

April 2000

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Philip Carter Strother, *Brownfields of Dreams in the Old Dominion: Redeveloping Brownfields in Virginia*, 24 Wm. & Mary Envtl L. & Pol'y Rev. 269 (2000), <https://scholarship.law.wm.edu/wmelpr/vol24/iss2/4>

BROWNFIELDS OF DREAMS IN THE OLD DOMINION: REDEVELOPING BROWNFIELDS IN VIRGINIA

PHILIP CARTER STROTHER*

*The views are magnificent
the valleys so beautiful,
the scenery so peaceful.
What a glorious world
Almighty God has given us.
How thankless we are,
and how we labour to mar his gifts.*
—Robert E. Lee 1861¹

*Working together we will transform abandoned commercial and industrial
sites into new locations for businesses and housing that will create jobs
and help revitalize communities.*
—Secretary Andrew Cuomo²

- I. INTRODUCTION
- II. BROWNFIELDS IN VIRGINIA
 - A. *Defining the Brownfields Problem*
 - B. *Brownfields in Virginia*
 - C. *The Cause*
 - D. *Justifying the Reuse of Brownfields*
 - E. *So What's Preventing the Cleanup?*
- III. THE PRIMARY ENVIRONMENTAL LAWS ADVANCING BROWNFIELDS IN VIRGINIA: A HISTORICAL PERSPECTIVE
 - A. *The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)*

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¹ Piedmont Environmental Council (on file with author).

² HUD, *Brownfields Redevelopment* (visited Dec. 5, 1998) <<http://www.gov/whatisbf.html>>.

- B. Virginia State Cleanup Program
- C. Virginia Limits Liability at CERCLA Properties
- IV. THE U.S. ENVIRONMENTAL PROTECTION AGENCY LEADS THE FEDERAL CHARGE IN THE REDEVELOPMENT OF BROWNFIELDS
 - A. *An Overview of EPA's Brownfields Economic Redevelopment Initiative*
 - B. *Brownfields Action Agenda*
 - 1. Brownfields Assessment Demonstration Pilots
 - 2. Clarification of Liability and Cleanup Issues
 - 3. Partnerships and Outreach
 - 4. Job Development and Training
 - C. *Brownfields Cleanup Revolving Loan Fund Pilots*
- V. VIRGINIA LAW AND INITIATIVES AFFECTING BROWNFIELD REDEVELOPMENT
 - A. Virginia Voluntary Remediation Program
 - B. Local Tax Exemption for Environmental Restoration Sites
 - C. The Virginia Brownfields Program
- VI. CONCLUSION

I. INTRODUCTION

In virtually every city across the nation with older industrial zones, public officials are grappling with the challenges associated with abandoned or underutilized industrial and commercial properties—also known as brownfields. The U.S. Environmental Protection Agency (EPA) defines brownfields as “abandoned, idled, or under-used industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination.”³ These properties include once prosperous industrial areas of Chicago and Detroit; closed timber mills that dot the rural landscape of the Pacific Northeast; abandoned mining operations in Arizona and California; and idle shipyards and railroad depots in Delaware and Virginia.

Throughout this decade, state and local governments have come to view the redevelopment of brownfields as a unique opportunity to solve multiple problems concurrently. With a minimum of public investment, brownfields redevelopment initiatives promote private sector investment and

³ U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response, *Brownfields* (visited Dec. 5, 1998) <<http://www.epa.gov/swerosps/bf/glossary.htm#brow>>.

involvement in community revitalization activities. Many brownfields are located in established urban areas where redevelopment projects can easily access highways, utilities, public works, and other existing infrastructure.⁴

Projects that target blighted communities increase employment opportunities, expand the tax base, and reduce costs associated with preventing crime in these decaying areas. Redevelopment efforts also help to reduce hazardous chemical levels on idle properties, curb sprawl development, improve air quality, reduce traffic congestion, and preserve open space and farmland. In short, brownfields redevelopment offers a cost effective, environmentally sensitive solution that encourages economic revitalization in depressed communities across the nation.⁵

The interplay between economic development issues and environmental concerns has dominated local development considerations. Developers and investors, cautious of environmental liability, have historically shied away from properties that were previously used for industrial or commercial activities. These properties, subject to many environmental regulations and procedures, can also require additional construction delays that often neutralize the economic viability of development projects. As a result of this uncertainty, investors are reluctant to finance development projects on these properties. This, in turn, causes developers to simply forsake urban cores for undeveloped land in rural and suburban areas that is less expensive and free from the labyrinth of environmental regulations.⁶

The Commonwealth of Virginia has not been immune to development patterns that have abandoned industrial and commercial sites with actual or perceived contamination. Brownfield sites can be found across the Commonwealth, from the banks of the Eastern Shore to the valleys of the Blue Ridge Mountains. The Virginia Department of Environmental Quality (VDEQ), working in coordination with the United States Environmental Protection Agency (EPA), is leading the administrative charge to implement programs that will return Virginia's brownfield sites to productive use. Moreover, EPA has created the Brownfields National Partnership for the purpose of coordinating federal agency efforts that address many of these concerns.⁷ The Partnership represents a commitment on behalf of over

⁴ See generally TODD S. DAVIS & KEVIN D. MARGOLIS, *BROWNFIELDS: A COMPREHENSIVE GUIDE TO REDEVELOPING CONTAMINATED PROPERTY* (1997).

⁵ See generally *id.*

⁶ See generally *id.*

⁷ Discussion of the Brownfields National Partnership is beyond the scope of this article. The author refers the reader to ANN EBERHART GOODE ET AL., *GUIDE TO FEDERAL BROWNFIELD*

twenty federal agencies to coordinate and actively promote policies and/or programs that encourage the redevelopment of brownfields.

The general focus of this article is on the state initiatives and programs, statutes, and regulations that affect brownfields redevelopment in Virginia. Part II of the article assesses the status of brownfields in Virginia, including a discussion of the factors that contribute to brownfields, the justification for their reuse, and the reasons why environmental remedial measures have been avoided to date. Part III of the article traces the historical development of the federal and state laws that were enacted to facilitate the cleanup of contaminated properties. Part IV describes the activities that the U.S. Environmental Protection Agency has taken in its leadership role in the campaign to redevelop brownfields. Part V discusses the Virginia Brownfield initiatives, programs, and laws created to address contaminated properties within the Commonwealth. The article concludes by noting the optimistic future that brownfield redevelopment may play in the sustainable development of the Commonwealth's neighborhoods and communities.

II. BROWNFIELDS IN VIRGINIA

A. *Defining the Brownfields Problem*

The exact magnitude of the brownfields problem is unknown and the precise effect that these idle properties have on regional, state, and local economies is unclear.⁸ The United States General Accounting Office has estimated that the number of acres nationally that could be classified as brownfields may be as high as 500,000.⁹ Furthermore, there appears to be a consensus that these properties "present a significant barrier to economic revitalization in our nation's cities," and some policy analysts estimate that the total cost for corrective action to remediate the contaminated sites is approximately \$650 billion.¹⁰

PROGRAMS, NORTHEAST-MIDWEST INSTITUTE (1999) for a complete discussion of the Partnership, as well as the corresponding federal programs and available assistance.

⁸ See CHARLES BARTSCH & ELIZABETH COLLATON, *COMING CLEAN FOR ECONOMIC DEVELOPMENT: A RESOURCE BOOK ON ENVIRONMENTAL CLEANUP AND ECONOMIC DEVELOPMENT* i (1996).

⁹ See U.S. GENERAL ACCOUNTING OFFICE, *SUPERFUND - BARRIERS TO BROWNFIELD REDEVELOPMENT* (1996), available in 1996 WL 495636 [hereinafter *BARRIERS TO BROWNFIELD REDEVELOPMENT*].

¹⁰ DAVIS & MARGOLIS, *supra* note 4, at xix; ELIZABETH GLASS GELTMAN, *ENVIRONMENTAL*

In developing a working understanding of the brownfields problem and the resources available to abate the contamination, it is essential to differentiate between those properties with severe levels of environmental contamination and those properties characterized with medium to low levels of contamination.¹¹ The most severely contaminated properties, known as "Superfund high priority sites," contain contamination levels that pose extreme risk to the environment and to the health and safety of the surrounding communities and have the potential to affect adversely all forms of biological life.¹² These sites require enormous amounts of time and resources to remediate properly.¹³ EPA is charged with the responsibility of identifying and orchestrating the cleanup efforts of these high priority sites.¹⁴

The remaining sites, those characterized as having low to medium levels of environmental contamination, fall within the ambit of "abandoned, idled, or under-used industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination," known as "Brownfields."¹⁵ While these sites are more pervasive, they require fewer resources and considerably less time to remediate.¹⁶ As such, they offer tremendous opportunity for reuse and have the potential to be catalyst points for economic revitalization efforts within depressed communities.¹⁷

B. *Brownfields in Virginia*

A fortunate result of the Commonwealth's location in the South and its historical development as an agrarian society is that Virginia has a relatively small number of brownfield sites compared to many northern states.¹⁸ While northern cities evolved largely based on industrial and

LAW & BUSINESS 62 (Supp. 1997); U.S. GENERAL ACCOUNTING OFFICE, SUPERFUND: EPA'S USE OF FUNDS FOR BROWNFIELD REVITALIZATION 3 (1998).

¹¹ See BARTSCH & COLLATON, *supra* note 8, at i.

¹² *Id.*

¹³ See *id.*

¹⁴ See 42 U.S.C. § 9605(a)(8)(B); DAVIS & MARGOLIS, *supra* note 4, at 16; BARTSCH & COLLATON, *supra* note 8, at i.

¹⁵ U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response, *Brownfields* (visited Dec. 5, 1998) <<http://www.epa.gov/swerosps/bf/glossary.htm#brow>>; BARTSCH & COLLATON, *supra* note 8, at i.

¹⁶ BARTSCH & COLLATON, *supra* note 8, at i.

¹⁷ See *id.*

¹⁸ See 40 C.F.R. § 300, App. B (1998); W. J. CASH, THE MIND OF THE SOUTH 180-81 (1941); EDWARD L. AYERS, THE PROMISE OF THE NEW SOUTH: LIFE AFTER RECONSTRUCTION 104-

commercial activities, Virginia, and the South in general, relied primarily on an agriculturally based economy.¹⁹ As a result, there are simply fewer abandoned or idle industrial and commercial sites located in the Commonwealth because historically there has been less industrial and commercial activity.²⁰

The Virginia Department of Environmental Quality (VDEQ) estimates that there are approximately five hundred brownfield sites in Virginia, ranging from high to low levels of environmental contamination.²¹

VDEQ has developed a brownfields program that focuses on sites that have been characterized as having low levels of contamination.²² Of the sites that are addressed by the VDEQ program, VDEQ estimates that 40% pose health and environmental risk, and that their cleanup cost will be approximately \$125 million.²³

The majority of brownfields located in Virginia are concentrated in areas where there has been a high level of industrial activity.²⁴ These areas include, but are not limited to, the City of Norfolk, the City of Richmond, and other industrialized areas throughout the Urban Crescent.²⁵ As with other regions of the Country, brownfield sites in Virginia comprise a wide variety of real estate uses, ranging from warehouse and manufacturing to residential uses.²⁶ VDEQ estimates that the eclectic mix of real estate uses that makes up the brownfield sites in the Old Dominion can be roughly apportioned as follows: dry cleaning facilities contribute close to 20%; gas plants 5%; leaking underground storage tanks 5-6%; land fills 2-3%; automobile junk yards 2-3%, lumber yards 2-3%, and miscellaneous industries.²⁷

31 (1992).

