfund for a particular property based on information presently known by EPA about that property. In addition, the letters do not provide a release from CERCLA liability and are not to be used as assurances that no action will be taken by EPA under Superfund law[19].

Upon request, a comfort/status letter may be issued by EPA if:

- Cleanup and redevelopment of contaminated or potentially contaminated property may be facilitated by the letter;
- Incurring CERCLA liability is probable or a realistic perception; or
- No other mechanism is available to adequately address the party's concerns.

Since its inception in 1996, EPA has been successfully implementing the comfort letter policy. Comfort/status letters have facilitated myriad redevelopment projects ranging from fitness centers to urban parking facilities to wildlife habitats. According to preliminary analysis of a 1999 survey conducted by EPA on how well the policy was working, most comfort/status letter recipients have had favorable results using this EPA policy[20].

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[18]United States Environmental Protection Agency. Handbook of Tools for Managing Federal Superfund Liability Risks at Brownfields and Other Sites. November 1998. pg. 30.

[19]http://www.epa.gov/swerosps/bf/html-doc/liabilty.htm . June 12, 2000.

[20]Office of Site Remediation Enforcement. Fact Sheet: Preliminary Survey Results on EPA's Use of Comfort Letters. December 1999. pg. 3.

Resource Conservation and Recovery Act (RCRA)

The Resource Conservation and Recovery Act (RCRA) was enacted in 1976 by Congress and revised in 1984 through the Hazardous and Solid Waste Amendments (HSWA). In general, RCRA's main purpose is to provide a "cradle to grave" program for managing hazardous waste. This "cradle to grave" effort covers the generation, transportation, storage, treatment, and disposal of hazardous waste. Under RCRA, Subtitle C's Corrective Action Program and Subtitle I's regulation of underground storage tanks are the two most important components of RCRA affecting brownfields redevelopment.

There are at least **three ways that RCRA impacts the redevelopment of brownfields**:

1. RCRA deals with petroleum based products, governing underground storage tanks (USTs), major contributors to the contamination of urban land.

2. RCRA regulates the cleanup activities at active hazardous waste treatment, storage, and disposal facilities (TSDFs). While RCRA regulates the actions of current businesses, most of the properties CERCLA addresses are vacant.

3. RCRA contains requirements concerning the management of wastes containing any of more than 200 hazardous constitutents and therefore may place restrictions on the handling and disposal of wastes generated during remediation[21].

RCRA-Corrective Action Program and Superfund

RCRA's Corrective Action Program (Subtitle C) is different from the CERCLA/Superfund program because RCRA typically deals with sites that have viable operators and on-going operations. Superfund was primarily designed to remedy the mistakes in hazardous waste management made in the past at sites that have been abandoned or where the responsible parties cannot be identified. Cleanup at Superfund sites is primarily paid for by responsible parties with the Federal Superfund Trust Fund used where responsible parties are not available. Expenditures from the Trust Fund can be recovered from responsible parties. The RCRA Corrective Action Program encompasses active, or soon to be active facilities, that are permitted or seek a permit to treat, store, or dispose of hazardous waste. As a condition for obtaining a RCRA operating permit, these active facilities are required to clean up contaminants that are released or have been released in the past. RCRA facilities must pay for the cleanup at their site.

The Corrective Action Program is the EPA's Office of Solid Waste's hazardous cleanup program. Facilities that fall under oversight of this program include TSDFs and businesses that work with, or operate on, underground storage tanks (USTs). EPA estimates that there are **almost 4,000 RCRA TSDF facilities** and **approximately 150,000 leaking underground**

[21] Bartsch, Charlie; Collaton, Elizabeth; Fischer, William; and Kirshenberg, Seth. Brownfields Redevelopment: A Guidebook for Local Governments and Communities. Washington, D.C. International City/County Management Association. 1997. pg. 3-13.

storage tanks (LUST) which have not yet been cleaned up.[22]

RCRA Enforcement

In general, RCRA provides federal enforcement authorities including the ability to compel and cleanup and criminal, civil and administrative penalties. The statute also authorizes suits by EPA to restrain anyone who has contributed to or is contributing to the past or present handling of hazardous waste that may threaten human health or the environment. EPA can require a TSDF to engage in corrective action cleanup activities pursuant to a number of **enforcement options.** EPA may pursue:

- Notifying the facility of its cleanup obligations, and giving it a specific amount of time to comply.
- Issue and/or negotiate an administrative order for performance of corrective action.
- Ask the U.S. Department of Justice to file a civil judicial lawsuit before a U.S. District Court compelling the performance of corrective action.

For more information on the enforcement options available to EPA under RCRA, consult the Internet at: http://www.epa.gov/OSWRCRA/hotline/training/enf.pdf or the RCRA/Superfund hotline number at 1-800-424-9346.

RCRA Database: Resource Conservation Recovery Information System

There is a comprehensive EPA database of corrective action sites: **RCRAInfo,** providing access to data supporting RCRA. In addition, those treatment, storage, and disposal facilities that handle, and generators that produce, specified amounts of hazardous waste are included in a summary titled the **"Biennual Report."** The report indexes these facilities and describes their waste related activities. For general information on RCRA waste cleanup refer to http://www.epa.gov/epaoswer/osw/cleanup.htm.

