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Basic Brownfields

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BASIC BROWNFIELDS

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I. INTRODUCTION

It seems as if everyone is talking about brownfields these days. You hear about brownfields on the news, and you can select from a variety of books and articles on the subject.[1] Brownfields forums and seminars are being organized nationwide.[2] Government agencies and officials at all levels consider brownfields a top priority.[3] President Bill Clinton even remarked upon the issue in his 1997 State of the Union Address: "We should restore contaminated urban land and buildings to productive use."[4]

This article is a basic guide to the brownfields problem. It will define the problem and will attempt to identify the various causes thereof. It also will review federal brownfields initiatives and state brownfields reforms in Kentucky, Ohio, Pennsylvania, and West Virginia.

II. BROWNFIELDS: THE PROBLEM

A. Identifying the Problem

Nearly everyone agrees that brownfields are a significant problem for American communities. But, you may ask, "What exactly are brownfields?" The U.S. Environmental Protection Agency ("the U.S. E.P.A.") defines brownfields as "abandoned, idled or under-used industrial and commercial sites where expansion or redevelopment is

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[1] *See, e.g.*, TODD S. DAVIS & KEVIN D.. MARGOLIS, BROWNFIELDS - A COMPREHENSIVE GUIDE TO REDEVELOPING CONTAMINATED PROPERTY (1997). This author credits the excellent Davis & Margolis book for the structure and organization of this article.

[2] Consider, for example, the Brownfields '97 conference in Kansas City, Missouri, which was held on September 3-5, 1997. The U.S. Environmental Protection Agency ("the U.S. E.P.A.") was one of the many co-sponsors of this event.

[3] For example, the United States Conference of Mayors has published a brownfields policy statement. U.S. Conference of Mayors, BROWNFIELDS REDEVELOPMENT ACTION AGENDA INITIAL FRAMEWORK (Jan. 25, 1996) [hereinafter MAYORS BROWNFIELDS ACTION AGENDA].

[4] President Bill Clinton, State of the Union Address (Feb. 4, 1997).

complicated by real or perceived environmental contamination that can add cost, time or uncertainty to a redevelopment project."[5] While brownfields generally are associated with distressed urban areas,[6] these sites dot the landscape nationwide. The U.S. E.P.A. estimates that there may be as many as 450,000 brownfields properties across the country.[7] These sites may be as small as a vacant, corner gas station, or they may be as large as a defunct and derelict factory complex.[8]

Not only do brownfields pose a potential environmental threat to the communities in which they are located, the brownfields phenomenon also has enormous implications for the American economy. The quantifiable financial costs of the problem are staggering. Current valuations estimate that it will cost $650 billion to clean up the nation's brownfields.[9] In a survey by the U.S. Conference of Mayors, 33 cities projected their cumulative annual loss of tax revenues at $386 million.[10]

Brownfields also impose unquantifiable financial costs on communities, states, and the nation. How would one quantify unrealized income tax revenue or lost wages due to unemployment? What about the cost of diminished property values? Further, unemployment and property decay often bring about a concomitant disintegration of local infrastructure and public services.

Urban sprawl, one consequence of the brownfields epidemic, has become a part of the American landscape. This too, is costly. Valuable farm land, forestry, parks, and recreation areas have been, and continue to be, lost to residents and businesses fleeing distressed inner-cities. Daily commuters into these cities increase traffic congestion and pollution. Further, urban sprawl results in the expenditure of unnecessary capital to duplicate existing services such as roads, sewers, schools, waterlines, and schools.[11]

Finally, it is impossible to assess the social and moral implications of the brownfields phenomenon. Abandoned, decaying properties certainly reduce the aesthetic quality of a neighborhood. High unemployment and increased crime rates create environmental justice concerns[12] and potentially broaden the gap between the "haves" and the

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[5] Office of Pub. Affairs, U.S. EPA Region 5, BASIC BROWNFIELDS FACT SHEET, [hereinafter U.S. EPA REGION 5] (1996).

[6] DAVIS & MARGOLIS, *supra* note 1, at 5.

[7] U.S. EPA Region 5, *supra* note 5.

[8] *Id.*

[9] DAVIS &: MARGOLIS, *supra* note 1, at 6.

[10] MAYORS BROWNFIELDS ACTION AGENDA, *supra* note 3, at 1-3.

[11] DAVIS & MARGOLIS, *supra* note 1, at 12. *See also* THE ATLANTIC SITELINE, April, 1997, at 2 (GEI Consultants, Inc. Atlantic Envtl. Div.) [hereinafter April 1997 ATLANTIC SITELINE].

[12] U.S. EPA REGION 5, *supra* note 5.

"have nots" in our culture.[13] As a result, the "have nots" in older cities may become increasingly isolated and disassociated from society.[14]

B. Understanding the Problem

The brownfields problem has been attributed to a variety of causes: public opposition; the cost of cleanups; competition from greenfields; inadequate financing; a lack of remediation expertise; and a limited demand for redeveloped brownfields properties.[15] However, the most significant impediment to the redevelopment of brownfields sites is the "dense web of [legal] liability" in which these properties are trapped.[16] A number of federal and state laws are entwined in this legal web, including the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)[17] and the Resource Conservation and Recovery Act (RCRA).[18] These laws create expansive liability and generate unpredictable cleanup costs which discourage even the most enthusiastic brownfields investors.

1. CERCLA

The Comprehensive Environmental Response, Compensation, and Liability Act, also known by the acronym CERCLA or as the "Superfund" Law, was passed in 1980 to address the infamous Love Canal disaster. CERCLA establishes an elaborate liability scheme to effectuate the cleanup of hazardous waste sites and to compensate those who have remediated environmental hazards.[19] The Act requires the U.S. E.P.A. to rank the most seriously contaminated hazardous sites nationwide on the National Priorities List (NPL).[20] While NPL-listed properties generally are the focus of the U.S. E.P.A.'s resources and

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[13] DAVIS & MARGOLIS, *supra* note 1, at 178.