¹⁹ See CASH, *supra* note 18; AYERS, *supra* note 18.

²⁰ See 40 C.F.R. § 300, App. B (1998); AYERS, *supra* note 18.

²¹ Telephone Interview with Chris M. Sitaram, Program Manager, Brownfields Program, Virginia Department of Environmental Quality, in Richmond, Va. (Apr. 22, 1998).

²² *Id.*

²³ *Id.*

²⁴ *Id.*

²⁵ *Id.* The Northern Virginia, Richmond, and Hampton Roads regions are collectively referred to as the "Urban Crescent." REPORT OF THE COMMISSION ON POPULATION GROWTH AND DEVELOPMENT, TO THE GOVERNOR AND THE GENERAL ASSEMBLY OF VIRGINIA, H. Doc. No. 76, at 5 (1994).

²⁶ See DAVIS & MARGOLIS, *supra* note 4, at 65; Telephone Interview with Chris M. Sitaram, *supra* note 21.

²⁷ Telephone Interview with Chris M. Sitaram, *supra* note 21.

C. *The Cause*

A variety of complementing factors have led developers and lending institutions to avoid previously occupied industrial and commercial properties that have real or perceived environmental contamination. For the most part, these factors can be compartmentalized into three general categories: the unintended effect of environmental laws, the targeting of deep pocket lenders, and a lack of understanding or simple ignorance in the science of contamination.

Probably the major factor in the creation and continuance of brownfields is the unintended effect of environmental laws. States, local governments, and the private sector must contend with federal and state environmental statutes and regulations, along with interpreting court decisions, that impose or have the potential to impose substantial liability on any persons owning contaminated property.²⁸ Arguably the environmental law that has had the most profound impact on brownfields is the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).²⁹

"CERCLA established a federal program to identify and remediate chemical spills and abandoned hazardous waste sites believed to pose a significant threat to human health, safety, and the environment."³⁰ The statute was intended in part to stimulate redevelopment, and ultimately to ensure the reuse of once idle and abandoned contaminated properties.³¹ However, due to its strict, retroactive, and joint and several liability on all parties deemed to be responsible for the contamination, CERCLA has had the very opposite effect in that its application has "chilled the transfer of industrial and commercial real estate throughout the country."³² "Indeed, according to a U.S. General Accounting Office report, the principal barrier to redevelopment of these former industrial properties has been the existence of state and federal environmental laws like CERCLA that impose strict and retroactive liability on owners and operators of contaminated properties."³³

In addition to the sweeping potential for liability developers and other

²⁸ See U.S. GENERAL ACCOUNTING OFFICE, COMMUNITY DEVELOPMENT, REUSE OF URBAN INDUSTRIAL SITES, (1995) (on file with author).

²⁹ See BARTSCH & COLLATON, *supra* note 8, at 6; GELTMAN, *supra* note 10, at 61; *Financing Brownfields Development*, 12 TOXICS L. REP. (BNA) No 31, at 870 (Jan. 7, 1998).

³⁰ DAVIS & MARGOLIS, *supra* note 4, at 7.

³¹ See *id.*

³² GELTMAN, *supra* note 10, at 61.

³³ *Financing Brownfields Development*, *supra* note 29, at 870.

contaminated-property owners must confront under environmental laws, lending institutions because of their economic resources are also primary targets in law suits that seek out the proverbial deepest pockets.³⁴ In the landmark decision, *United States v. Fleet Factors Corp.*, the court solidified lending institutions' worst fears when the court held that a lender could be held responsible under CERCLA for remediation if the lender partook "in the financial management of a facility to a degree indicating a capacity to influence the corporation's treatment of hazardous wastes."³⁵ Therefore, it should come as no surprise that lending institutions reluctant to loan on contaminated properties cite CERCLA as one of the primary obstacles to brownfield redevelopment.³⁶ In fact, approximately 87 percent of commercial mortgage bankers who were surveyed in a recent study confirmed that fear of environmental regulatory liability has delayed transactions involving contaminated properties and 40 percent acknowledged that they had reneged on mortgage deals involving potentially contaminated property.³⁷ Potential purchasers and developers are also often deterred from brownfields redevelopment because of this reluctance by lenders to provide the financial capital required to purchase and/or redevelop the contaminated properties.³⁸

Much of the fear and trepidation associated with the redevelopment of brownfields, either from regulatory liability or financial insecurity and perception of questionable economic viability, are exaggerated by pure ignorance of environmental science.³⁹ In many instances there is simply a lack of understanding of the compounds that contribute to the contamination

³⁴ See DAVIS & MARGOLIS, *supra* note 4, at 8.

³⁵ *United States v. Fleet Factors Corp.*, 901 F.2d 1550, 1557 (11th Cir. 1990) (minority view); DAVIS & MARGOLIS, *supra* note 4, at 8.

³⁶ See BARRIERS TO BROWNFIELD REDEVELOPMENT, *supra* note 9. See also DAVIS & MARGOLIS, *supra* note 4, at 8. The following are a few examples of the reasons that lenders cite for their reluctance to extend credit to transactions involving brownfields redevelopment:

- devaluation of the collateral due to cleanup costs potentially exceeding the value of the property;
- directly assuming CERCLA liability as an owner or operator through workout activities if the loan goes bad or by foreclosure on such property;
- inability to foreclose on contaminated property if the debtor creates or leaves an environmental hazard and then defaults on the loan.

GELTMAN, *supra* note 10, at 61; see also *Financing Brownfields Development*, *supra* note 29, at 870.

³⁷ See DAVIS & MARGOLIS, *supra* note 4, at 10.

³⁸ See GELTMAN, *supra* note 10, at 61.

³⁹ See DAVIS & MARGOLIS, *supra* note 4, at 214-49.

and the threshold levels required for them to present a risk to either the environment or to the health of the community members.⁴⁰ Many fears of potential health risks have been aggravated due to inferior scientific evidence and exaggerated claims.⁴¹ Members of the lending, development, and environmental community suffer from “chicken little” mentality, whereby assumptions are made about the risks associated with slightly contaminated properties without truly appreciating the magnitude or extent of the risk associated with the contamination.⁴²

D. *Justifying the Reuse of Brownfields*

It is clear that several contributing factors have led to what some scholars have coined as “Brownfields paralysis,” where redevelopment of properties with actual or perceived contamination is simply forsaken for greener pastures on the edges of suburbia.⁴³ At this point in the discussion it is important to understand the justification for the reuse and redevelopment of brownfield properties. In other words, why should developers and society even bother remediating and redeveloping brownfields, when it appears to be more economically feasible simply to purchase and develop property located in suburban or rural areas that is unaffected by the regulation regime that encompasses brownfield redevelopment?⁴⁴

It is remarkably easy to focus solely on the avoidance of potential liability as the rationale for the development of greenfields as opposed to brownfields, without appreciating the sweeping impact this development pattern has on urban regions. When developers choose greenfields instead of brownfields, urban residents are greatly affected. Through lost job opportunities, city governments lose tax revenue. The loss leads to a declining tax base, which results in fewer services and amenities.⁴⁵ The new greenfield development contributes to suburban sprawl.⁴⁶ In Virginia, urban sprawl has resulted in the economic decline of the cities and established

⁴⁰ See *id.*

⁴¹ See *id.* “[T]he risk to the average commuter of being killed in a car accident is significantly greater than the risk of developing cancer from years of exposure to a mildly contaminated site.” *Id.* at 8-9.

⁴² See *id.* at 214-49.

⁴³ GELTMAN, *supra* note 10, at 61.

⁴⁴ See BARTSCH & COLLATON, *supra* note 8, at 2-5.

⁴⁵ See *id.* at 2; DAVIS & MARGOLIS, *supra* note 4, at 222.

⁴⁶ See BARTSCH & COLLATON, *supra* note 8, at 2

suburbs, and simultaneously has destroyed the open spaces and farmlands.⁴⁷

From 1960 to 1990, the Urban Crescent experienced a substantial population decline in its established cities and suburbs.⁴⁸ It also lost an average of forty percent of its farmland.⁴⁹ In Northern Virginia alone, where some of the most rapid development in the country is occurring, it is estimated that twenty-eight acres a day are developed.⁵⁰ The Northern Piedmont of Virginia is the second most threatened farming region in the country.⁵¹ Sprawling development patterns have also disproportionately increased traffic congestion in relation to the otherwise substantial population growth that Virginia has experienced during the last two decades.⁵²

In addition to these land use impacts, the environmental contamination itself has the potential to contaminate adjacent properties, seep into the water table, and affect potable water supplies, thereby magnifying the environmental and health risks associated with the contamination plume.⁵³

By focusing development on contaminated properties located in urban areas, state and local governments are hoping to increase employment opportunities, generate tax revenues, and put underutilized properties back into productive use.⁵⁴ In addition, centralizing development should reduce impacts on more pristine areas, curb sprawl,⁵⁵ and better utilize the existing infrastructure (e.g., highways, utilities, public works).⁵⁶

⁴⁷ See generally WILLIAM H. LUCY & DAVID L. PHILLIPS, METROPOLITAN SPRAWL IN VIRGINIA: CITY DECLINE, SUBURBAN TRANSITION, AND FARMLAND LOSS SUMMARY REPORT, A REPORT TO THE VIRGINIA COMMISSION ON POPULATION GROWTH AND DEVELOPMENT (1994)(on file with author).

⁴⁸ See *id.* at 10-13.

⁴⁹ See *id.* at 2-4. "Forty seven percent of 1959 farmland in the Richmond region had been converted to other uses by 1992." *Id.* at 2. "Thirty five percent of 1959 farmland in the Hampton Roads region had been converted to other uses by 1992." *Id.* at 3.

⁵⁰ SOUTHERN ENVIRONMENTAL LAW CENTER, SMART GROWTH IN THE SOUTHEAST: NEW APPROACHES FOR GUIDING DEVELOPMENT 4 (1999)[hereinafter SMART GROWTH].

⁵¹ SOUTHERN ENVIRONMENTAL LAW CENTER, BEYOND ASPHALT: CREATING A BETTER TRANSPORTATION FUTURE FOR VIRGINIA 2 (1999).

⁵² *Id.* The Virginia Department of Transportation reported that the number of miles driven by Virginians increased 60% between 1980 and 1990, while the population grew by 16% during the same time period. SMART GROWTH, *supra* note 50, at 4.

⁵³ See generally DAVIS & MARGOLIS, *supra* note 4, at 201.

⁵⁴ Telephone Interview with Chris M. Sitaram, Program Manager, Brownfields Program, Virginia Department of Environmental Quality, in Richmond, Va. (Apr. 7, 1998).

⁵⁵ Telephone Interview with Patricia A. McMurray, Toxicologist, Federal Facilities Restoration and Superfund Programs, Virginia Department of Environmental Quality, in Richmond, Va. (Apr. 7, 1998).