UST Requirements Under RCRA

The section of HSWA that regulates USTs is Subtitle I. This addition to RCRA required EPA to develop a program for tanks containing petroleum and hazardous substances. The basic regulation that resulted from this states that **owners and operators of tanks (including those in ground when enacted) must prevent, detect, and, should it be necessary, cleanup leaks, as well as, prove a financial capability to clean up leaks and to compensate any third parties who were damaged** (UST regulations, 40 CFR Parts 280 and 281).

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[22]Horinko, Marianne L. Statement Before the U.S. Senate Committee on Environment and Public Works, Subcommittee on Superfund, Toxis, Risk and Waste Management. May 8, 2002

This has been interpreted as meaning that owners and operators are responsible for three separate areas.

1. **Technical Requirements**
   There are a number of technical requirements that govern the maintenance, the construction and the use of USTs, as well as leak detection and protection. The instructions on what is and is not acceptable are extremely detailed. Consult the EPA for these specifics (RCRA / CERCLA Hotline can be reached at (800) 424-9346).

2. **Financial Responsibility Requirements**
   Owners of petroleum containing USTs are required to sustain an annual aggregate of financial assurance of $1 or $2 million[23], depending on the number of USTs owned. Options available to those trying to meet this requirement include: buying environmental impairment liability insurance, obtaining guarantees, surety bonds, or letters of credit, or putting the necessary amount in a trust fund to be administered by a third party.

3. **Corrective Action Requirements**
   - Owners and operators are required to confirm, study, and respond to leaks.
   - Responses may include (but are not limited to):
     - Investigating a suspected leak.
     - Determining if contamination has migrated into an adjacent property.
     - Taking swift action to prevent further release.
     - Notifying the appropriate agencies in a prespecified amount of time.
     - Monitoring and preventing the spread of the substance into the groundwater or the soil.
     - Outlining and implementing a cleanup plan.

The Effect of RCRA's UST Requirements

These regulations have had a significant effect both on the redevelopment of brownfields and on the creation of new brownfields. The three obligations listed above have driven away many potential developers and investors. The effects of lender liability concerns are quite different from those that result from CERCLA regulations. This is largely a reflection of the fact that RCRA controls the actions of active businesses and productive properties, not abandoned land. The lack of credit to UST owners (many of whom are small businesses which may require secured financing mechanisms for capital) has translated into **more brownfields**. Indeed, without the credit that lenders can provide, UST owners have difficulty meeting their upgrade obligations, maintenance requirements, and, generally, complying with environmental standards. In some cases, this has lead to additional leaks.

[23]United States Environmental Protection Agency. Dollars and Sense: Financial Responsibility Requirements for Underground Storage Tanks. July 1995. Pages 4-5.

In order to avoid these problems, many states have UST trust funds to support redevelopment costs. Indeed, even though RCRA is a federal Act, it is primarily managed by states, since each state is required by law to have its own RCRA program for USTs. Currently, 43 states have developed State Financial Assurance Funds to aid UST owners with compliance and financial responsibility. [24]

The 2002 legislation provided that USTs are eligible for the brownfields funding programs (see Chapter V).

UST "Owners"

Originally under RCRA, an UST owner was defined as anyone who owned an UST that was employed for the storage, the use, or the dispensing of substances regulated under Subtitle I of RCRA (which includes both petroleum and hazardous substances) (Sec. 9001 (3), 42 USC 6991 (3)[25]. As was the case with Superfund, how the term "owner" was being applied to RCRA was a major barrier to the rejuvenation of brownfields.

The negative impact that RCRA's UST section has had on redevelopment motivated a change in the law. And as with CERCLA, the change was in to whom the term "owner" could be applied. Under section 2503 of the Lender Liability Rule, there is now an exemption for RCRA's Subtitle I. **Exempt from liability as owners are**:

> Those persons who, without participating in the management of the UST or UST system, and who are not otherwise engaged in petroleum, refining, and marketing, maintain indicia of ownership in an UST or UST system primarily to protect a security interest[26].

Affected parties of this security interest exemption include private lending institutions and others who provide loans that may be secured by real estate containing an UST, or who acquire indicia of ownership (e.g., a legal title) in a contaminated UST. It is important to note that this exemption extends beyond lending institutions, as it can be applied to those "whose indicia of ownership in an UST or UST system is maintained primarily to protect a security interest"[27]. The exemption for those who held indicia of ownership in an UST was essentially to protect a security interest, yet, included within the definition of "security interest" are those interests which may result from transactions such as sales and leasebacks.[28]

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[24]http://www.epa.gov/swerust1/states/fndstatus.htm

[25]http://www.epa.gov/swerosps/bf/html-doc/undergro.htm. July 15, 2002

[26]Ibid.

[27]Ibid.

[28]This is a function of the 1995 RCRA Lender Liability Rule. This was created to clarify the liability of lenders who held petroleum USTs as collateral.