[14] April 1997 ATLANTIC SITELINE, *supra* note 12, at 2.

[15] DAVIS & MARGOLIS, *supra* note 1, at 9-13; Edwin H. Clark, *Taking the Initiative on Brownfields*, in KEY ENVTL. ISSUES IN U.S. EPA REGION III COURSE MATERIALS, TAB K (April 9-10, 1996).

[16] THE ATLANTIC SITELINE, May 1997, at 2 (GEI Consultants, Inc., Atlantic Envtl. Div.) [hereinafter May 1997 ATLANTIC SITELINE].

[17] The Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C.S. §§ 9601-9675 (1986 & Supp. 1996) [hereinafter CERCLA].

[18] The Resource Conservation and Recovery Act, 42 U.S.C.S. §§ 6901-6992k (1994) [hereinafter RCRA].

[19] *See* Mehrig v. KFC Western, Inc., 116 S.Ct. 1251, 1254 (1996).

[20] *See* CERCLA, 42 U.S.C.S. §§ 9605(a)(8), (c).

efforts under CERCLA, virtually any site where a hazardous substance[21] is placed or has otherwise come to be located may be subject to a CERCLA required cleanup.[22]

CERCLA has several draconian provisions that contribute to the brownfields dilemma. For example, the Superfund statute has an incredibly broad jurisdictional reach. Nearly any entity or individual who ever had any significant contact with a contaminated site may be considered a "potentially responsible party," or PRP, under CERCLA. PRPs may include current and former property owners and facility operators, waste generators, and waste transporters.[23] While the statute does provide for a very limited "innocent landowner" defense,[24] all current owners and operators of a contaminated property potentially can be held liable under CERCLA for the full cost of a cleanup. This is so, even if the current owner or operator did not in any way contribute to the hazardous condition of the site.

Additionally, at one time, a lender could be held liable as an owner or operator under CERCLA if it participated "in the financial

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[21] The term "hazardous substance" is defined in Section 101 of CERCLA, 42 U.S.C.S. § 9601(14) as:

> (A) [A]ny substance designated pursuant to section 311(b)(2)(A) of the Federal Water Pollution Control Act [33 USCS §1321(b)(2)(A)], (B) any element, compound, mixture, solution, or substance designated pursuant to section 102 of this Act [42 USCS §9602], (C) any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act [42 USCS §6921] (but not including any waste the regulation of which under the Solid Waste Disposal Act has been suspended by Act of Congress), (D) any toxic pollutant listed under section 307(a) of the Federal Water Pollution Control Act [33 USCS §131 7(a)], (E) any hazardous air pollutant listed under section 112 of the Clean Air Act [42 USCS § 7412], and (F) any imminently hazardous chemical substance or mixture with respect to which the Administrator has taken action pursuant to section 7 of the Toxic Substances Control Act [15 USCS §2606]. The term does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas).

See also Designation of Hazardous Substances, 40 C.F.R. § 302.4, (1996)(which lists the elements and compounds that are designated as hazardous substances under CERCLA.)

[22] *See* United States v Metate Asbestos Corp., 584 F. Supp. 1143, 1147 (D.C. Ariz. 1984).

[23] CERCLA, 42 U.S.C.S. § 9607(a).

[24] CERCLA, 42 U.S.C.S. §§ 9601(35)(A)-(B), 9607(b)(3). These provisions require that a potential purchaser make all appropriate inquiry into the previous ownership and uses of a property consistent with good commercial or customary practice. Courts have construed this requirement very strictly. *See, e.g.*, United States v. A & N Cleaners and Launderers, Inc., 854 F. Supp. 229, 243-44 (S.D.N.Y. 1994) (rejecting "innocent landowner" defense when purchaser failed to inquire about the previous disposal practices at the property).

management of a facility to a degree indicating a capacity to influence the corporation's treatment of hazardous wastes."[25] Realizing that this interpretation prevented lending institutions from participating in promising redevelopment projects, the U.S. E.P.A. unsuccessfully attempted to promulgate a rule limiting lender liability to circumstances in which the lender actively managed a facility.[26] The U.S. Congress finally weighed in on this issue by amending CERCLA to codify the U.S. E.P.A.'s lender liability rule.[27] Thus, lenders now have some small measure of certainty regarding their potential CERCLA liability.

All past owners and operators of a hazardous waste site also are subject to CERCLA's liability net. CERCLA consistently has been applied retroactively so that liability is imposed even for acts that occurred prior to the statute's passage.[28] Further, even prior owners who did not actively dispose of hazardous substances at a site are potentially subject to CERCLA's liability provisions.[29]

Property sellers may attempt to obtain contract indemnification from purchasers for any environmental liabilities associated with a piece of property, and these contractual provisions may provide some level of financial relief, at least amongst the parties to the contract.[30] However, the CERCLA statute explicitly states that indemnification or other similar agreements shall not be effective to transfer away a PRP's CERCLA liability.[31]

Other brownfields obstacles appear in CERCLA. Superfund PRPs are held to a strict liability standard.[32] While apportionment of

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[25] United States v. Fleet Factors Corp., 901 F.2d 1550, 1557-58 (11th Cir. 1990), cert. denied, 498 U.S. 1046 (1991). *See also* Daniel Michel, *The CERCLA Paradox and Ohio's Response to the Brownfields Problem: Senate Bill 221*, 26 U. TOLL L. REV. 435, 444-49 (1995).

[26] *See* 40 C.F.R. § 300.1100. This regulation was vacated in *Kelley v. EPA*, 15 F.3d 1100 (D.C. Cir. 1994), *cert. denied sub nom.*, American Banker's Ass'n v. Kelley, 513 U.S. 1110 (1995).