⁵⁶ Telephone Interview with Thomas D. Modena, Federal Facilities Restoration and

E. *So What's Preventing the Cleanup?*

While the uncertainty surrounding legal liability is clearly the biggest obstacle to the redevelopment of brownfields, there are a number of additional barriers that contribute to the pervasive reluctance to redevelop brownfields even in light of the aforementioned potential benefits, including: lack of concentrated expertise; potentially substantial capital costs; insufficient financing; clouded federal, state, and local environmental and legal policies; entrenched attitudes among regulators; absence of a consistent redevelopment framework; public opposition; limited demand for redeveloped sites; and competition from greenfields.⁵⁷ Property owners would rather warehouse their property, and developers and investors would rather avoid the property than risk the legal quagmire of the environmental statutes.⁵⁸ In Virginia, the VDEQ considers the three main obstacles to the redevelopment of brownfields located in Virginia to be the potential for liability, the magnitude of the environmental contamination, and the time frame to expedite redevelopment efforts.⁵⁹

III. THE PRIMARY ENVIRONMENTAL LAWS ADVANCING BROWNFIELDS IN VIRGINIA: AN HISTORICAL PERSPECTIVE

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

The genesis of modern day brownfields awareness can be traced back to a defining moment in Congressional history. In the last days of the 1980 session, the 96th Congress enacted the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), thereby creating an extensive labyrinth of regulatory hurdles that were intended to expedite the cleanup process of contaminated properties, but which in reality had the opposite effect.⁶⁰

Superfund Programs, Virginia Department of Environmental Quality, in Richmond, Va. (Apr. 7, 1998).

⁵⁷ See DAVIS & MARGOLIS, *supra* note 4, at 9.

⁵⁸ *Id.*

⁵⁹ Telephone Interview with Chris M. Sitaram, *supra* note 54.

⁶⁰ See generally 42 U.S.C. §§ 9601-9675 (1998). CERCLA was substantially amended in 1986 by the Superfund Amendment and Reauthorization Act (SARA), and in 1990, it was re-authorized once again as part of the Omnibus Budget Reconciliation Act without any

Through the enactment of CERCLA, Congress granted the federal government extensive power to deal with hazardous waste spills, to clean up abandoned hazardous waste sites, and to require those responsible for careless disposal practices to pay for the remediation of the impaired land.⁶¹ To further these goals, CERCLA imposes liability on a "person"⁶² who "releases"⁶³ a "hazardous substance"⁶⁴ from a "facility"⁶⁵ or contaminated site.⁶⁶

substantive amendments. *Id.*

⁶¹ See generally 42 U.S.C. §§ 9601-9675 (1998); see, e.g., *General Electric Co. v. Litton Indus. Automation Sys., Inc.*, 920 F.2d 1415, 1422 (8th Cir. 1990)(stating that "two of the main purposes of CERCLA [are] prompt cleanup of hazardous waste sites and imposition of all cleanup costs on the responsible party"); DAVIS & MARGOLIS, *supra* note 4, at 7. Note that in addition to CERCLA, there are other federal environmental statutes that affect the redevelopment of brownfields. For example, the Resource Conservation and Recovery Act (RCRA) imposes costly regulation of underground storage tanks. See generally 42 U.S.C. §§ 6991, 6991a, 6991b (1998), and it also authorizes citizens and governments to demand cleanup of certain hazardous waste sites. See 42 U.S.C. §§ 6971(a)(1), 6973 (1998).

⁶² Section 101 defines "person" to include "an individual, firm, corporation, association, partnership, consortium, joint venture, commercial entity, United States Government, State, municipality, commission, political subdivision of a State, or any interstate body." 42 U.S.C. § 9601(21) (1998).

⁶³ "Release" is defined very broadly under Section 101 to include "any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment . . ." 42 U.S.C. § 9601(22) (1998).

⁶⁴ Hazardous substance is defined to mean:

(A) any substance designated pursuant to section 1321(b)(2)(A) of Title 33, (B) any element, compound, mixture, solution, or substance designated pursuant to section 9602 of this title, (C) any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act [42 U.S.C.A. § 6921] (but not including any waste the regulation of which under the Solid Waste Disposal Act [42 U.S.C.A. § 6901 et seq.] has been suspended by Act of Congress), (D) any toxic pollutant listed under section 1317(a) of Title 33, (E) any hazardous air pollutant listed under section 112 of the Clean Air Act [42 U.S.C.A. § 7412], and (F) any imminently hazardous chemical substance or mixture with respect to which the Administrator has taken action pursuant to section 2606 of Title 15.

42 U.S.C. § 9601(14) (1998).

⁶⁵ The term "facility" is defined as "(A) any building, structure, installation, equipment, pipe or pipeline (including any pipe into a sewer or publicly owned treatment works), well, pit, pond, lagoon, impoundment, ditch, landfill, storage container, motor vehicle, rolling stock, or aircraft, or (B) any site or area where a hazardous substance has been deposited, stored, disposed of, or placed, or otherwise come to be located; but does not include any consumer product in consumer use or any vessel." 42 U.S.C. § 9601(9) (1998).

⁶⁶ 42 U.S.C. § 9607(a) (1998). See generally William B. Johnson, *Third-Party Defense to*

Section 107 of CERCLA specifies four different classes of "persons" that may be subjected to liability.⁶⁷ These include present owners and operators, certain past owners and operators, transporters, and generators.⁶⁸

The liability not only can be applied retroactively to include previous persons who contributed to the hazardous waste disposal prior to the enactment of CERCLA,⁶⁹ but liability is strict, and may be joint and several on those persons deemed to be a responsible party.⁷⁰ In other words, CERCLA imposes liability on any potentially responsible party that may have contributed to the release of hazardous substances at a particular site.⁷¹

This sweeping potential for liability had only a limited chance of being deflected by CERCLA's defenses, that are limited to: acts of God, acts of war, and acts or omissions of certain third parties.⁷² These few exceptions to environmental liability were expanded, however, in 1986, when Congress added the innocent landowners defense and the secured creditors exception to accommodate lending institutions and subsequent purchasers that did not participate in the management of the contaminated property or were unaware of contamination on the property.⁷³ Unfortunately, both of these exceptions are riddled with practical applicability problems, including unpredictable judicial interpretations⁷⁴ and the imposition of additional environmental due diligence hurdles.⁷⁵

Liability Under § 107 of Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. § 6907) 105 A.L.R. FED. 21 (1998).

⁶⁷ 42 U.S.C. § 9607(a)(1)-(4) (1998).

⁶⁸ *Id.*

⁶⁹ See *United States v. Monsanto Co.*, 858 F.2d 160, 174 (4th Cir. 1988). For example, CERCLA gives "current owners and operators of contaminated property a cause of action against predecessors as well as against the generators and transporters who placed the hazardous substances on the property." GELTMAN, *supra* note 10, at 61.

⁷⁰ 42 U.S.C. § 9607(a) (1998); GELTMAN, *supra* note 10, at 61; 58 LA. L. REV. 167, 168; *New York v. Shore Realty Corp.*, 759 F.2d 1032, 1044, and n. 17 (2nd Cir. 1985) (noting that Congress "specifically rejected including a causation requirement in the CERCLA statute"). *Cf.*, *In re Bell Petroleum Services, Inc.* 3 F.3d 889, 895 (5th Cir. 1993) (noting that joint and several liability under CERCLA is not mandatory).

⁷¹ See DAVIS & MARGOLIS, *supra* note 4, at 16.

⁷² 42 U.S.C. § 9607(b) (1998).

⁷³ See 42 U.S.C. § 9601(35)(A); 42 U.S.C. § 9607(b)(3) (1998); BARTSCH & COLLATON, *supra* note 8, at 7.

⁷⁴ See e.g., *United States v. Fleet Factors Corp.*, 901 F.2d 1550 (11th Cir. 1990) (denying Appellant's motion for summary judgment because Appellant, a secured creditor, could have influenced the facility's treatment of waste).

⁷⁵ See 42 U.S.C. §§ 9601(35), 9607(b)(3) (1998); BARTSCH & COLLATON, *supra* note 8, at 7-8; MICHAEL B. GERRARD, *BROWNFIELDS LAW AND PRACTICE: THE CLEANUP AND*

To promote the clean up of the worst hazardous sites in the country, Congress charged EPA with the duty to rank the most contaminated sites in the United States.⁷⁶ The EPA starts the site evaluation process with a Hazard Ranking System, which identifies, assesses, and ranks the hazards associated with contamination of a site by hazardous materials.⁷⁷ The EPA then records the worst sites on the National Priorities List (NPL) in order to determine the resources needed for cleanup.⁷⁸ There are presently twenty-six hazardous sites located in Virginia that are on the NPL.⁷⁹

REDEVELOPMENT OF CONTAMINATED LAND §§ 8.04 (1999). For example, under the innocent purchaser defense, a purchaser is required to prove by a preponderance of the evidence that it did not know or have reason to know of the contamination. *See id.*

⁷⁶ 42 U.S.C. § 9605(a)(8)(B) (1998); DAVIS & MARGOLIS, *supra* note 4, at 16.

⁷⁷ *See* 40 C.F.R. § 300, App. A (1999).

⁷⁸ 42 U.S.C. § 9616; 40 C.F.R. § 300, App. B (1999); DAVIS & MARGOLIS, *supra* note 4, at 7. Presently, the NPL contains over 1,300 hazardous sites on the list. BARTSCH & COLLATON, *supra* note 8, at i. EPA has estimated that, on average, these sites will cost over \$26 million each to clean up. *See Barriers to Brownfield Redevelopment, supra* note 9.

⁷⁹ National Priorities List, 40 C.F.R. § 300, App. B (1999); Virginia Department of Environmental Quality, *Virginia Superfund Sites* (visited Dec. 5, 1998) <<http://www.deq.state.va.us/superf/sfundind.html>>. Below is a complete list of the private sites and federal facilities located in Virginia that are on the National Priorities List:

SITE NAME	CITY/COUNTY
Abex Corp	Portsmouth
Arrowhead Associates/Scovill Corp	Montross
Atlantic Wood Industries, Inc	Portsmouth
Avtex Fibers, Inc	Front Royal
Buckingham County Landfill	Buckingham
C & R Battery Co., Inc	Chesterfield County
Chisman Creek	York County
Culpeper Wood Preservers, Inc	Culpeper
Dixie Caverns County Landfill	Salem
First Piedmont Rock Quarry (Route 719)	Pittsylvania County
Greenwood Chemical Co.	Newtown
H & H Inc., Burn Pit	Farrington
L.A. Clarke & Son	Spotsylvania County
Rentokil, Inc. (VA Wood Preserving Div)	Richmond
Rhinehart Tire Fire Dump	Frederick County
Saltville Waste Disposal Ponds	Saltville
Saunders Supply Co	Chuckatuck
U.S. Titanium	Piney River

Unfortunately, EPA has had little success in sufficiently cleaning up the designated NPL sites to the level required for their removal from the priority list.⁸⁰ Furthermore, the sweeping coverage of CERCLA and the fear of its potential liability has resulted in the perpetuation of the hazardous waste sites and in the expansion of brownfields—a far cry from the original intent of Congress.⁸¹

B. *Virginia State Clean Up Program*

Following the enactment of CERCLA, a number of states created programs to address contaminated sites that were not considered serious enough to be placed on the National Priorities List, but which were believed to create a significant enough health risk to require remediation.⁸² As a general rule, brownfields usually are not contaminated seriously enough to warrant coverage under CERCLA.⁸³ In fact, Congress expressly provided the states with the authority to enact state cleanup programs that address these sites.⁸⁴ To date, approximately forty-five states have enacted cleanup programs that parallel the CERCLA legislation.⁸⁵ While Virginia was one of the first states to enact such legislation, it has likewise been one of the first states to abandon the mandatory cleanup regime in exchange for a voluntary

FEDERAL FACILITIES

Defense General Supply Center (DLA)	Chesterfield County
Fort Eustis (US Army)	Newport News
Langley Air Force Base	Hampton
Marine Corps Combat Development Command	Quantico
NASAB Langley Research Center	Hampton
Naval Surface Warfare Base Dahlgren	Dahlgren
Naval Weapons Station Yorktown	Yorktown
Norfolk Naval Base (Sewells Pt Nvl Cmpx)	Norfolk

Id.