Not participating in management means **not being involved in the day-to-day operations of the tank**[29]. A lender must also empty his or her UST(s) within 60 days after foreclosure. In addition, if no current operator of an UST site (other than the lender) can be held accountable for compliance with UST regulations, the UST must be either temporarily or permanently closed.

The security interest exemption applies to the entire Subtitle I of RCRA. Thus, **those exempt can not be held responsible for the technical requirement, financial requirements, or the corrective action requirements**. For more information, refer to the EPA's Office of Underground Storage Tanks. It has a home page: **www.epa.gov/OUST**.

C. EPA Relations with States

Memoranda Of Agreement (MOA)

EPA involvement in and oversight of state cleanup projects has occurred under limited cirumstances. Thus, while a developer or land owner could get a clean bill of health from the state, it has been very difficult to get such legally binding assurances from EPA.[30] This has been a significant problem in brownfields redevelopment. In recent years, EPA Regional offices have signed memoranda of agreement (MOA) with states. These agreements established mutually agreed upon roles and responsibilities for the cleanup of brownfields as well as outline the baseline criteria which the EPA will use to evaluate the adequacy of a state's voluntary cleanup program. These MOAs give developers confidence that if they meet state cleanup standards, EPA generally will not take any federal cleanup action at the site. Furthermore, under the 2002 legislation, an MOA makes states eligible for EPA funding to assist in the development of state voluntary cleanup programs. Without the MOA, the state must satisfy a set of specific regulatory requirments to be eligible for funding. To date, 19 states have signed MOAs with the EPA.[31]

EPA Regional offices have a number of criteria which are used to evaluate state VCPs. **Before signing an MOA with a state, the Regional office generally considers the following aspects of the program:**

- **Community Involvement**
  The public should be informed of the program and of the opportunities for involvement in brownfields remediation made available through that program.

- **Protectiveness**
  The program should protect the welfare of humans and the environment.

[29] http://www.epa.gov/swerosps/bf/html-doc/undergro.htm. July 15, 2002

[30] EPA does issue legally binding covenants not to sue, but these are rare (see Chapter 5).

[31] http://www.epa.gov/brownfields/html-doc/vcp.htm.

- **Resources and Technical Assistance**
The state should have the legal and technical abilities, and sufficient financial resources to support its program.

- **Certification of Response Action Completion**
The state should be able to provide written approval of response actions, and to certify the completion of those actions.

- **Oversight Authorities**
The state should demonstrate its capacity to supervise the response actions of private parties.

- **Enforcement Authorities**
Similarly, in the event that the volunteering group fails, or refuses, to complete response actions, the state should be able to ensure the completion of those actions through enforcement.

EPA continues to work with interested States in entering into MOAs. The 2002 legislation restricts EPA enforcement and cost recovery actions on certain sites remedied under state programs. It restricts federal administrative or judicial enforcement action under 106(a) or cost recovery actions under 107(a) at any eligible response site at which there is a release, or threatened release, of a CERCLA-covered substance and at which a person is conducting a response compliance with a state program that specifically governs response actions for protection of human health and the environment. This limitation applies only to response actions conducted after February 15, 2001. There are a number of specific criteria for when this restriction does and does not apply. The 2002 Act requires deferral of NPL listing if state or other party is cleaning up a site under a state program or if the state is pursuing a cleanup agreement.[32]

D. State Liability

Because most brownfield sites are not on NPL, states have the responsibility of restoring a large number of contaminated sites. States have developed a number of tools to address these problem properties. States have used and continue to use mechanisms to enforce against responsible parties as well as to encourage private-party redevelopment. Thus, many states have their own Superfund laws in addition to Voluntary Cleanup Programs. This section will close with some examples of state environmental regulations.

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[32] http://www.epa.gov/brownfields/html-doc/2869sum.htm

States Take the Lead in Cleaning Up NPL Sites

States have begun taking the responsibility for remediating NPL sites. ***As of 2000, 140 NPL sites were being restored under the supervision of state agencies****. The hope is that by giving states the lead in specific cases, restoration will happen faster and more efficiently.*

These agreements do not, however, mean that states are working in isolation. In most cases, EPA still oversees much of the states' actions. The relationship between state cleanup programs and EPA has become more complicated as a result of this exchange of responsibility. However, as communication improves, these joint efforts should be a productive redevelopment technique. ***Important to the success of this program is****:*

- *The relationship between EPA and the states. With each site, a mutual understanding of each parties' responsibilities and of the level of EPA oversight is critical.*
- *The availability of EPA technical and financial assistance to states which now have increased responsibilities.*

State Superfund Legislation

Modeled after CERCLA, at least 45 states have their own Superfund laws to cope with those sites which do not make the NPL[33]. While these laws usually have different cleanup standards and liability requirements, as with CERCLA, the remediation they demand is typically financed by a pool of tax dollars.

Like CERCLA, state laws generally create a fund to support cleanups and charge a state agency with carrying out an emergency response action, compelling responsible parties to pay, and overseeing cleanup activities[34].