[27] *See* The Asset Conservation, Lender Liability, and Deposit Insurance Protection Act of 1996, Pub. L. No. 104-208 (1996). This new law actually expands upon the protections of the U.S. E.P.A.'s lender liability rule by clarifying the secured party exemption and by removing the 12-month presumptive time period for disposing of property acquired through foreclosure. In response to this new law, the U.S. EPA announced on July 7, 1997 its new policy on lender liability under CERCLA. *See* 62 Fed. Reg. 36,424 (1997).

[28] United States v. Olin Corp., 107 F.3d 1506, 1515 (11th Cir. 1997) ("[W]e find clear congressional intent favoring retroactive application of CERCLA's cleanup liability provisions."). The *Olin* case reversed a controversial and highly-publicized district court decision which held that CERCLA's liability provisions applied prospectively only. *See* United States v. Olin, 927 F. Supp. 1502 (S.D. Ala. 1996).

[29] *See, e.g.*, Nurad, Inc. v. William E. Hopper & Sons Co., 966 F.2d 837, 844-46 (4th Cir.), *cert. denied*, 113 S. Ct. 377 (1992); *but see* United States v. CDMG Realty Co., 96 F.3d 706, 713 (3d Cir. 1996).

[30] DAVIS & MARGOLIS, *supra* note 1, at 22.

[31] CERCLA, 42 U.S.C.S. § 9607(e).

[32] *See* New York v. Shore Realty Corp., 759 F.2d 1032, 1044 (2d Cir. 1985).

remediation costs amongst PRPs may be warranted in certain circumstances,[33] joint and several liability is the general CERCLA rule.[34]

The cleanup process also may create an insurmountable barrier to potential brownfields developers. CERCLA cleanup procedures are detailed in the National Contingency Plan (NCP).[35] The NCP is used by the U.S. E.P.A. and by private parties conducting a cleanup pursuant to an enforcement order and many of the elements of the NCP have been incorporated into various state laws and regulations.[36] A private party seeking to recover its costs from other responsible parties must conduct even voluntary cleanups in substantial compliance with the NCP.[37]

Compliance with the NCP can be a costly proposition. The Plan sets forth a cumbersome investigation and cleanup mechanism[38] involving significant public participation[39] and complex, oftentimes ambiguous cleanup standards.

Identifying the proper cleanup standards has evolved into an art form. CERCLA requires that all cleanups meet all "applicable or relevant and appropriate" federal and state standards (ARARs).[40] If an ARAR cannot be identified for a particular contaminant, the cleanup standard will be set at an acceptable exposure level that is "protective of human health and the environment."[41] Not only are these levels difficult to quantify, they often are virtually impossible or prohibitively expensive to attain, with little or no incremental environmental benefit.[42]

To complicate matters further, many states have implemented their own "Little CERCLA" statutes and regulations.[43] While these

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[33] The burden of proof as to apportionment is heavy in these instances and it falls upon each PRP. *See* United States v. Chem-Dyne Corp., 572 F. Supp. 802 (S.D. Ohio 1983); *see also* United States v. Rohm & Haas Co., 2 F.3d 1265 (3d Cir. 1993).

[34] WILLIAM H. RODGERS, JR., ENVIRONMENTAL LAW § 8.1 (2nd ed. 1994).

[35] Superfund, Emergency Planning, and Community Right-to-Know Porograms, 40 C.F.R. § 300.

[36] *See, e.g.*, N.J. STAT. ANN. § 58:10-23.11f(3) (West 1995).

[37] CERCLA, 42 U.S.C.S. § 9607(a)(4)(B); 40 C.F.R. § 300.700(c)(3)(i).

[38] DAVIS & MARGOLIS, *supra* note 1, at 23.

[39] 40 C.F.R. §§ 300.430(c), 300.430(f)(3), 300.700(c)(6).

[40] 40 C.F.R. § 300.430(e)(2)(i)(A). *See also* CERCLA, 42 U.S.C.S. § 9621(d). Obviously, the ARAR formulation is extremely vague, and the NCP regulations offer little additional certainty to PRPs. *See* 40 C.F.R. §§ 300.400(g), 300.430(e)(2). To address the confusion, the U.S. E.P.A. has published various guidance documents on the subject. *See* U.S. EPA, CERCLA COMPLIANCE WITH OTHER LAWS MANUAL, OSWER 9234.1-01 (Mar. 1988); U.S. EPA CERCLA COMPLIANCE WITH OTHER LAWS MANUAL PART II, OSWER 9234.1-02 (Aug. 1989).

[41] 40 C.F.R. § 300.430(e)(2)(i).

[42] For a fascinating discourse on environmental outcomes, see STEPHEN G. BREYER, BREAKING THE VICIOUS CYCLE (1993).

[43] *See* Robert B. McKinstry, Jr., *The Role of State "Little Superfunds" in Allocation and Indemnity Actions under the Comprehensive Environmental Response, Compensation and Liability Act*, 5 VILL. ENVTL. L.J. 83 (1994).

regulatory schemes generally parallel the federal CERCLA program, some states impose different liability standards or provide incentives for voluntary cleanups.[44] The highly complicated and extensive federal and state CERCLA liability systems often subvert the very cleanup process that they were intended to address.

2. Other Laws

There are several other state and federal laws entwined in the dense brownfields liability web. Consider the Resource Conservation and Recovery Act (RCRA). This federal statute was passed in 1976 and creates a "cradle to grave" regulatory program for hazardous waste.[45] RCRA applies to all aspects of the hazardous waste management life-cycle: generation, transportation, treatment, and disposal. However, its primary focus is on ongoing waste management activities, not on the problem of closed disposal sites.