⁸⁰ See DAVIS & MARGOLIS, *supra* note 4, at 9-10.

⁸¹ See *id.* at 7-8; GELTMAN, *supra* note 10, at 61 (claiming that CERCLA “has chilled the transfer of industrial and commercial real estate throughout the country”).

⁸² See GELTMAN, *supra* note 10, at 66.

⁸³ See *Barriers to Brownfield Redevelopment*, *supra* note 9, at 3.

⁸⁴ See 42 U.S.C. § 9614(a) (1998). Section 114 of CERCLA provides that “[n]othing in this chapter shall be construed or interpreted as preempting any State from imposing any additional liability or requirements with respect to the release of hazardous substances within such State.” *Id.*

⁸⁵ See GELTMAN, *supra* note 10, at 66.

remediation approach. Provided below is a brief historical account of the Virginia State Clean Up Program under the Virginia mini-Superfund law, that was abandoned in 1992.⁸⁶

The Virginia Department of Waste Management initiated the Virginia State Clean Up Program in 1986 to augment the coverage of the CERCLA clean up program in the Commonwealth.⁸⁷ Subsequently, the Virginia Department of Environmental Quality (VDEQ) was created in 1992 and given responsibility for administering Virginia's waste management policies and regulations, including the implementation of the State Clean Up Program.⁸⁸

The Virginia program was primarily intended to address those contaminated sites that were not covered by other federal or state programs or regulations.⁸⁹ Under the program the VDEQ evaluated the contaminated sites to assess the potential health risks posed to the general public and potential harm posed to the environment.⁹⁰ Evaluated sites were then prioritized using the State Priority Ranking System⁹¹ and a determination was made as to whether or not a particular site warranted remediation.⁹²

The VDEQ was also authorized to take a variety of actions to ensure proper cleanup of sites.⁹³ These actions included issuing administrative orders, entering into consent orders, seeking injunctive action, civil penalties, or recovery of costs associated with the corrective action.⁹⁴

⁸⁶ Telephone Interview with Kevin L. Greene, Remediation Project Officer, Voluntary Remediation Program, Department of Environmental Quality, in Richmond, Va. (Apr. 7, 1998).

⁸⁷ See MAYS & VALENTINE, VIRGINIA: ENVIRONMENTAL LAW HANDBOOK § 9.8 (2nd ed. 1992); VA. CODE ANN. § 10.1-1402.18 (Michie 1998).

⁸⁸ See VA. CODE ANN. §§ 10.1-1183, 10.1-1404 (Michie 1998). The enabling legislation for the Program is found in the Virginia Waste Management Act, which also includes the VDEQ's enforcement authority. See *id.* § 10.1-1455.

⁸⁹ See MAYS & VALENTINE, *supra* note 87, § 9.8.

⁹⁰ See *id.* § 9.8.1.

⁹¹ The State Priority Ranking System was based on the EPA's Hazard Ranking System. See MAYS & VALENTINE, *supra* note 87, at § 9.8.1.

⁹² See *id.*

⁹³ See VA. CODE ANN. §§ 10.1-1402.18 -.19, 10.1-1455 (Michie 1998).

⁹⁴ See *id.* §§ 10.1-1402.18 -.19, § 10.1-1455. In addition to its authority to order appropriate corrective actions, the VDEQ could request the Attorney General's Office to seek injunctive relief. See *id.* § 10.1-1455. The Waste Management Act further provided that the VDEQ could assess civil penalties up to \$25,000 per day against persons who violated corrective action orders. See *id.* § 10.1-1455.A. Furthermore, the statute provided that "[a]ny person willfully violating or refusing, failing, or neglecting to comply with any regulation or order" of the Clean Up Program was guilty of a Class 1 misdemeanor. See *id.* § 10.1-1455.D.

The Virginia statute applicable to the program does not specify the extent of liability imposed upon responsible parties, including whether or not such liability is retroactive or joint and several. However, the statute does provide that a person is not liable for any containment or cleanup costs if "the violation[s] and the damages resulting therefrom were caused solely by an act of God, an act of war, an act or omission of a third party," or any combination thereof.⁹⁵

By January of 1992, no enforcement or cost recovery actions had taken place in the Commonwealth under the Clean Up Program, and by November of 1992, the Program was officially abandoned.⁹⁶ Moreover, while the enabling legislation for the Clean Up Program does remain on the books, in light of the recent advent of the Voluntary Remediation Program there appears to be no indication that the Commonwealth will return to a compulsory program or CERCLA equivalent in the near future.⁹⁷

C. *Virginia Limits Liability at CERCLA Properties*

In 1996, the Virginia General Assembly amended the Virginia Waste Management Act to provide for the Remediated Property Fresh Start Program.⁹⁸ This program provides citizen suit and enforcement immunity to titleholders, lenders, and others who hold a security interest in certain Virginia remediated properties listed on the NPL.⁹⁹ This immunity is designed to relieve the threat of future regulatory and third-party liability, and is an attempt by the legislature to stimulate the redevelopment of previously contaminated properties.¹⁰⁰ The statute does not apply to persons who are otherwise liable under state law or regulation, nor does it apply to title holders and lenders that held an interest in the property prior to satisfactory remediation.¹⁰¹ The program does not address brownfields within the Commonwealth that do not come under the jurisdiction of CERCLA, nor does it provide any protection from federal liability.¹⁰²

⁹⁵ *Id.* § 10.1-1406.

⁹⁶ Telephone Interview with Kevin L. Greene, *supra* note 86.

⁹⁷ Telephone Interview with Patricia A. McMurray, *supra* note 55.

⁹⁸ See Remediated Property Fresh Start Program, 1996 Va. Acts ch. 554 (codified at VA. CODE ANN. § 10.1-1429.4 (Michie 1998)).

⁹⁹ See *id.*

¹⁰⁰ See *id.*

¹⁰¹ See *id.*

¹⁰² See generally *id.*

IV. THE U.S. ENVIRONMENTAL PROTECTION AGENCY LEADS THE FEDERAL CHARGE IN THE REDEVELOPMENT OF BROWNFIELDS

A. *An Overview of EPA's Brownfields Economic Redevelopment Initiative*¹⁰³

The U.S. Environmental Protection Agency (EPA) has been the most active federal agency in developing initiatives that promote the redevelopment of brownfields and other underutilized contaminated properties.¹⁰⁴ In 1993, the EPA took its first steps to promote the redevelopment of abandoned and contaminated properties that were once used for industrial and commercial purposes.¹⁰⁵ Guided by the belief that "environmental cleanup is a building block to economic development, not a stumbling block, [and] that revitalizing contaminated property must go hand in hand with bringing life and economic vitality back to the community,"¹⁰⁶ the EPA launched its brownfields redevelopment campaign with the introduction of the Brownfields Economic Redevelopment Initiative.¹⁰⁷

The Brownfields Economic Redevelopment Initiative placed a new, national focus on brownfields and on their reuse and redevelopment.¹⁰⁸ Specifically, the Initiative was "designed to empower states, cities, tribes, communities, and other stakeholders in economic redevelopment to work together in a timely manner to prevent, assess, safely clean up, and sustainably reuse brownfields."¹⁰⁹

¹⁰³ Additional information regarding the Brownfields Economic Redevelopment Initiative can be obtained from the RCRA/Superfund Hotline at 1-800-424-9346 or at <<http://www.epa.gov/brownfields>>.

¹⁰⁴ See generally EPA Brownfields Web site (visited Dec. 6, 1998) <<http://www.epa.gov/brownfields>>.

¹⁰⁵ See Grant R. Trigger et al., *Making Brownfields Green Again: How Efforts to Give Urban Centers an Economic Facelift have Changed the Face of Environmental Policy*, 76 MICH. B. J. 42, 42 (1997).

¹⁰⁶ EPA, *The Brownfields Action Agenda* (visited Dec. 6, 1998) <<http://www.epa.gov/swerosps/bf/ascii/action.txt>>.

¹⁰⁷ See Grant R. Trigger, *supra* note 105, at 42.

¹⁰⁸ See EPA, *Brownfields Economic Redevelopment Initiative: Quick Reference Fact Sheet* (Mar. 1998) (visited April 22, 2000) <<http://www.epa.gov/swerosps/bf/html-doc/econinit.htm>>.

¹⁰⁹ *Id.*

B. *Brownfields Action Agenda*

On January 25, 1995, the EPA announced the Brownfields Action Agenda, which outlined its plans and activities to assist states in addressing brownfields and the problems that are associated with unaddressed contamination.¹¹⁰ With implementation of its Brownfields Action Agenda, EPA set out to help reverse the growing sprawl effect by implementing initiatives that encourage the redevelopment of existing industrial sites, rather than undeveloped areas.¹¹¹

The Agenda outlines the steps that EPA had taken and was planning to take to help the States understand and implement the Brownfields Economic Redevelopment Initiative.¹¹² The Agenda is divided up into four broad, overlapping categories: brownfields pilots; clarification of liability and cleanup issues; partnerships and outreach; and job development and training.¹¹³

1. Brownfields Assessment Demonstration Pilots

Since the Agenda's inception in 1995, the EPA has funded 307 Brownfields Assessment Demonstration Pilots,¹¹⁴ four of which—Town of Cape Charles-County of Northampton, Newport News, Richmond, & Shenandoah—are located in Virginia.¹¹⁵ The Pilots are funded at up to \$200,000 each over a period of two years, and are intended to “test clean up and redevelopment planning models, direct special efforts toward removing

¹¹⁰ See *Barriers to Brownfield Redevelopment*, *supra* note 9; *The Brownfields Action Agenda*, *supra* note 106.

¹¹¹ See *The Brownfields Action Agenda*, *supra* note 106.

¹¹² See *id.*

¹¹³ See *id.* “EPA’s Brownfields Initiative strategies include funding pilot programs and other research efforts, clarifying liability issues, entering into partnerships, conducting outreach activities, developing job training programs, and addressing environmental justice concerns.” EPA, *Brownfields Tax Incentive: Quick Reference Fact Sheet*, EPA 500-F-97-155 (Aug. 1997) (visited April 22, 2000) <http://www.epa.gov/swerosps/bf/html-doc/taxfs_2.htm>.