States Limit Liability

However, like the recent federal bids to address the liability concerns of lenders and developers, states are amending their statutes as well. This is expressed in the following quote:

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[33]Wright, James G. Risks and Rewards of Brownfields Redevelopment. Cambridge, MA. Lincoln Institute of Land Policy. 1997. pg. 19.

[34]Bartsch, Charlie; Collaton, Elizabeth; Fischer, William; and Kirshenberg, Seth. Brownfields Redevelopment: A Guidebook for Local Governments and Communities. Washington, D.C. International City/County Management Association. 1997. pg. 3-3.

More than half of the states have adopted laws or regulations to ease the threat of liability for brownfield purchasers, and many will assume direct ownership of a property, complete cleanup, and recover costs from the sale or lease of the property[35].

Two states which have adjusted their environmental regulations in order to stimulate private sector involvement are Pennsylvania and Illinois.

In 1995, **Pennsylvania enacted the Economic Development Agency, Fiduciary, and Lender Environmental Liability Protection Act**. In order to be held liable for the remediation expenses incurred by the commonwealth, the Act requires proof either of direct causation or exacerbation of contamination by a lender, or the lender's knowing and willful compulsion of borrower action that causes contamination. For fiduciaries, proof is required that he or she controlled the property that caused, or was the site of, the contamination, and the contamination resulted from the fiduciary's gross negligence or willful misconduct. This Pennsylvania statute also protects both lenders and fiduciaries against the claims of third parties, not just those of the commonwealth.

In 1995, **Illinois** amended some of its laws to limit the liability of lenders and fiduciaries. These amendments protect lenders and fiduciaries from liability to the state and to third parities, unless the lender, or fiduciary, following foreclosure, directly causes contamination. Proof that the person in question caused or contributed to that contamination is required. In addition, the Illinois legislation limits the recovery by the state and/or third parties to a person's proportionate share of cleanup costs.

Voluntary Cleanup Programs

Often, lower priority properties, i.e., sites which do not pose serious risks to human health and the environment, are addressed by Voluntary Cleanup Programs (VCPs). These type of low-priority sites are typically not of "federal interest," which means EPA will generally not be involved in cleanup activities, unless requested by the State to participate. State VCPs vary from state to state, but can be important tools for speeding up the restoration of non-NPL sites.

Voluntary Cleanup Programs are designed to stimulate redevelopment by encouraging private sector involvement. The idea is to give the private sector reasons for participating in restoration efforts. **It is important to recognize that the term "voluntary" does not mean a lack of state supervision or approval, rather, it is intended to mean "private-party initiated**"[36]. In addition to future land-use restrictions, some features common to many voluntary programs include:

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[35]Wright, James G. Risks and Rewards of Brownfields Redevelopment. Cambridge, MA. Lincoln Institute of Land Policy. 1997. pg. 19.

[36]http://www.epa.gov/swerosps/bf/html-doc/fr090997.htm. November 12, 1997.

- **Liability Incentives**
  Liability assurances are the most significant incentive for participating in VCPs. The types of assurances available to owners and developers vary from certificates which state that a remediation effort has been completed, to legal covenants not to sue current and future owners. Some VCPs also entail contribution protection sections which prevent third party law suites.

- **Alternative Cleanup Standards**
  Voluntary Cleanup Programs are often more flexible about the required level of remediation and what work has to be done than are federal and state Superfund laws. States often use risk based correction standards which are standards that vary by land use. For example, a site can be cleaned for industrial use and not be required to meet the same level of cleanup as a property prepared for residential use.

- **Streamlined Oversight Procedures**
  Under most of these state-run voluntary programs, property owners and developers can recognize and rehabilitate sites without being confronted by the same burdensome administrative procedures which characterize Superfund laws. Specifically, some states allow immediate interim removal actions, partial and staged site cleanups, and issue consolidated permits[37].

- **Financial Incentives**
  Some states provide financial incentives to cleanup property. In Delaware, for example, tax credits are given out according to the number of jobs created at a reused brownfield site. Pennsylvania and Minnesota give grants and loans for the assessment and the remediation of brownfields.

- **Reopener Clauses**
  "Reopeners" are clauses in an agreement that would allow an agreement to be reopened, if certain actions occur. These actions might include fraudulent activity or a change in land use, and even prior undiscovered contamination. The terms of the VCP reopener can have an major impact on the value of the covenant-not-to-sue.

Limiting Liability: State Closure Letters

Closure letters serve to notify developers and lenders that remediation has taken place. Common forms include:

[37]Dinsmore, Clement. *State Initiatives on Brownfields*. Urban Land. June, 1996. Washington D.C. The Urban Land Institute. pg. 40.