RCRA impacts brownfields redevelopment in two principal respects.[46] First, RCRA regulates underground storage tanks (USTs), a fairly ubiquitous fixture on industrial properties. Pursuant to RCRA, the U.S. E.P.A. has established regulations and guidelines to address UST liability, compliance, and remediation.[47] The U.S. E.P.A. has authorized several states to run the RCRA UST program, and there also are state UST programs that have not been authorized by the U.S. E.P.A.[48]

A brownfields site might also run afoul of RCRA's "imminent and substantial endangerment" provisions.[49] Under these provisions, a contaminated site that may present an imminent and substantial endangerment to health or to the environment may be subject to an enforcement action or to RCRA's corrective action or closure requirements.[50] Owners and operators of contaminated property generally

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[44] DAVIS & MARGOLIS, *supra* note 1, at 17 & note 27.

[45] "Hazardous waste" is defined in RCRA, 42 U.S.C.S. §§ 6903(5), 6921. See also 40 C.F.R. § 260, which provides definitions of RCRA terms and general standards.

[46] DAVIS & MARGOLIS, *supra* note 1, at 16.

[47] *See* RCRA, 42 U.S.C.S. §§ 6991-6991i; 40 C.F.R.§ 280. Part 280 contains technical standards and corrective action requirements for owners and operators of underground storage tanks (USTs).

[48] See 40 C.F.R. § 281 for a listing of U.S. E.P.A.-approved state UST programs and for the requirements that state programs must meet. Kentucky, Ohio, and Pennsylvania do not appear to have received U.S. E.P.A. approval for their UST programs. The EPA recently approved the State of West Virginia's underground storage tank program under Subtitle I of RCRA. The effective date of the approval was October 23, 1997. West Virginia; Final Approval of State Underground Storage Tank Program, 62 Fed. Reg. 49,620 (1997).

[49] RCRA, 42 U.S.C.S. §§ 6972(a)(1)(B), 6973.

[50] RCRA, 42 U.S.C.S. §§ 6924(u), 6925, 6928(h), 6972(a)(1)(B), 6973.

are held responsible for conducting the RCRA cleanups or for reimbursing the federal or state cleanup authorities.[51]

Certain brownfields may fall within the regulatory scope of the Toxic Substances Control Act (TSCA).[52] TSCA was passed in 1976 to regulate toxic chemical substances and mixtures,[53] and it governs the testing, manufacture, processing, and distribution of toxic chemicals.[54] TSCA impacts potential brownfields, for instance, through its regulation of the disposal of polychlorinated biphenyls, or PCBs.[55] Because PCBs also are listed hazardous substances under CERCLA,[56] TSCA and CERCLA would concurrently control a PCB spill in a brownfields area.

TSCA also addresses lead exposure in connection with the renovation and remodeling of older public and commercial buildings,[57] and it incorporates the Asbestos Hazard Emergency Response Act (AHERA).[58] AHERA deals with asbestos hazards in the nation's schools and in public and commercial buildings.

Asbestos is also regulated as a hazardous air pollutant, or HAP, under the Clean Air Act.[59] The Clean Air Act is a highly complex and wide-ranging statute for the prevention and control of air pollution from both stationary and mobile sources. Brownfields redevelopers need to be aware of the Clean Air asbestos program, which regulates certain demolition and renovation projects.[60] The Clean Air Act regulations also set standards for the disposal of asbestos-containing waste material.[61] It should be noted that Clean Air Act HAPs are hazardous substances for purposes of CERCLA.[62]

Various state laws also may act as barriers to brownfields redevelopment. For example, several states have enacted mandatory

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[51] RCRA, 42 U.S.C.S. § 6924(u). If an "imminent endangerment" situation exists, all parties contributing to the contamination may be held liable for these costs. *See* RCRA, 42 U.S.C.S. §§ 6972(a)(1)(B), 6973(a).

[52] The Toxic Substances Control Act, 15 U.S.C.S. §§ 2601-2692 (1996) [hereinafter TSCA].

[53] Id. at § 2601.

[54] Id. at §§ 2603-2605.

[55] Id. at § 2605(e). *See also* 40 C.F.R. § 761, Subparts D, G, K (Subpart D regulates the storage and disposal of PCBs, and Subpart G contains TSCA's Spill Cleanup Policy. Subpart K sets forth the PCB waste disposal record and report requirements.).

[56] *See* 40 C.F.R. § 302.4(a).

[57] TSCA, 15 U.S.C.S. §§ 2681-2692.

[58] TSCA, 15 U.S.C.S. §§ 2641-2671.

[59] The Clean Air Act, 42 U.S.C.S. §§ 7401-7671(q) (1989) [hereinafter Clean Air Act]. *See also* 40 C.F.R. Part 61, Subpart M (Subpart M contains the National Emission Standard for asbestos pursuant to the Clean Air Act).

[60] *See* 40 C.F.R. § 61.145.

[61] *See* 40 C.F.R. § 61.150.

[62] *See* CERCLA, 42 U.S.C.S. § 9605(a)(8),(c).

disclosure laws in connection with real property transfers.[63] Such disclosures may inhibit the transfer of brownfields sites.

All of the above statutes and regulations have been blamed for the proliferation of brownfields. The complexities of these laws and the ambiguities concerning a party's responsibilities and liabilities thereunder serve as a potent disincentive for potential brownfields redevelopers and lenders.

C. Solving the Problem

As the previous discussion suggests, environmental liability is a significant barrier to the cleanup and reuse of brownfields sites. Recently, however, there has been a flurry of activity at both the federal and state level to address this situation.