¹¹⁴ See EPA, *The Brownfields Economic Redevelopment Initiative: Proposal Guidelines for Brownfields Assessment Demonstration Pilots 2* (visited April 22, 2000) (Oct. 1999) <<http://www.epa.gov/swerosps/bf/html-doc/apappg00.htm>>.

¹¹⁵ See EPA, *Brownfields Assessment Demonstration Pilot: Newport News* (June 1999) (visited April 22, 2000) <<http://www.epa.gov/swerosps/bf/html-doc/nwprtnws.htm>>; EPA, *Pilots: Region 3 Brownfields Initiative* (Sept. 1998) (visited April 22, 2000) <<http://www.epa.gov/reg3hwmd/brownfld/pilots.htm>>. The first Brownfields Pilot was awarded in 1993, in Cleveland, Ohio. See *The Brownfields Action Agenda*, *supra* note 106.

regulatory barriers without sacrificing protectiveness, and facilitate coordinated environmental cleanup and redevelopment efforts at the federal, state, tribal and local levels."¹¹⁶ In other words, Pilot funding is intended in part to promote efforts that relieve lenders, investors, developers, and other affected parties from many of the draconian environmental statutes and regulations that stifle redevelopment efforts of property affected by actual or perceived contamination, provided "protectiveness" is preserved.¹¹⁷ As of June 1999, \$69 million had been awarded in pilot grants, and this figure has the potential to continue to increase because of the increasing political awareness of and demand for sustainable communities built on the concepts of preservation, smart growth, and urban revitalization.¹¹⁸

In Virginia, the Brownfields Pilot Program officially commenced in September of 1994, when the City of Richmond was selected by the EPA as one of the Brownfields Pilot sites.¹¹⁹ Richmond served as a prime example of the effect that brownfields can have on the Nation's older cities.¹²⁰ Over the years, due in part to environmental risks, Richmond had experienced private disinvestment from developers, investors, and lenders in its older industrial zones.¹²¹ The Pilot Program was implemented to target one of these problem areas, a 5,800 acre area located in South Richmond, which the

¹¹⁶ *Brownfields Pilots*, *supra* note 115.

¹¹⁷ See *id.* Section 104(d)(1) of CERCLA provides the authority for the funding of these Pilots. EPA, *The Brownfields Economic Redevelopment Initiative: Proposal Guidelines for Brownfields Assessment Demonstration Pilots*, at 3 (Oct. 1997) (visited April 22, 2000) <<http://www.epa.gov/swerosps/bf/html-doc/appbook.htm>>.

¹¹⁸ See Office of the Vice President, *Vice President Gore Announces \$11 Million to Cleanup and Redevelop Distressed Areas* (June 21, 1999) (visited April 22, 2000) <<http://www.epa.gov/swerosps/bf/html-doc/Whpr699.htm>>; EPA, *Vice President Gore Awards Brownfields Grants to 71 Communities, Expands Efforts to Revitalize Distressed Areas* (July 15, 1998) (visited April 22, 2000) <<http://www.epa.gov/swerosps/bf/html-doc/pr071598.htm>>; E-mail from James Maas, *EPA Accepting Applications for Brownfields Assessment Pilots*, EPA, Nov. 4, 1998 (on file with author). This expansion is due in part to the \$86.4 million that Congress appropriated to the EPA to address the brownfields problem. See EPA, *Brownfields Economic Redevelopment Initiative: Quick Reference Fact Sheet* (Mar. 1998) (visited April 22, 2000) <<http://www.epa.gov/swerosps/bf/html-doc/econinit.htm>>.

¹¹⁹ See EPA, *Richmond, Virginia* (Sept. 1998) (visited April 22, 2000) <<http://www.epa.gov/reg3hwmd/brownfld/richmond.htm>>. Richmond was one of the original three cities selected for the Brownfields Pilot project. See U.S. ENVIRONMENTAL PROTECTION AGENCY, *EPA BROWNFIELDS REDEVELOPMENT DEMONSTRATION PILOTS 1-2* (1995) (on file with author).

¹²⁰ See *Richmond, Virginia*, *supra* note 119.

¹²¹ See *id.*

Commonwealth had previously designated as a State Enterprise Zone.¹²² An Enterprise Zone is an additional redevelopment tool that the Commonwealth can use to encourage redevelopment within distressed areas of the Commonwealth through real property and business tax incentives.¹²³

The EPA's stated objective for the Richmond Pilot Program was to "serve as a catalyst in moving the process of reclaiming vacant business sites forward."¹²⁴ To date, the Program has identified five brownfields within the targeted 5,800 acres, and has conducted pre-development and environmental site assessments at a number of these sites.¹²⁵ In addition, business users have entered into negotiations for the use of two of the brownfields sites.¹²⁶

In April 1995, the EPA designated the Town of Cape Charles-County of Northampton as the second Brownfields Pilot site in Virginia.¹²⁷ The Cape Charles Pilot focuses on an old 155-acre railyard and municipal dump site located on the tip of the Delmarva peninsula, which separates the Chesapeake Bay from the Atlantic Ocean.¹²⁸ It is an area that is rich in environmental treasures, including wetlands, unspoiled coastlines, fertile farmlands, and resourceful waters that are abundant in aquatic life.¹²⁹ Since the Pilot's implementation, approximately 25 acres of brownfields within the targeted area have been leased to the Industrial Development Authority for redevelopment purposes.¹³⁰ EPA predicts that upon the Pilot's completion, "the redeveloped brownfields will include [an] eco-industrial park,¹³¹ restored wetlands, a nature trail and environmental education facility, and a tertiary sewage treatment system."¹³²

¹²² See *id.* The Commonwealth designated the 5,800 acres in South Richmond as a State Enterprise Zone in January of 1993. *Id.*

¹²³ See generally Enterprise Zone Act, 1982 Va. Acts Ch. 275 (codified at VA. CODE ANN. §§ 59.1-270 to 59.1-284.01)(Michie 1998).

¹²⁴ *Richmond, Virginia*, *supra* note 119.

¹²⁵ See *id.*

¹²⁶ See *id.*

¹²⁷ See EPA, *Cape Charles-Northampton County, Virginia* (Sept. 1998) (visited April 22, 2000) <<http://www.epa.gov/reg3hwmd/brownfld/cape.htm>>.

¹²⁸ See *id.*; PAULA DUGGAN, WORKING ON BROWNFIELDS: THE EMPLOYMENT AND TRAINING CONNECTION, NORTHEAST-MIDWEST INSTITUTE 10 (1998).

¹²⁹ See *Cape Charles-Northampton County, Virginia*, *supra* note 127.

¹³⁰ See *id.*

¹³¹ In addition to being selected as one of the National Brownfields Pilot Project sites, Cape Charles was recently selected by the President's Council on Sustainable Development as one of four sites in the nation for an Eco-Industrial Park Demonstration Project. See *id.* The Cape Charles Sustainable Technologies Industrial Park will "demonstrate advanced facilities in resource efficiency and pollution prevention." *Id.*

¹³² *Id.*

In July 1998, the EPA announced the addition of the Town of Shenandoah, in Page County, to the growing list of Pilot Programs in Virginia.¹³³ The Shenandoah Pilot targets the site of the old Big Gem Cast Iron Furnace, which was a substantial iron producer during the glory days of the iron industry.¹³⁴ The tract is located in the center of the town, and the community is hopeful that its cleanup and redevelopment will stimulate the local economy and improve the quality of life for a community that is plagued with a 13.1% poverty rate and a 10.4% unemployment rate.¹³⁵

The latest addition in Virginia occurred in June 1999, when the City of Newport News was awarded a Pilot Program to address an area of the naval city that is populated with old shipyards and abandoned factories.¹³⁶ While it is simply too early to report the effect that the Pilot has had in Newport News, City officials are optimistic that the success achieved by Cape Charles can and will be duplicated.¹³⁷

2. Clarification of Liability and Cleanup Issues

The Brownfields Action Agenda also provides that EPA is to clarify liability and cleanup issues relating to brownfields in order to alleviate liability concerns and encourage involvement in cleanup and redevelopment.¹³⁸ Since 1995, EPA has issued many guidance documents to address the liability concerns of purchasers, owners, developers, lenders, and other affected parties.¹³⁹ In addition, EPA has removed nearly 30,000 sites from its list of potential NPL Sites, thereby potentially stimulating redevelopment at these sites by reducing the possibility of CERCLA

¹³³ See EPA, *Shenandoah, Virginia* (Sept. 1998) (visited April 22, 2000) <<http://www.epa.gov/reg3hwmd/brownfld/shenand.htm>>.

¹³⁴ See *id.*

¹³⁵ See *id.*

¹³⁶ EPA, *Brownfields Assessment Demonstration Pilot: Newport News, Va* (June 1999) (visited April 22, 2000) <<http://www.epa.gov/swerosps/bf/html-doc/nwprtnws.htm>>.

¹³⁷ Interview with Paul F. Miller, Director, Planning and Development - City of Newport News, Virginia Brownfields Conference '99, in Richmond, Va. (Oct. 25, 1999).

¹³⁸ See *The Brownfields Action Agenda*, *supra* note 106.

¹³⁹ See *Barriers to Brownfield Redevelopment*, *supra* note 9; EPA, *Brownfields Economic Redevelopment Initiative: Quick Reference Fact Sheet* (Mar. 1998) (visited April 22, 2000) <<http://www.epa.gov/swerosps/bf/html-doc/econinit.htm>>. One example is EPA's guidance document that addressed the Asset Conservation, Lender Liability, and Deposit Insurance Protection Act of 1966. See *id.* (clarifying when lenders and government entities are immune from certain federal and third party CERCLA claims).

liability.¹⁴⁰

3. Partnerships and Outreach

The third category of the Brownfields Action Agenda is Partnerships and Outreach.¹⁴¹ EPA actively encourages the development of partnerships with other federal agencies and states to address brownfields redevelopment.¹⁴² The most significant of these partnerships, in which more than twenty federal departments and agencies are members, is the Brownfields National Partnership.¹⁴³

The Brownfields National Partnership is a coordinated national agenda that draws upon the exchange of information from various federal agencies to more effectively clean up contaminated properties while promoting economic opportunity.¹⁴⁴ The federal government has committed \$300 million to the Brownfields Partnership for investment in brownfields communities, while another \$165 million has been committed in loan guarantees.¹⁴⁵ The EPA predicts that these commitments will result in the clean up and redevelopment of close to 5,000 properties, an increase in private investment to \$28 billion, the protection of 34,000 acres of undeveloped land, the creation of 196,000 jobs, and an improvement in the

¹⁴⁰ See EPA, *Brownfields Economic Redevelopment Initiative: Quick Reference Fact Sheet* (Mar. 1998) (visited April 22, 2000) <<http://www.epa.gov/swerosps/bf/html-doc/econinit.htm>>.

¹⁴¹ See *The Brownfields Action Agenda*, *supra* note 106.