No Further Action: *The weaker form of closure states that no further action is required on the site regarding the remedial action just completed. This type of closure letter does not address any other contamination on the site. This document is usually issued by the state VCP or sometimes a certified private consultant.*

Certificate/Letter of Completion - *see "No Further Action"*

Comfort Letters*: These letters are issued by environmental regulatory agencies to advise future owners that the government has no interest in taking action with respect to environmental issues at a particular site. Unfortunately, these letters do not guarantee "no enforcement", but they can be helpful to buyers.*

Covenant Not to Sue*: A strong form of closure document, binding all state and local agencies, promising that no further legal action or remediation is needed once the approved remediation plan for a site has been satisfactorily completed, subject to certain conditions. These agreements are subject to "reopeners" (as described above).*

Voluntary Cleanup Programs are not necessarily new, in fact, there were voluntary programs before the term "brownfields" was well known. Such initiatives are, however, much more prevalent today than they have ever been before. Currently, at least 47 states have some kind of Voluntary Cleanup Program[38]. Chapter V's section entitled *State Programs and Funding* describes five state VCPs.

However, in addition to agreements with states, **there are straight indemnity agreements between sellers and private buyers**. Thus, buyers can reduce their liability risks through private contracts and agreements. Since a buyer could still be responsible, indemnity would only make sense if the seller has deep pockets. The buyer is still held responsible, regardless of the agreement, if the seller does not uphold his/her end of the deal. Liability protection is not solely derived through VCPs.

Examples Of State Environmental Programs

Oregon

Oregon's Environmental Cleanup Program was adopted in 1988 and was initially designed to mirror CERCLA. A component of the Environmental Cleanup Program is the Hazardous Substance Remedial Action Fund. **The fund itself is supported by tipping fees taken at landfills**. Whenever someone deposits waste at a landfill in Oregon, he or she has to pay a fee. A portion of that fee is used to support the fund. This pool of money is currently used to rehabilitate "orphan" sites, those sites that have been abandoned and no responsible party can be found.

[38] Bartsch, Charles; Deane, Rachel; Dorfman, Bridget. Brownfields "State of the States". Northeast Midwest Institute. November 2001.

In recent years, however, Oregon has had trouble maintaining a stable fund balance. This is a problem that Oregon's Department of Environmental Quality is working to solve. The source of these fund fluctuations is dumping fluctuations. Each year the amount of waste dropped off at Oregon's landfills is different. As a result, tipping fees have varied. This is a bit of a "catch 22." If the state's pollution prevention programs work, there is likely to be less use of the landfills and, as a result, less dollars in the cleanup fund. This is particularly a problem because a decrease in dumping does not necessarily equate to a decrease in the number of "orphaned" sites. Other parts of the Environmental Cleanup Program include a Voluntary Cleanup Program and covenant agreements. While Oregon's environmental initiatives have changed over the years, most of these adjustments have been made administratively, as new legislation has not been passed. For more information on Oregon's brownfields cleanup programs, contact the Department of Environmental Quality at (503) 229-6834.

Michigan

Michigan's VCP, composed of both the Site Reclamation Fund and the Site Assessment Fund, was created in 1995 with the enactment of the Michigan Environmental Response Act (MERA). The legislation provides a variety of liability assurances and incentives. **Liability incentives** for participation include covenants not to sue and Letters of Determination (another form of protection from state liability law). Michigan's VCP offers third party liability relief to lenders and innocent new owners. In addition, liability exemptions are sometimes given to purchasers of contaminated land if they submit a baseline environmental assessment within a certain amount of time. In the first twelve months of program implementation, 425 baseline environmental assessments were submitted to the administering agency, the Michigan Department of Environmental Quality (DEQ).

Michigan also has **financial incentives**. Grants up to $1 million are available to governmental units for assessment and remediation. This is made possible through a 1989 $425 million bond issue. Other incentives include Tax Increment Financing for rehabilitation and redevelopment in new "brownfield zones," a 10% tax credit of up to $30 million for the costs that companies take on while restoring brownfields, and a Revitalization Revolving Loan Fund which is used to issue loans to local governments and to aid environmental remediation initiatives. Unfortunately, the $425 million from the bond is almost extinguished. However, in 1998 the "Clean Michigan Initiative" was created, authorizing a bond issue for $675 million for seven different programs. Approximately half the funds are designated specifically for brownfields redevelopment, while the other half, though not explicitly intended, are also available for brownfields projects.

Other incentives built into Michigan's VCP include:

- Flexible cleanup standards, with the particular standard to be met depending on the land use intended by the developer.
- Cost-effectiveness of mitigating to a specific standard is taken into consideration.
- Institutional and engineering controls.

In addition to the liability and financial incentives, Michigan offers business incentives for

brownfields redevelopment in the form of **Brownfield Redevelopment Authorities**. Municipalities are allowed to create a Brownfield Redevelopment Authority to facilitate implementation of plans to create Brownfield Redevelopment Zones and cleanup contaminated property.

For more information contact the Environmental Response Division of the Michigan Department of Environmental Quality at (517) 373-8450.

Pennsylvania

Pennsylvania's Hazardous Sites Cleanup Act (HSCA) is funded by a surcharge on a variety of businesses such as chemical manufactures. This money is used exclusively by the state for cleaning up contaminated sites. Immediate responses to serious health and environmental hazards are also supported by this fund. Thus, in cases where there is not enough time to locate the responsible parties, the dollars required for cleanup are taken from this cash pool.