1. Federal Initiatives

a. Congressional Activity

The U.S. Congress has made brownfields redevelopment a top priority. On September 30, 1996, the Congress passed and the President signed into law the Asset Conservation, Lender Liability, and Deposit Insurance Protection Act of 1996.[64] This Act was part of the Omnibus Appropriations Bill for Fiscal Year 1997, and it codified the U.S. E.P.A.'s lender liability rule.[65] Under this new Act, only those lenders who actually participate in the management of a facility that operates on a contaminated site would be subject to liability under CERCLA and under RCRA's UST program.[66]

In addition to the enactment of this lender liability law, The Taxpayer Relief Act was signed into law on August 5, 1997.[67] This new law includes a tax incentive for the cleanup and redevelopment of brownfields in distressed communities.[68] Further, more than a dozen pieces of brownfields-related legislation have been proposed in

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[63] *See, e.g.*, PA. STAT. ANN. tit. 35, §§ 6018.405, 6020.512(b) (1993) (stating that conveyance of hazardous waste disposal site property requires an acknowledgment in the deed); W. VA. CODE § 22-18-21 (1993) (stating that a deed disclosure is required regarding the use of a property for the storage, treatment, or disposal of hazardous waste).

[64] *See supra* note 27.

[65] *See supra* Part II.B.1. and note 26.

[66] *See supra* note 27.

[67] *See* Taxpayer Relief Act of 1997, Pub L. No. 105-34 (1997).

[68] *See Id.*

Congress. These proposals take various approaches to the brownfields issue; for example, offering tax incentives for brownfields cleanups,[69] establishing a grant assistance program for brownfields remediation,[70] making available loans to the states to establish revolving loan funds for voluntary cleanups,[71] and providing for more rational and cost-effective site remediation standards.[72] Several bills also would promote state involvement in the brownfields redevelopment process.[73]

There is a debate in Congress as to whether brownfields issues should be included in comprehensive CERCLA reform or whether it warrants stand-alone legislation. There is no question, however, that brownfields are a priority item on the Congressional agenda.

b. Administrative/Agency Activity

The Clinton Administration "has embarked on a sweeping Brownfields Economic Redevelopment Initiative."[74] The U.S. E.P.A. launched the initiative in 1993, and, in 1995, the Agency released its Brownfields Action Agenda.[75] The Brownfields Action Agenda is an ambitious program designed to bring together and empower the various stakeholders to solve the brownfields problem. Pursuant to this initiative, the Administration and the U.S. E.P.A. are pursuing several avenues to promote brownfields redevelopment:

- Guidance on Prospective Purchaser Agreements - In 1995, the U.S. E.P.A. revised its Guidance on agreements with prospective purchasers of contaminated property.[76] The Guidance outlines the conditions under which the U.S. E.P.A. will enter into agreements and covenants not to sue regarding contaminated property, and it provides a model prospective purchaser agreement (PPA) for use as a "starting point" for negotiations.[77] While the revised Guidance offers somewhat more flexibility in the drafting of PPAs, there still is much room for

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[69] The Community Empowerment Act of 1997, S. 235, 105th Cong. (1997); Brownfields Redevelopment Act of 1997, H.R. 523, 105th Cong. (1997).

[70] Brownfields and Environmental Cleanup Act of 1997, S. 18, 105th Cong. (1997).

[71] Brownfields Cleanup and Redevelopment Revolving Loan Fund Pilot Project Act of 1997, H.R. 1462, 105th Cong. (1997).

[72] Brownfields Remediation and Economic Development Act of 1997, H.R. 990, 105th Cong. (1997).

[73] Brownfields Reuse and Real Estate Development Act, H.R. 1392, 105th Cong. (1997); Brownfields Cleanup and Redevelopment Act, H.R. 1206, 105th Cong. (1997).

[74] Vice President Al Gore, Preface to DAVIS & MARGOLIS, *supra* note 1, at xix.

[75] U.S. E.P.A., BROWNFIELDS ACTION AGENDA (Jan. 1995).

[76] U.S. E.P.A., GUIDANCE ON SETTLEMENTS WITH PROSPECTIVE PURCHASERS OF CONTAMINATED PROPERTY, DIRECTIVE (May 1995) [hereinafter GUIDANCE ON PPAS].

[77] *Id.* at 2.

improvement in both the policy and its application.[78]

- Policy on Comfort/Status Letters - Along similar lines, the U.S. E.P.A. released a new "Policy on the Issuance of Comfort/Status Letters" in early 1997.[79] This Policy was created to provide parties interested in brownfields sites with information about the Agency's intentions toward a particular piece of property.[80] The Policy contains four sample comfort/status letters that address the most common inquiries received by the U.S. E.P.A. concerning brownfields sites: (1) A "No Previous Federal Superfund Interest Letter;" (2) a "No Current Federal Superfund Interest Letter;" (3) a "Federal Interest Letter;" and (4) a "State Action Letter."[81] The Policy describes these letters in detail, and it suggests that U.S. E.P.A. Regional offices may tailor the contents for particular situations.[82] In the Policy, the U.S. E.P.A. emphasizes that the letters will be provided solely for informational purposes and that they are not intended to provide a release from CERCLA liability.[83]
- Archiving CERCLIS Sites - The U.S. E.P.A. has archived approximately 2900 sites in which it has no interest from "CERCLIS," the national Superfund site database.[84] The Agency also has published a guidance document under which it will defer sites involved in state cleanups.[85] These actions may make these delisted or deferred properties more attractive to developers.
- Contaminated Aquifer Policy/Land Use Guidance - The U.S. E.P.A. published a "Final Policy Towards Owners of Property Containing Contaminated Aquifers."[86] This guidance is designed to provide assurances that the Agency will not take action against an owner of uncontaminated property for groundwater contamination if the owner did not cause or contribute to the groundwater problem.[87] The U.S. E.P.A. also issued a directive allowing future land uses to be considered in the remedy selection process at NPL sites.[88] These Agency policies

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[78] For a discussion of the failings of the Guidance on PPAs, see DAVIS & MARGOLIS, *supra* note 1, at 25-26.