¹⁴² See EPA, *Brownfields Economic Redevelopment Initiative: Quick Reference Fact Sheet* (Mar. 1998) (visited April 22, 2000) <<http://www.epa.gov/swerosps/bf/html-doc/econinit.htm>>.

¹⁴³ See *id.* The following agencies are members of the Brownfields National Partnership Action Agenda: Executive Office of the President; Federal Deposit Insurance Corporation; Federal Housing Finance Board; General Services Administration; Office of Management and Budget; U.S. Department of Agriculture; U.S. Department of Commerce; U.S. Department of Defense; U.S. Department of Education; U.S. Department of Energy; U.S. Department of Health and Human Service; U.S. Department of Housing and Urban Development; U.S. Department of Interior; U.S. Department of Justice; U.S. Department of Labor; U.S. Department of Transportation; U.S. Department of Treasury; U.S. Department of Veterans Affairs; U.S. Environmental Protection Agency; and U.S. Small Business Administration. See *id.* See generally GOODE, *supra* note 7, for a complete discussion of the federal agencies' programs under the Brownfields Partnership Action Agenda.

¹⁴⁴ See EPA, *Brownfields National Partnership Action Agenda* (May 1997) (visited April 22, 2000) <http://www.epa.gov/swerosps/bf/html-doc/97aa_fs.htm>.

¹⁴⁵ See *id.*

quality of life for millions of Americans.¹⁴⁶ The Brownfields National Partnership and its corresponding agency programs are an integral part to the redevelopment of brownfields in Virginia, and these available resources and opportunities should be pursued.¹⁴⁷

In addition, as part of the Brownfields Partnership, the Clinton Administration has recently selected 16 Brownfields Showcase Communities.¹⁴⁸ These Communities are to serve as national examples of the beneficial results that can be reached in brownfields redevelopment through broad-based cooperation by Federal, State, local, and private interests.¹⁴⁹ There are seventeen federal agencies, including the EPA that are participating in the Showcase Communities project.¹⁵⁰ The combined monetary commitment by these agencies is expected to be over \$28 million.¹⁵¹ In Virginia, the Town of Cape Charles-County of Northampton, recently applied

¹⁴⁶ See *id.*

¹⁴⁷ See generally GOODE, *supra*, note 7, for a complete discussion of the federal agencies' programs that are part of the Brownfields National Partnership.

¹⁴⁸ See EPA, *EPA Awards 36 New Brownfields Redevelopment Grants* (May 6, 1998) (visited April 22, 2000) <http://www.epa.gov/swerosps/bf/html-doc/pr_0506.htm>.

¹⁴⁹ See EPA, *Brownfields National Partnership Action Agenda* (May 1997) (visited April 22, 2000) <http://www.epa.gov/swerosps/bf/html-doc/97aa_fs.htm>. More specifically, the EPA has stated the following as the official goals of the Brownfields Showcase Communities:

- 1) Promote environmental protection and restoration, economic redevelopment, job creation, community revitalization, and public health protection, through the assessment, cleanup, and sustainable reuse of brownfields;
- 2) Link Federal, State, local and non-governmental action supporting community efforts to restore and reuse brownfields; and
- 3) Develop national models demonstrating the positive results of public and private collaboration in addressing brownfields challenges.

EPA, *Solicitation of Statements of Interests from Communities Interested in Being Designated as Brownfields Showcase Communities* (Aug. 1997) (visited April 22, 2000) <<http://www.epa.gov/swerosps/bf/html-doc/showcase.htm>>.

¹⁵⁰ See EPA, *Brownfields Showcase Communities: Quick Reference Fact Sheet* (Mar. 1998) (visited April 22, 2000) <<http://www.epa.gov/swerosps/bf/html-doc/showfact.htm>>. The federal agencies that are presently committed to the Showcase Communities projects are: Department of Agriculture; Department of Commerce; Department of Defense; Department of Education; Department of Energy; Department of Health and Human Services; Department of Housing and Urban Development; Department of the Interior; Department of Justice; Department of Labor; Department of Transportation; Department of the Treasury; Department of Veterans Affairs; Environmental Protection Agency; Federal Housing Finance Board; General Services Administration; and the Small Business Administration.

See *id.*

¹⁵¹ See *id.*

to be considered as one of the Brownfields Showcase Communities.¹⁵² It was not selected, however.¹⁵³

EPA has recently launched a new cooperative initiative together with the U.S. Department of Commerce's Economic Development Administration and the U.S. Conference of Mayors called the Clean Air/Brownfields Partnership Pilot.¹⁵⁴ The Pilot has been allocated \$500,000 in federal funding and is intended to improve air quality and to stimulate economic revitalization in the cities of Baltimore, Chicago, and Dallas.¹⁵⁵

EPA anticipates that these initial Pilot cities will serve as models to other cities to develop programs that harmonize economic growth simultaneously with efforts to protect the health of the community.¹⁵⁶

4. Job Development and Training

The fourth category of the Brownfields Action Agenda is increased job development and training.¹⁵⁷ In March 1998, EPA launched the Brownfields Job Training and Development Demonstration Pilots program in an attempt to bring to fruition the goals of the Brownfields Redevelopment

¹⁵² Telephone Interview, Chris Sitaram, Program Manager, Brownfields Program, Virginia Department of Environmental Quality, in Richmond, Va. (Mar. 24, 1998). On October 27, 1997, the EPA announced that the Town of Cape Charles-County of Northampton, had been selected as one of forty finalists, out of two hundred and thirty-one applicants, that would be considered for one of the ten designations as a Brownfields Showcase Community. See EPA, *Federal Brownfields Partnership Chooses Showcase Communities Finalists* (Oct. 27, 1997) (visited April 22, 2000) <<http://www.epa.gov/swerosps/bf/html-doc/scfinal.htm>>.

¹⁵³ Telephone Interview, Chris Sitaram, *supra* note 152.

¹⁵⁴ See Dave Ryan, *EPA Announces Half Million for Projects Harmonizing Air Quality, Economic Progress in Chicago, Dallas and Baltimore*, EPA (July 27, 1998) (visited April 22, 2000) <http://www.epa.gov/swerosps/bf/html-doc/pr_air.htm>. The Clean Air/Brownfields Partnership Pilot was announced on July 24, 1998. See *id.* For additional information on the program, contact Leah Yasenchak, EPA, at (202) 260-7854 or see *Clean Air/Brownfields Partnership Pilot* (visited Dec. 8, 1998) <<http://www.epa.gov/swerosps/bf/html-doc/cleanair.htm>>.

¹⁵⁵ See Ryan, *supra* note 154. Specifically, the funding will be used to, "study the relationship between clean air, brownfields assessment and cleanup, and economic development issues; . . . quantify the air quality and other environmental and economic benefits of redeveloping Brownfield sites within a city instead of developing new sites in the suburbs; . . . make it easier for urban developers to offset emissions from new development by reducing it elsewhere in the city; . . . look at air quality benefits derived from locating clean power plants on brownfield properties in urban areas." *Id.*

¹⁵⁶ See *id.*

¹⁵⁷ See *The Brownfields Action Agenda*, *supra* note 106.

Initiative.¹⁵⁸ The Pilots are intended to encourage the cleanup of brownfield sites and to prepare trainees for future environmental employment needs.¹⁵⁹

The Job Training Pilots are funded up to \$200,000 each over a two-year period.¹⁶⁰ These "funds are to be used to bring together community groups, job training organizations, educators, investors, lenders, developers, and other affected parties to address the issue of providing training for residents in communities impacted by brownfields."¹⁶¹ In Richmond, the City of Richmond Office of Economic Development and the J. Sargeant Reynolds Community College conduct a community environmental training program at the College to train and educate residents living in the South Richmond Enterprise Zone under one of these grants.¹⁶²

C. *Brownfields Cleanup Revolving Loan Fund Pilots*

As an additional part of the Brownfields Economic Redevelopment Initiative, the EPA has begun the process of awarding Brownfields Cleanup Revolving Loan Fund Demonstration Pilots to States and local governments.¹⁶³ This loan program supports State and local government efforts to safely clean up and sustainably reuse brownfields by enabling these governments to capitalize revolving loan funds.¹⁶⁴ The loan funds that are

¹⁵⁸ See EPA, *The Brownfields Economic Redevelopment Initiative: Proposal Guidelines for Brownfields Job Training and Development Demonstration Pilots* (Mar. 1998) (visited April 22, 2000) <<http://www.epa.gov/swerosps/bf/html-doc/jtguide.htm>>.

¹⁵⁹ See *id.*

¹⁶⁰ See *id.*

¹⁶¹ *Id.* EPA is accepting applications for the Pilots throughout the March 1998, and it expects to announce ten new pilot grants by the end of May 2000. See EPA, *The Brownfields Economic Redevelopment Initiative: Proposal Guidelines for Job Training and Development Pilots* 1 (Nov. 1999) (visited April 22, 2000) <<http://www.epa.gov/swerosps/bf/html-doc/jtgde200.htm>>. See also EPA, *Announcement of Competition for EPA's Brownfields Job Training and Development Demonstration Pilots* (Mar. 31, 1998) (visited April 22, 2000) <http://www.epa.gov/swerosps/bf/html-doc/fr_jobtr.htm>; EPA, *EPA Awards \$2 Million in Grants for Brownfields Jobs Training Initiative* (Aug. 14, 1998) (visited April 22, 2000) <http://www.epa.gov/swerosps/bf/html-doc/pr_job.htm>.

¹⁶² See EPA, *Brownfields Pilot - Richmond, VA* (May 1997) (visited April 22, 2000) <<http://www.epa.gov/swerosps/bf/html-doc/richmond.htm>>.

¹⁶³ See generally EPA, *EPA's Brownfields Cleanup Revolving Loan Fund Demonstration Pilots* (May 21, 1999) (visited April 22, 2000) <<http://www.epa.gov/swerosps/bf/html-doc/rlfguide.htm>>.

¹⁶⁴ See *id.* The revolving loan fund is a process whereby the EPA provides capitalization funds to the state or local government, which in turn makes loans for the cleanup and

awarded may range from \$50,000 to \$500,000, are based on community need, and must be used for environmental response and redevelopment activities.¹⁶⁵

The City of Richmond was awarded a Loan pilot and the VDEQ anticipates that the program will provide an incentive for the redevelopment of brownfields within the City.¹⁶⁶

V. VIRGINIA LAWS AND INITIATIVES AFFECTING BROWNFIELD REDEVELOPMENT

A. *Virginia Voluntary Remediation Program*

In an attempt to remediate all contaminated properties within the Commonwealth, the Virginia General Assembly passed the Virginia Voluntary Remediation Program on March 25, 1995.¹⁶⁷ The Program officially took effect on July 1, 1995, and was designed to encourage the cleanup of contaminated properties that were not previously covered under existing state or federal law.¹⁶⁸ The Program encourages the cleanup of

redevelopment of brownfields. *Id.*

¹⁶⁵ See generally *id.* The program is funded under CERCLA § 104(d)(1) and the funding is subject to all the same use restrictions that are applicable to CERCLA. See 42 U.S.C. § 9604(d). Applicable regulations include: 40 C.F.R. pt. 31 (Uniform Administration Requirements for Grants and Cooperative Agreements to State and Local Governments), 40 C.F.R. pt. 35, Subpart O (Cooperative Agreements for Superfund Response Actions), and 40 C.F.R. pt. 300 (The National Oil and Hazardous Substances Pollution Contingency Plan).