The state also has a VCP known as the "Land Recycling Program" (LRP). If one of the sites under the purview of this program is deemed to require immediate assistance, HSCA funds are used. For more information on Pennsylvania's LRP go to the *State Programs and Funding* section in Chapter V.

The **Key Sites Initiative** under LRP creates partnerships between local economic development agencies and the Department of Environmental Protection (DEP). Local economic development agencies target sites having the greatest potential for reuse, while DEP applies the tools to assess sites and create work plans for cleanups. The goal is to revitalize vacant industrial sites and bring jobs to Pennsylvania's communities.

The Key Sites Initiative uses state-funded contractors to conduct environmental site assessments and prepare plans to encourage and facilitate the voluntary cleanup and reuse of abandoned industrial properties in primary locations. The initiative builds upon the successful Land Recycling Program and creates a bridge with the Hazardous Sites Cleanup Program.[39]

For more information, contact the Pennsylvania Department of Environmental Protection at (717) 783-7509[40].

E. Insurance

The environmental risks associated with the development of brownfields, while varying from site to site, generally fall into the following categories:

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[39]http://www.dep.state.pa.us/dep/deputate/airwaste/wm/landrecy/Key_Sites/Intro.htm.

[40]Much of the information on these specific state programs is drawn from: Bartsch, Charlie; Collaton, Elizabeth; Fischer, William; and Kirshenberg, Seth. Brownfields Redevelopment: A Guidebook for Local Governments and Communities. Washington, D.C. International City/County Management Association. 1997.

- Site characterization work describing the actual extent — both spacial and concentration — of contamination. This includes contamination on the site, on adjacent properties, on formerly owned properties, and emanating from non-owned disposal sites that may have received wastes from the site.

- Third party claims for damages to persons and property from contaminants on the site. These claims may include diminution of property values due to real contamination and the stigma of contamination from the site.

- Remediation risks including release of contaminants during actual clean-up, failure of the technology to achieve the specified clean-up standards, and discovery of more or different contaminants.

- Post- remediation risk that additional contamination will be discovered, regulatory requirements will change and require additional remediation, and the ultimate site use will change.

These environmental risks often make brownfields redevelopment difficult. Most of these risks can be limited and in some instances completely eliminated through environmental insurance.

Overall, the market for environmental insurance has improved dramatically in the past few years. While some firms still do not have accurate techniques for correctly pricing the coverage of risks, other firms have specialists in this area. There are a number of **myths** that persist in the marketplace concerning environmental insurance:

- *Environmental insurers don't pay claims.* This fallacy comes from the fights to collect environmental damages under old commercial general liability (CGL) policies. The insurers underwriting the new environmental specialty policies have a solid track record of paying claims for all types of environmental policies.

- *Environmental underwriters don't understand the risks associated with brownfields redevelopment.* The underwriters working in the environmental field are seasoned professionals trained in engineering, environmental sciences, and environmental risk analysis. When teamed with experienced environmental brokers, these underwriters are capable of accurately evaluating the environmental risks posed by a site and providing the necessary coverages to protect the developer, the buyer, and the municipality.

- *The environmental insurance policies exclude a number of the risks faced by many sites.* Off-the shelf policies may not include coverage for property diminution or natural resource damages. However, experienced environmental insurance brokers are able to negotiate necessary policy endorsements and tailor the coverage to meet the needs of any site.

- *Policy limits are low, deductibles are high, and policy terms are short.* This was true only three years ago, but today environmental insurance is far more reasonable and accessible. Available policy limits from an individual insurer now exceed $100 million and the total

market capacity is approximately $400 million for a single site or portfolio of sites. Deductibles now range as low as $5,000 per site. Policy terms of ten years are common and may be extended to as long as 30 years.

- *Environmental insurers tend to cater to the big deals and ignore the small sites.* Environmental insurance policies are commonly written for individual sites such as former gas stations and dry cleaners. However, tremendous economies of scale can be realized when a number of small parcels are packaged as a portfolio for an urban redevelopment project.

These myths are a major reason why environmental insurance remains underused. The market for such policies has improved dramatically, so quickly, that many people do not know how affordable and effective different forms of insurance can be. Indeed, environmental specialty insurance products can facilitate brownfields transactions by providing protection against:

- Professional liability.
- Release during investigation and remediation.
- Remediation cost overruns.
- Re-opening of remediation after cleanup is complete.
- Discovery of additional or different contaminants.
- Third party claims for bodily injury, property damage, and cleanup costs.
- New releases from the site.

This protection against environmental risks provides a number of advantages during the redevelopment of a brownfields site. First and foremost, the use of environmental insurance provides the lender and ultimate buyer with assurances backed by the financial strength of the insurer that they will not become a deep pocket for future clean-up actions in the event that additional or different contamination is found at the site. Secondly, remediation and long-term monitoring costs can be capped to better manage project budgets. Finally, environmental insurance policies include legal defense costs, which are typically the major cost item in most environmental legal actions.

The following is a brief description of the major types of environmental insurance applicable to brownfields projects.