[79] U.S. EPA, Policy on the Issuance of Comfort/Status Letters, 62 Fed. Reg. 4624 (1997).

[80] *Id.*

[81] *Id.* at 4624-25.

[82] *Id.* at 4624.

[83] *Id.*

[84] *See* DAVIS & MARGOLIS, *supra* note 1, at 42.

[85] U.S. EPA, GUIDANCE ON DEFERRAL OF NPL LISTING DETERMINATIONS WHILE STATES OVERSEE RESPONSE ACTIONS, OSWER DIRECTIVE NO. 9375.6-11 (Aug. 1995).

[86] U.S. EPA, Final Policy Toward Owners of Property Containing Contaminated Aquifers, 60 Fed. Reg. 34,790 (1995).

[87] *Id.*

[88] U.S. EPA, LAND USE IN THE CERCLA REMEDY SELECTION PROCESS, OSWER DIRECTIVE NO. 9355.7-04 (May 1995).

potentially decrease the regulatory burden on hopeful brownfields developers.

- Lender Liability - As previously discussed, the U.S. E.P.A. instituted a policy limiting lender liability under CERCLA to those circumstances in which a lender actively managed a contaminated property.[89] The Agency issued a similar rule for UST liability under RCRA.[90] While the CERCLA lender liability policy was judicially vacated,[91] the U.S. EPA continued to follow the rule as an enforcement policy and the policy now is codified in the Asset Conservation, Lender Liability, and Deposit Insurance Protection Act of 1996.[92] It is hoped that this development will improve the financing prospects for brownfields projects.
- Pilot Programs - As part of the Brownfields Action Agenda, the U.S. E.P.A. committed to funding 50 brownfields pilots for up to $200,000 each.[93] These pilots are designed to test creative site assessments, cleanups, and redevelopment solutions. To date, 113 such projects have been awarded, totaling approximately $20 million to promote brownfields redevelopment from Birmingham, Alabama to Tacoma, Washington.[94]
- Interagency Cooperation - A number of federal agencies are working with the U.S. E.P.A. to develop a coordinated national strategy on brownfields. Recently, the Administration announced a "Brownfields National Partnership," a program which includes a $300 million investment in brownfields cleanup and redevelopment from more than 15 federal agencies.[95] New federal resources include job training support funds from the Departments of Health and Human Services, Labor, and Education, community development and housing support from the Department of Housing and Urban Development, and sustainable transportation funding from the Department of Transportation.[96]
- Federal-State Cooperation - The Administration and the U.S. E.P.A. actively have supported the role that state governments play in the reclamation of brownfields sites. In terms of financial support, the U.S.

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[89] *See supra* Section II.B.1. and note 27.

[90] *See* 60 Fed. Reg. 46,692 (1995).

[91] *See supra* note 27.

[92] *See supra* Section II.C.1.a. and notes 28, 65, 66, and 67.

[93] U.S. E.P.A., BROWNFIELDS CHECKLIST (1996).

[94] *See* May 1997 ATLANTIC SITELINE at 6. *See also* U.S. E.P.A., BROWNFIELDS CHECKLIST, *supra* note 94.

[95] White House Press Release, *Vice President Gore Announces Expansion of Brownfields Initiative* (May 13, 1997).

[96] *Id. See also* U.S. EPA, BROWNFIELDS NATIONAL PARTNERSHIP ACTION AGENDA-QUICK REFERENCE FACT SHEET (May 1997).

E.P.A. is providing funds to the states through the federal Superfund program to develop and expand voluntary cleanup programs.[97] The Agency also has committed its "expertise" to the brownfields problem in various states. For example, U.S. E.P.A. Region 10 has designated "Brownfields Coordinators" to oversee brownfields pilots, and the Agency has assigned staff members to cities around the country through inter-governmental personnel assignments.[98] To further promote state voluntary cleanup programs, six of the U.S. E.P.A.'s regions have negotiated Memorandums of Agreement (MOAs) with at least ten states possessing such programs. Colorado, Illinois, Indiana, Maryland, Michigan, Minnesota, Missouri, Rhode Island, Texas, and Wisconsin all have signed MOAs with the U.S. E.P.A., and Ohio is anticipated to enter into an MOA in the near future.[99] These MOAs provide that, absent extraordinary imminent danger, the U.S. E.P.A. will not take further CERCLA action at sites that have been remediated under a state's voluntary cleanup program.[100] Significantly, the Texas MOA is the first such agreement in which the U.S. E.P.A. pledges that it will not take enforcement action under CERCLA or RCRA.[101] Because more states have expressed an interest in signing voluntary cleanup MOAs with the U.S. E.P.A., the Agency published a draft guidance to assist its regional offices in negotiating Memoranda of Agreements (MOAs) regarding state voluntary cleanup programs.[102] Prior to signing a voluntary program MOA, the guidance requires that the state program meet the following six criteria: (1) The program must provide opportunities for meaningful community involvement; (2) it must ensure that voluntary response actions are protective of human health, welfare, and the environment; (3) the program must have adequate resources, including financial, legal, and technical, to ensure that voluntary response actions are conducted in an appropriate and timely manner; (4) it also must provide mechanisms for the written approval of response action plans and documentation that the response actions are complete; (5) there must be adequate oversight to ensure that voluntary response actions are conducted in such a manner to assure protection of human health, welfare, and the environment; and

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[97] *See* UNITED STATES GENERAL ACCOUNTING OFFICE, SUPERFUND - STATE VOLUNTARY PROGRAMS PROVIDE INCENTIVES TO ENCOURAGE CLEANUPS 7 (April 1997) [hereinafter GAO REPORT].

[98] *See* U.S. EPA, Brownfields Checklist, *supra* note 94.