¹⁶⁶ Telephone Interview with Chris M. Sitaram, *supra* note 54. State and local governments, lenders, investors, developers, and community groups that are interested in learning more about the aforementioned programs and initiatives should access EPA's web site at <http://www.epa.gov/swerosps/bf/index.html>.

¹⁶⁷ See 1995 Va. Acts Chs. 609, 622 (codified at VA. CODE ANN. § 10.1-1429.1)(Michie 1998); Telephone Interview with Kevin L. Greene, *supra* note 86.

¹⁶⁸ Telephone Interview with Kevin L. Greene, *supra* note 86; VA. CODE ANN. § 10.1-1429.1 (Michie 1998). The Act provides in part that "[t]he regulations shall apply where remediation has not clearly been mandated by the United States Environmental Protection Agency, the Department or a court pursuant to [CERCLA], [RCRA], the Virginia Waste Management Act, the State Water Control Law, or other applicable statutory or common law or where jurisdiction of those statutes has been waived." *Id.*; Meredith Cohn, *State Helps Reclaim Old Industrial Sites*, VIRGINIAN-PILOT & LEDGER-STAR (Norfolk, Va.), Aug. 2, 1997, at D1, available in 1997 WL 12450942 ("DEQ's [Erica] Dameron said companies are eligible for the program if they are not required by another government agency or court to clean up their site"). The percentage of the contaminated property in Virginia that is covered by the Voluntary Remediation Program is unknown. Telephone Interview with Kevin L. Greene, *supra* note 86.

contaminated properties by providing incentives for voluntary participation.¹⁶⁹ It accomplishes this goal by authorizing the Virginia Department of Environmental Quality (VDEQ) to provide liability releases upon cleanup completions.¹⁷⁰ The VDEQ does not have enforcement capabilities under the Program, nor is it authorized to consider a party that is a participant in another enforcement program. The program's success depends solely on voluntary participation.¹⁷¹ The VDEQ does provide participants and the general public with technical support and educational assistance for the implementation of the Program.¹⁷²

The Voluntary Remediation Program can be broken down into three sections.¹⁷³ The first section mandates that the VDEQ promulgate regulations in five categories.¹⁷⁴ These regulations were officially promulgated on June 26, 1997, and establish the following:¹⁷⁵

1. Methodologies to determine site-specific, risk-based remediation standards;¹⁷⁶
2. Procedures that minimize delay and expense of the remediation, to be followed by a volunteer and by VDEQ

¹⁶⁹ See VA. CODE ANN. §§ 10.1-1429.1 & .2 (Michie 1998); Telephone Interview with Kevin L. Greene, *supra* note 86.

¹⁷⁰ See VA. CODE ANN. §§ 10.1-1429.1 & .2 (Michie 1998). The VDEQ is composed of several Boards, one of which is the Virginia Waste Management Board (VWMB). See *id.* § 10.1-1183. The Virginia Waste Management Act grants VWMB the power to "supervise and control waste management activities in the Commonwealth." *Id.* § 10.1-1402(1). Therefore, the VDEQ, through the VWMB, oversees the voluntary cleanup program.

¹⁷¹ Telephone Interview with Kevin L. Greene, *supra* note 86; AN ANALYSIS OF STATE SUPERFUND PROGRAMS: 50-STATE STUDY, 1995 UPDATE, ENVIRONMENTAL LAW INSTITUTE 52 (1996).

¹⁷² Telephone Interview with Tom Modena, *supra* note 56.

¹⁷³ See VA. CODE ANN. § 10.1-1429.1 -.3 (Michie 1998).

¹⁷⁴ See *id.* § 10.1-1429.1(B).

¹⁷⁵ See Virginia Department of Environmental Quality, *Voluntary Remediation Program* (Jan. 15, 1998) (visited April 22, 2000) <<http://www.deq.state.va.us/envprog/vrp/>>.

¹⁷⁶ VA. CODE ANN. § 10.1-1429.1(A)(1) (Michie 1998). In determining the remediation standards, the VADEQ is to consider the following:

- (i) protection of public health and the environment; (ii) the future industrial, commercial, residential, or other use of the property to be remediated and of surrounding properties; (iii) reasonably available and effective remediation technology and analytical quantitation technology; (iv) the availability of institutional or engineering controls that are protective of human health or the environment; and (v) natural background levels for hazardous constituents.

Id.

- in processing submissions and overseeing remediations;¹⁷⁷
3. Certifications of satisfactory completion of remediation, based on then-present conditions and available information, when a voluntary cleanup achieves applicable cleanup standards or when VDEQ determines that no further action is required;¹⁷⁸
 4. Procedures to waive or expedite issuance of any permits required to initiate and complete a voluntary cleanup consistent with applicable federal law;¹⁷⁹ and
 5. Registration fees to be collected from persons conducting voluntary remediation, to defray the actual and reasonable costs of the Voluntary Remediation Program.¹⁸⁰

The second section of the Voluntary Remediation Program addresses the granting of immunity to those who satisfactorily complete the remediation.¹⁸¹ Upon completion, the VDEQ issues a "certificate of satisfactory completion of remediation" that assures the site owner or operator who conducted the cleanup that he or she will not be subject to future VDEQ enforcement actions pertaining to germane issues.¹⁸² The certificate does not, however, extend to potential federal enforcement actions.¹⁸³ Moreover, the granted immunity does not provide protection against toxic-tort liability or third-party contribution liability. A participant may seek federal concurrence with EPA provided that the cleanup standard agreed to is equal to or greater than the established standard under the Virginia Program for that particular site.¹⁸⁴ The VDEQ can assist the

¹⁷⁷ *Id.* § 10.1-1429.1(A)(2).

¹⁷⁸ *Id.* § 10.1-1429.1(A)(3).

¹⁷⁹ *Id.* § 10.1-1429.1(A)(4).

¹⁸⁰ *Id.* § 10.1-1429.1(A)(5).

¹⁸¹ *Id.* § 10.1-1429.2.

¹⁸² *Voluntary Remediation Program*, *supra* note 175; 9 VAC 20-160-110. "In exchange for cleaning up their property, the companies get a certificate saying the land is clean and safe in the state's eyes-something they can show to potential buyers or tenants who don't want responsibility for someone else's mess." Meredith Cohn, *State Helps Reclaim Old Industrial Sites*, VIRGINIAN-PILOT & LEDGER-STAR (Norfolk, Va.), Aug. 2, 1997, at D1, *available in* 1997 WL 12450942.

¹⁸³ Telephone Interview with Kevin L. Greene, *supra* note 86; AN ANALYSIS OF STATE SUPERFUND PROGRAMS: 50-STATE STUDY, *supra* note 171, at 53. Virginia issues a Certificate of Completion "that confers the waiver of liability." *Id.*

¹⁸⁴ Telephone Interview with Kevin L. Greene, *supra* note 86. The established cleanup levels are based on either background level, a risk assessment, or published risk-based

participant in initiating the dialogue with EPA; however, any agreement would ultimately be solely between the participant and EPA.¹⁸⁵

The third section of the Program provides for site access to a contaminated property, not owned by the cleanup participant, to conduct the voluntary remediation.¹⁸⁶ The person conducting the remediation is required to first demonstrate that a reasonable effort was made to gain the property owner's approval to access the property.¹⁸⁷ Authorized site access is limited to the minimum amount of time required to complete the remediation and must be conducted in a way that minimizes the disruption to any activities at the property.¹⁸⁸

The Voluntary Remediation Program has broad applicability.¹⁸⁹ Any "persons who own, operate, have a security interest in or enter into a contract for the purchase of contaminated property" may take part in the program.¹⁹⁰

The program does not provide for participation by lenders, trustees, and fiduciaries.¹⁹¹ Furthermore, no provision in Virginia affords their liability protection.

The types of releases that are covered by the program are also broadly defined under the law.¹⁹² Specifically, the statute provides that "hazardous substances, hazardous wastes, solid wastes or petroleum" are all covered under the program.¹⁹³ There are, however, a number of contaminated sites that are not covered. In order for a contaminated site to be eligible to participate in the program, it must be demonstrated that "remediation has not clearly been mandated" pursuant to certain federal or state statutes, or common law.¹⁹⁴

standards. See *Voluntary Remediation Program*, *supra* note 175, at 4.

¹⁸⁵ Telephone Interview with Patricia A. McMurray, *supra* note 55.

¹⁸⁶ See VA. CODE ANN. § 10.1-1429.3 (Michie 1998).

¹⁸⁷ See *id.* § 10.1-1429.3.

¹⁸⁸ See *id.* § 10.1-1429.3.

¹⁸⁹ See *id.* § 10.1-1429.1(A).

¹⁹⁰ See *id.* § 10.1-1429.1(A); 9 VAC 20-160-30(B).

¹⁹¹ See generally VA. CODE ANN. §§ 10.1-1429.1 to .3; Chris M. Sitaram, 1997-98 *Brownfields Redevelopment Questionnaire*, EI DIGEST (Apr. 1, 1998) (on file with author) (stating that Virginia law does not provide liability protection to banks that finance the redevelopment of brownfields).

¹⁹² See VA. CODE ANN. § 10.1-1429.1(A) (1998).

¹⁹³ *Id.* § 10.1-1429.1(A).

¹⁹⁴ *Id.* § 10.1-1429.1(A); 9 VAC 20-160-30(C). Specifically, the statute provides that a site will be ineligible if remediation has clearly been mandated by the EPA, the DEQ or a court under CERCLA, RCRA, the Virginia Waste Management Act, the State Water Control Law, or "other applicable statutory or common law, or where the jurisdiction of those statutes has been waived." *Id.* § 10.1-1429.1(A). The VADEQ considers that remediation has been

To participate in the Voluntary Remediation Program, a volunteer must undergo a six step process that will take his or her contaminated site from entry to completion.¹⁹⁵ This process includes: the determination of eligibility;¹⁹⁶ the payment of a registration fee;¹⁹⁷ the submission of a voluntary remediation report;¹⁹⁸ the establishment of remediation goals;¹⁹⁹ the

"clearly mandated" under any of the following conditions, unless jurisdiction has been waived:

1. Remediation of the release is the subject of a permit issued by the U.S. Environmental Protection Agency or the department, a pending or existing closure plan, a pending or existing administrative order, a pending or existing court order, a pending or existing consent order, or a site is on the National Priorities List;
2. The site at which the release occurred, in accordance with the Virginia Hazardous Waste Management Regulation (9 VAC 20-60-10 et seq.)(VHWMR), is a permitted facility, is applying for or should have applied for a permit, is under interim status or should have applied for interim status, or was previously under interim status, and is thereby subject to requirements of the VHWMR.
3. The site at which the release occurred constitutes an open dump or unpermitted solid waste management facility under Part IV (9 VAC 20-80-170 et seq.) of the Virginia Solid Waste Management Regulations;
4. The director determines that the release poses an imminent and substantial threat to human health or the environment; or
5. Remediation of the release is otherwise the subject of a response action required by local, state, or federal law or regulation.