- **Professional Liability Insurance (Professional Errors and Omissions Insurance)** Professional liability insurance provides the client with assurances that the work performed by the environmental engineer/professional is complete, accurate, and performed in a manner consistent with current industry standards. The client must ensure that the insurance offered covers environmental work. All environmental professionals working on the project should be required to provide proof of professional environmental errors and emissions coverage in the event they cause a release during sampling activities, fail to identify areas of contamination, or specify inadequate remediation requirements. This extends to the consultants performing the Phase I and II studies. By acquiring this coverage, smaller engineering firms become more attractive assessors to banks. An engineering firm with professional liability coverage is appealing to institutional lenders because both have deep pockets.

- **Contractors Pollution Liability Insurance**
  This type of insurance is the remediation contractor's counterpart to professional errors and omissions coverage. This policy responds in the event that the remediation contractor causes a release of contamination, either on-site or off-site, during remediation activities. The policy will pay for any required cleanup and any damages caused by the release. It also can apply to remediation workers who are exposed to contamination that was previously released, but was contained until cleanup began.

- **Owner Controlled Wrap-up Insurance Program**
  A wrap-up program provides all the major types of insurance for all the engineers and contractors working at the site. The owner/developer buys the policy that covers all professionals, contractors, and subcontractors working at the site. A wrap-up ensures that the full policy limits are available for the project and that every professional and contractor on the site has the proper insurance coverage. Wrap-ups guarantee access to the project to small and disadvantaged firms that may not be able to secure the required insurance coverage at affordable rates.

- **Remediation Cost Overrun Insurance**
  Also known as cost cap insurance, this coverage allows the developer/seller/buyer to cap the cost of cleanup or long-term operation and maintenance (normally groundwater extraction and treatment) activities. This insurance is based on the estimated cost of remediation normally found in the approved site work plan or the engineer's estimate developed prior to solicitation for contractors. The policy normally requires a 10% buffer layer above the estimated costs, however, this buffer may not be required when the site owner buys the policy. The discovery of additional contamination, different contaminants, failure of the selected technology, or changes in regulatory requirements may trigger the policy[41].

- **Remediation Warranty Insurance**
  Once remediation has been completed, remediation warranty insurance can be used to provide an indemnity to the buyer. If additional contamination is found on the site or the action levels for the clean-up change during the policy period, the policy will pay for any necessary clean-up to the policy limits. Any additional investigation and engineering expenses incurred are also covered. Remediation warranty policies are routinely written for periods of seven to ten years and can effectively go into perpetuity.

- **Property Transfer Insurance**
  Similar to remediation warranty insurance, property transfer insurance is normally used for sites with "clean" Phase I and II reports. Property transfer insurance will respond to any contamination discovered during the policy period. A number of municipalities are using property transfer insurance to indemnify purchasers of residential and commercial properties

[41]It is a particularly difficult situation when claims are filed after a policy has expired, even though exposure occurred during the policy term. For example, a worker may not know that he or she has been exposed to contamination for many months.

sold from their property portfolio.

- **Pollution Legal Liability or Environmental Impairment Liability**
  Pollution legal liability insurance provides prospective environmental coverage for sites. This insurance covers third-party bodily injury, property damage, and clean-up arising from the release of contaminants from the site. It can also be endorsed to cover on-site cleanup, non-owned disposal facilities, natural resource damages, and underground storage tanks. It often serves as the basic coverage form for a site with the other types of environmental coverage added as endorsements to the policy.

One of the main reasons why these types of coverage are underutilized is because the public sector is not aware of them. Generally, the private sector has used environmental insurance to its advantage much more than the public sector.

Trends in Environmental Insurance Policies:

- ***Pooled coverage*** *for multiple properties contained within a portfolio or owned by one insured entity.*
- *More hybrid, varied, and customized* ***combined coverages****. Some policies specify different levels of coverage for different components of the policy.*
- ***Long term coverage****. Nowadays, policies mey run for as long as thirty years, Most policies last seven to ten years.*
- *Current* ***market capacity*** *for a single site or project is nearing $400 million.*
- ***Premiums*** *continue to drop*
- ***Deductibles*** *vary according to how much risk purchasers are willing to accept, but start as low as $5,000.*

There are more than 100 different policy forms currently available from the environmental insurance market. It is critical that sellers/buyers/developers obtain the assistance of insurance brokers who are experienced in environmental issues to help them tailor a comprehensive program that fits the needs of their specific site or project. Five major underwriters offer environmental specialty insurance products:

- AIG.
- Zurich North America.
- XL Insurance Company
- Kemper Environmental.
- United Capital.

Sometimes, such as in foreclosure, lenders become "owners." Therefore, lenders are reluctant to back private investment in brownfields. Without the financial assistance that lending institutions can provide, a redevelopment initiative may never get off the ground. In the case of brownfields, it can be extremely difficult to enlist financial support. **Lenders fear**:

- That the borrower will not **operate the facility** in an environmentally sound fashion.

- Inheriting the liability associated with the property if the owner **defaults** on a property loan. In order to avoid defaults that may result from cleanup expenses, lenders frequently steer clear of small businesses, the assets of which are sometimes limited to land and improvements.