[99] *Id. See also* U.S. EPA REGION 5, *supra* note 5.

[100] GAO REPORT, *supra* note 97 at 48-49.

[101] *See* DAVIS & MARGOLIS, *supra* note 1, at 49.

[102] U.S. EPA, Guidance for Developing Superfund memoranda of Agreement (MOA) Language Concerning State Voluntary Cleanup, 62 Fed. Reg. 47,495 (1997).

(6) the program must show the capability of ensuring completion of response actions if the volunteering parties fail or refuse to complete the response actions.[103] The Guidance also states that for sites remediated pursuant to an approved state program the U.S. EPA will not exercise its cost recovery authority, unless there are exceptional circumstances.[104] Through all of the above-described partnerships, the U.S. EPA is leveraging limited state and federal resources to encourage participation in state voluntary cleanup programs.

2. State Reforms

a. Kentucky

In 1996, the Kentucky General Assembly enacted very succinct and very general brownfields legislation. The legislation is an effort to promote the redevelopment of contaminated industrial sites in the Commonwealth,[105] and it takes a rather unique approach to the brownfields conundrum.

Under the Kentucky brownfields legislation, a "public entity" may apply to the Kentucky Natural Resources and Environmental Protection Cabinet (NREPC) for a No Further Remediation Letter (NFR Letter) for a brownfields property.[106] Only a "public entity" may apply for an NFR Letter; the statute defines "public entity" as the Commonwealth of Kentucky, a county, city, urban-county government, charter county government, or any of their agencies or departments.[107] A nonprofit corporation organized pursuant to Kentucky Revised Statute

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[103] *Id.* at 47,495-500.

[104] *Id.* at 47,498. While this draft guidance Memorandum is an effort by the U.S. EPA to advance brownfields cleanups, critics query whether it might actually deter the cleanup process. Programs in several states with existing voluntary cleanup MOAs likely would not satisfy all of the Agency's baseline criteria, and the guidance states that the U.S. EPA will periodically review programs in states which have signed MOAs. *Id.* at 47,498-90. Are these programs at risk? *See* GAO Report at 49-50, *supra* note 97 at 49-50. The Environmental Council of States (ECOS) unanimously passed a resolution requesting that the U.S. EPA withdraw the guidance in its current form. *See ECOS Asks EPA to Withdrawal Guidance, Begin Dialogue With States on Brownfields,* On November 6, 1997, the U.S. EPA pulled the final draft of the guidance Memorandum because the guidance on state voluntary cleanup programs did not meet EPA's initial objectives or address the needs of affected parties. *See* Waste Management 28 Env't Rep. (BNA) 1533-1534 (Dec. 5, 1997). ECOS also has concerns about the two-tier system established in the guidance. *Id.* The guidance creates two tiers of contaminated sites: (1) Tier I sites are likely to require long-term or emergency cleanup work under CERCLA; (2) Tier II sites are less contaminated. 62 Fed. Reg. at 47,500-06.

[105] KY. REV. STAT. ANN. §§ 224.01-450 to -465 (Michie 1996 Supp.). The effective date of this legislation was July 15,1996.

[106] KY. REV. STAT. ANN. § 224 10-460(1) (Michie 1996).

[107] KY. REV. STAT. ANN. § 224.01-455(2) (Michie 1996).

Section 58.180[108] expressly for the purpose of securing financing for public projects also is a "public entity" under the brownfields law.[109] Eligible properties under the law include any real property owned by a "public entity" upon which a release of a hazardous substance has occurred.[110]

In order to obtain an NFR Letter, a public entity must submit an application to the NREPC containing the following information: (1) A legal description of the property; (2) a copy of the deed for the property; (3) an environmental site assessment sufficient to characterize the extent of any contamination; (4) a proposed plan to remediate the environmental contamination upon the site; and (5) the proposed use of the property intended by the public entity after obtaining the NFR Letter.[111]

Upon receipt of an NFR application from a public entity, the NREPC will request public comment.[112] The NREPC may approve the application, deny it, or enter into negotiations with the public entity to modify the proposed remediation plan.[113] If the NREPC and the public entity successfully negotiate a modified remediation plan, the Cabinet will approve the amended application. [114]

While the new brownfields legislation itself does not provide details concerning the actual remediation process, Section 224.01-400 of the Kentucky Revised Statutes addresses environmental restoration issues.[115] Subsection 224.01-400(18) of this Section reads:

> Any person possessing or controlling a hazardous substance, pollutant, or contaminant which is released to the environment, or any person who caused a release to the environment of a hazardous substance, pollutant, or contaminant, shall characterize the extent of the release as necessary to determine the effect of the release on the environment, and shall take actions necessary to correct the effect of the release on the environment. Any person required to take action under this subsection shall have the following options:

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[108] KY. REV. STAT. ANN. § 58.180 (Michie 1996).
[109] KY. REV. STAT. ANN § 224.01-455(2) (Michie 1996).
[110] KY. REV. STAT. ANN § 224.01-455(1) (Michie 1996).
[111] KY. REV. STAT. ANN. § 224.01-460(1) (Michie 1996).
[112] KY. REV. STAT. ANN. § 224.01-460(2) (Michie 1996).
[113] *Id.*
[114] *Id.*
[115] KY. REV. STAT. ANN. § 224.01-400 (Michie 1996 Supp.).