9 VAC 20-160-30(D).

¹⁹⁵ See *Voluntary Remediation Program*, *supra* note 175.

¹⁹⁶ The volunteer submits an eligibility request to the VADEQ. See *id.* The VADEQ evaluates the request and then determines whether or not the site is eligible for the program. See *id.*; 9 VAC 20-160-40.

¹⁹⁷ The registration fee amount is the lesser of one percent of the cost of remediation or \$5,000. See VA. CODE ANN. § 10.1-1429.1(A)(5)(1998); 9 VAC § 20-160-60(B). The statute provides that these fees are "to defray the actual reasonable costs of the voluntary remediation program." *Id.*

¹⁹⁸ The voluntary remediation report contains three components: (1) site characterization/remedial action work plan; (2) documentation of public notice; and (3) demonstration of completion. See *Voluntary Remediation Program*, *supra* note 175; 9 VAC 20-160-70, 80.

¹⁹⁹ The remediation goals are based on using either background levels or risk assessments. See 9 VAC 20-160-90 (B). In some instances, a risk assessment of a site may indicate that the site is unacceptable for future residential use even after the site is cleaned up. Under these circumstances, the state is authorized to incorporate future use restrictions in the certificate of satisfactory completion, such as prohibiting residential use development on a commercial property. *Id.*

issuance of a Certification of Satisfactory Completion of remediation;²⁰⁰ and an opportunity for public participation.²⁰¹

The VDEQ has been pleased with the initial response to the Program during its infant stage.²⁰² As of October 1999, there were eighty-eight participants, and thirty sites that have been issued Certificates of Satisfactory Completion.²⁰³ These figures are in light of the fact that the Program was officially commenced in July of 1995 and that regulations for the program were passed in June of 1997.²⁰⁴

The VDEQ is in the process of developing guidance documents for the Program.²⁰⁵ These documents are being developed on a case-by-case basis as problems arise during the course of the Program through operation and implementation.²⁰⁶ The VDEQ is confident that this will improve the Program by providing participants with a clearer understanding of what exactly is expected of them.²⁰⁷ A date has not been set for their release; however, VDEQ expects to make the documents easily accessible to the general public via phone calls and the Internet.²⁰⁸ One final note, as a practical matter, developers should always consider the fact that information in reports filed with DEQ is available and easily accessible to competitors and potential plaintiffs. In particular, developers should be mindful that their VRP site characterization may reveal levels of contamination that may encourage citizen groups or adjoining property owners to sue.

B. *Local Tax Exemption for Environmental Restoration Sites*

On July 1, 1997, the Virginia General Assembly enacted House Bill 2141,²⁰⁹ which provides an additional incentive for the redevelopment of

²⁰⁰ The issuance of a certificate of satisfactory completion of remediation provides the recipient with immunity to an enforcement action under the Virginia Air Pollution Control Law, the Virginia State Water Control Law, the Virginia Waste Management Act, or other applicable Virginia law. Voluntary Remediation Regulations, 9 VAC 20-160-110.

²⁰¹ See *Voluntary Remediation Program*, *supra* note 175; 9 VAC 20-160-120.

²⁰² Telephone Interview with Kevin L. Greene, *supra* note 86.

²⁰³ Interview with Cheryl Heard, Remediation Project Officer, Voluntary Remediation Program, Virginia Department of Environmental Quality, Virginia Brownfields Conference '99, in Richmond, Va. (Oct. 26, 1999).

²⁰⁴ Telephone Interview with Kevin L. Greene, *supra* note 86.

²⁰⁵ Telephone Interview with Patricia A. McMurray, *supra* note 55.

²⁰⁶ Telephone Interview with Kevin L. Greene, *supra* note 86.

²⁰⁷ Telephone Interview with Patricia A. McMurray, *supra* note 55.

²⁰⁸ Telephone Interview with Kevin L. Greene, *supra* note 86.

²⁰⁹ See 1997 Va. Acts Ch. 849.

brownfields. Specifically, the statute provides a local tax exemption for “environmental restoration sites” that are subject to the Voluntary Remediation Program.²¹⁰

An environmental restoration site is defined to mean “real estate which contains or did contain environmental contamination from the release of hazardous substances, hazardous wastes, solid waste or petroleum, the restoration of which would abate or prevent pollution to the atmosphere or waters of the Commonwealth and which (i) is subject to voluntary remediation pursuant to § 10.1-1429.1 and (ii) receives a certificate of continued eligibility from the Virginia Waste Management Board during each year which it qualifies for the tax treatment described in this section.”²¹¹

The environmental restoration local tax exemption is the sole state tax incentive that affects the redevelopment of brownfields.²¹² This incentive is in addition to the federal Brownfields Tax Incentive, which provides a substantial tax incentive to private parties to invest and redevelop brownfield sites.²¹³

C. *The Virginia Brownfields Program*

In January of 1998, the VDEQ launched the Virginia Brownfields Program as a separate, but complementary, program to the Virginia Voluntary Remediation Program.²¹⁴ As with many other programs that address brownfields, the VA Brownfields Program is intended to put underutilized, abandoned properties back into productive use.²¹⁵ To achieve this goal the Program encourages the removal of regulatory barriers that serve as disincentives to brownfield redevelopment.²¹⁶ The Program also targets the problems associated with attempting to obtain access to adequate funding during the site acquisition, cleanup, and redevelopment phases of the brownfield remediation process.²¹⁷ While the Voluntary Remediation Program helps to pacify developers’ concerns of liability, the VA Brownfields Program completes the circle of state support in the remediation

²¹⁰ VA. CODE ANN. § 58.1-3664 (Michie 1998).

²¹¹ *Id.*

²¹² Telephone Interview with Chris M. Sitaram, *supra* note 54.

²¹³ *Id.*

²¹⁴ See 1997-98 *Brownfields Redevelopment Questionnaire*, *supra* note 191; Telephone Interview with Chris M. Sitaram, *supra* note 54.

²¹⁵ Telephone Interview with Chris M. Sitaram, *supra* note 54.

²¹⁶ *Id.*

²¹⁷ See 1997-98 *Brownfields Redevelopment Questionnaire*, *supra* note 191.

process by helping developers and investors obtain funding for expensive cleanup projects, when traditional funding sources are reluctant or refuse to provide the financial support.²¹⁸

The VDEQ estimates that there are approximately 500 brownfield sites in the Commonwealth, which range from having high to low risk levels of contamination.²¹⁹ The VA Brownfields Program addresses the low level sites only, and of these sites, VDEQ estimates that 40% pose health and environmental risk.²²⁰ The Program operates as an extension of the EPA Brownfields Program, in cooperative agreement with the EPA, but without its own statutory enabling legislation.²²¹ The Program can be broken down into three major steps: site identification; site screening; and confirmation of location compatibility.²²²

First, actual and prospective owners and developers that would like a particular site to be considered as a brownfield must submit a site identification application to the VDEQ that provides the following information: site name, site location, site description, summary of known problems, summary of alleged or potential problems, contact information, and the stated potential reuse of the site.²²³ Next, the VDEQ conducts a site screening in which it must determine whether the site is in fact a brownfield.²²⁴ VDEQ conducts a record search, which involves a deed search that investigates back at a minimum of forty years to ascertain prior owners who would likely have contaminated the property.²²⁵ VDEQ contacts all knowledgeable parties, such as previous owners, residents, former employees, neighbors, county officials, and the economic development office, to gather information on the prior use of the property.²²⁶ VDEQ then, upon written authorization, visits the site, conducts an immuno assay sampling test, and submits the sampling for a toxicological evaluation, which determines the level of contaminants at the site and the environmental and health risks they pose.²²⁷

²¹⁸ *See id.*

²¹⁹ Telephone Interview with Chris M. Sitaram, *supra* note 21.

²²⁰ *Id.*

²²¹ *Id.*

²²² *Id.*

²²³ *Id.*

²²⁴ Telephone Interview with Chris M. Sitaram, *supra* note 21.

²²⁵ *Id.*

²²⁶ *Id.*

²²⁷ *Id.*

Once VDEQ determines that the particular location is a brownfields site, certain criteria must be met before the site will be considered for the Program.²²⁸ There must be no impediments to assessment or redevelopment, such as deed restrictions; the site must be abandoned, publicly owned, or potentially publicly owned; there must be a local commitment to revitalization; there must be a strong development potential; the contamination must be at a low to moderate level; there must be a commitment to cleanup; and there must be a clear benefit to the community.²²⁹

There are currently twenty-two site screening and investigation events taking place in Virginia, and there are two properties that VDEQ is focused on in particular: Alleen, Inc., located in Flint Hill, Virginia, Rappahanock County, the redevelopment proposal submitted by Rappahanock County; and McCready Lumber, located in Pulaski, Virginia, the redevelopment proposal was submitted by the Town of Pulaski and the Department of Conservation and Recreation.²³⁰ The VDEQ anticipates that both properties will serve as success stories of the new brownfields program.²³¹

As for the future of the Virginia's brownfields programs and initiatives, it is simply too early to determine their success or failure.²³² As of the date of this publication, there are no changes expected in the brownfields or voluntary cleanup legislation, and no legislation is presently being considered or will be considered in the near future by the Virginia legislature.²³³

VI. CONCLUSION

The redevelopment of brownfields will not occur in a vacuum. It is highly unlikely that independent, unilateral development efforts by local governments or private investors will provide the necessary impetus to launch revitalization activities that lead to a renaissance throughout depressed communities within the Commonwealth. However, the Virginia Voluntary

²²⁸ *Id.*

²²⁹ Telephone Interview with Chris M. Sitaram, *supra* note 21.

²³⁰ *Id.*

²³¹ *Id.*

²³² Telephone Interview with Kevin L. Greene, *supra* note 86; Telephone Interview with Chris M. Sitaram, *supra* note 21.

²³³ Telephone Interview with Kevin L. Greene, *supra* note 86; 1997-98 *Brownfields Redevelopment Questionnaire*, *supra* note 191; Telephone Interview with Chris M. Sitaram, *supra* note 21.

Remediation Program and the Brownfields Assessment Program, coupled with the resources available through the Brownfields National Partnership, mark the beginning of a needed, coordinated approach to promote the redevelopment of areas that are plagued by underutilized industrial and commercial properties. By utilizing both state and federal incentives, thereby taking an holistic approach toward brownfield redevelopment, local governments, developers, and communities have many of the tools necessary to begin the process of eradicating the brownfield virus that has spread through Virginia's older industrial and commercial communities.

The future appears to be bright for these once idle and abandoned properties. While the term "brownfields" may not be considered part of Virginians' everyday vernacular, the concept and need to recycle our urban environment has begun to gain a foothold in the minds of many Virginians.

There is an ever-increasing understanding that in order to revitalize our cities and preserve our open spaces we must encourage the redevelopment of idle industrial and commercial properties. This awareness is directly reflected in the increasing number of political candidates who are being elected and initiatives enacted that promote concepts such as "smart growth" and that curtail "urban sprawl." Virginians are demanding to live in sustainable communities that encourage open space preservation and urban revitalization, and now the tools are available to make this vision a reality.