- A **loss of collateral value**. The value of a prospective borrower's collateral is one of the first things a lender will consider in making a loan. The low success rate of small business puts added pressure on the importance of collateral. The problem is, most small firms pledge real property (such as land and buildings) as collateral, and this may be of questionable value. Say, for example, a die shop owner wants to borrow $60,000 in order to expand the facility. The collateral, in this scenario, is probably going to be the existing facility and land. If an initial environmental assessment reveals no contamination, but later investigations uncover soil contamination, the lender could end up with worthless collateral.

- The potential for the bank to have to **forego its collateral and not foreclose** in the face of cleanup responsibilities.

- **The effect of cleanup costs on the project's viability**[42]. This is the bottom line. If the firm is unable to cope with the potential financial burdens associated with an environmental restoration project, then banking support may not be available. If there are serious questions about the ability of the borrower to pay back the loan, he or she is not going to get the loan.

These concerns help to explain the **practices and policies of lenders** on brownfields:

- On the whole, banks have **decreased their level of lending**. Some lenders simply do not conduct business with companies and properties such as bottling plants, semiconductor facilities, and wood treatment operations because they may be exposed to environmental risks. Ironically, because they are viewed as critical to the economic growth of the region, many of the businesses that have been redlined by the banking industry have been highlighted for special incentives by government entities.

- Some have **increased fees**. Fees are triple what they were in 1990. If banks and other lenders are suspicious of a property, **transaction costs are likely to increase**. Greater time and effort are needed to produce lending documents and additional money is needed for environmental assessments. CERCLA allows potential owners the opportunity to investigate a site prior to purchasing it. Lenders often demand

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[42]Bartsch, Charlie. Testimony before the U.S. House of Representatives, Committee on Science, Space, and Technology, Subcommittee on Technology, Environment, and Aviation on Reclamation and Reuse of Abandoned Industrial Sites. June 9, 1994. pg. 3.

phase I assessment, and, if necessary, cleanup. This protects them from liability and ensures collateral value. However, these assessments represent significant up-front costs which can affect the balance sheet of the proposed transaction. (See Chapter II). Loans can become more expensive than developers can afford.

- **Less interaction with borrowers** once loans have been issued. Lenders fear that high levels of contact with a borrower may mean increased liability. If banks offer a large amount of technical assistance and financial guidance to borrowers, they may be thought of as the "owner" or the "operator" of the facility. Lenders who participate in the management of a facility lose the liability exemption available to them under the Asset Conservation, Lenders Liability and Deposit Insurance Act, or Lender Liability Act (detailed below). This is unfortunate as such wisdom can be critical to the long-term success of a business. This is particularly true for owners of startup firms, who frequently lack financial management experience. While the Asset Conservation, Lenders Liability and Deposit Insurance Act has helped to appease some of these concerns, many lenders still shy away from business improvement assistance in order to distance themselves from possible liability responsibilities.

Contact: RCRA/Superfund Hotline at (800) 424-9346.

Despite these concerns, there are positive trends in the types of environmental insurance products available for brownfields redevelopment. An EPA-funded review of environmental insurance options conducted by Northern Kentucky University[43] found:

- **Policy dollar limits have increased.** In particular, maximum limits on Pollution Liability (PL) have increased considerably.

- **Policy periods are longer.** The standard policy period used to be one year, whereas today some policies may be written to cover a 10-15 year period.

- **Coverage is more flexible.** Individual businesses are now more able to add coverages to address features unique to their redevelopment project risks. In general, environmental insurance policies tend to be highly tailored to the project.

- **Coverage is broader.** The scope of available policies has expanded, and new insurance products continue to enter the market.

- **Costs are lower.** Respondents reported that the costs of brownfields insurance had fallen, but noted that this may be the cause of increased competition as more providers enter the environmental insurance market. Costs could rise again as insurers begin paying more

[43] Yount, Kristen R. Environmental Insurance Products Available for Brownfields Redevelopment. Northern Kentucky University for the United States Environmental Protection Agency. November 1999

claims, or if providers begin to consolidate.

While these findings are generally good news, prospective redevelopers should be cautioned that the environmental insurance market is changing rapidly, and costs and availability of coverage vary greatly. Private developers of large projects appear to be increasingly well-served, but small projects and public programs may still face difficulties in finding useful and cost-effective insurance.

F. Conclusion

Dealing with issues of liability is one of the most complex parts of a brownfield redevelopment project. However, programs at the state and federal level have provided some liability protection and increased certainty as to the liability exposure. Recent legislation to clarify the innocent landowner defense and exempt some small volume and municipal solid waste contributors, contiguous property owners, and prospective purchasers from Superfund liability removes barriers to redevelopment. Moreover, qualifying prospective purchasers can begin to take advantage of the new CERCLA liability relief immediately for any property acquired after January 11, 2002. The benefits of the legislation will become clearer as new regulations and guidelines are released.

In order to more completely understand the techniques for hurdling the obstacles which confront brownfields redevelopment, it is essential review the basics of real estate redevelopment discussed in the next chapter.