> (a) Demonstrating that no action is necessary to protect human health, safety, and the environment;
> (b) Managing the release in a manner that controls and minimizes the harmful effects of the release and protects human health, safety, and the environment;
> (c) Restoring the environment through the removal of the hazardous substance, pollutant, or contaminant; or
> (d) Any combination of paragraphs (a) to (c) of this subsection.[116]

This provision does not always require the removal of the released hazardous substance. Instead, this subsection takes a more pragmatic, risk-based approach to environmental remediations. The NREPC considers various factors when determining whether a proposed remedy for a release is protective of human health, safety, and the environment: (1) The characteristics of the released substance, pollutant, or contaminant, including its toxicity, persistence, environmental fate and transport dynamics, bioaccumulation, biomagnification, and potential for synergistic interaction; (2) the hydrogeologic characteristics of the facility and the surrounding area; (3) the proximity, quality, and current and future uses of surface water and groundwater; (4) the potential effects of residual contamination of potentially impacted surface water and groundwater; (5) the chronic and acute health effects and environmental consequences to terrestrial and aquatic life of exposure to the hazardous substance through direct and indirect pathways; (6) an exposure assessment; and (7) all other available information.[117] Future land use is not specifically listed as one of the "remediation" factors. However, it can certainly be classified as "other available information," and based upon its inclusion in the new brownfields NFR Letter process,[118] future land use should be considered in the process by the NREPC.

Upon satisfactory completion of the approved remediation plan,

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[116] KY. REV. STAT. ANN. § 224.01400(18) (Michie 1996 Supp.).

[117] KY. REV. STAT. ANN. § 224.01-400(21) (Michie 1996). The NREPC promulgated very detailed regulations regarding these risk-based remediation options. *See* KY. ADMIN. REG. § 13 (proposed in July 1995). However, industry challenged these proposed regulations and the authority of the NREPC to promulgate such regulations. The regulations were withdrawn following negotiations between industry groups and the NREPC. As a result, the NREPC reviews risk-based remediations on a site-specific basis. For a very good discussion of this regulatory challenge and of Kentucky's brownfields law, *see* DAVIS & MARGOLIS, *supra* note 1, at 410.

[118] DAVIS & MARGOLIS, *supra* note 1, at 410-15. *See* also KY. REV. STAT. ANN. § 224.01-460(1)(e) (Michie 1996).

the NREPC issues an NFR Letter to the public entity.[119] The NFR Letter will include all of the following elements: (1) An acknowledgment that the requirements of the remediation plan were satisfied or are being satisfied;[120] (2) a description of the location of the property by reference to a legal description or a plat; (3) a description of any monitoring requirements or any land use limitation imposed as a result of the remediation efforts; (4) a statement that the NFR Letter is a release from further responsibilities under Kentucky environmental remediation law;[121] (5) a prohibition against the use of the property in a manner inconsistent with any land use limitation imposed as a result of the remediation efforts without additional appropriate remedial activities; (6) a requirement that any deed conveying the property to a third party contain binding land use limitations in accordance with the remediation plan; and (7) a description of any preventive, engineering, and institutional controls required in the remediation plan and notification that failure to manage and maintain the controls in full compliance with the terms of the remediation plan may void the NFR Letter.[122] The public entity must record the NFR Letter with the county clerk in the county in which the property is located.[123]

The issuance of an NFR Letter signifies a release from further responsibilities for an approved remediation plan and from any further responsibilities under Kentucky's environmental remediation law.[124] Further, the NFR Letter is considered *prima facie* evidence that the site does not constitute a threat to human health and the environment and that the site does not require additional remediation under Kentucky law[125] if it is utilized in accordance with the terms of the NFR Letter.[126] This release does not eliminate CERCLA or RCRA concerns,[127] but redevelopers might negotiate a PPA with the U.S. EPA or seek a comfort

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[119] KY. REV. STAT. ANN. § 224.01-460(4) (Michie 1996).

[120] This language suggests that an NFR Letter could be issued *prior* to the completion of the remediation plan. *See* KY. REV. STAT. ANN. § 224.01-465(2)(a) (Michie 1996).

[121] *See* KY. REV. STAT. ANN. § 224.01-400 (Michie 1996).

[122] KY. REV. STAT. ANN. § 224.01-465(2) (Michie 1996).

[123] KY. REV. STAT. ANN. § 224.01-456(5) (Michie 1996).

[124] KY. REV. STAT. ANN. § 224.01-465(1) (Michie 1996). To review Kentucky's law concerning remedial action to restore the environment, *see* KY. REV. STAT. ANN. § 224.01-400.

[125] *See* KY. REV. STAT. ANN. § 224.01-400.

[126] KY. REV. STAT. ANN. § 224.01-465(l).

[127] To date, Kentucky has not signed an MOA with the U.S. EPA regarding its voluntary cleanup program. Thus, it is not clear whether Kentucky's NFR letter process would satisfy the baseline criteria set forth by the U.S. EPA with which it will evaluate the adequacy of a state voluntary cleanup program pursuant to its MEMORANDUM CONCERNING INTERIM APPROACHES FOR REGIONAL RELATIONS WITH STATE VOLUNTARY CLEANUP PROGRAMS. For a discussion of this Memorandum and of other state MOAs, *see supra* notes 103-105 and accompanying text.

letter from that Agency on a particular piece of property to minimize the threat of this federal liability.[128]

While public entities are the only entities or "persons" that may apply to the NREPC for an NFR Letter, the legislation expressly states that the NFR Letter shall apply to the property in favor of various "persons": (1) The public entity to which the NFR Letter was issued; (2) any mortgagee or trustee, or their assignee, transferee, or any successor in interest, of a deed of trust of the nublic entity property; (3) any successor in interest of the public entity; (4) any transferee of the public entity, whether the transfer was by sale, bankruptcy proceeding, partition, settlement, or adjudication of any civil action, charitable gift, or bequest; and (5) any financial institution, or their successor in interest that, after the date the NFR Letter was issued, acquires the ownership, operation, management, or control of the property through foreclosure or under the terms of a security interest held by, or the terms of an extension of credit made by, the financial institution.[129] To take advantage of the Kentucky brownfields legislation, these listed "persons" must transfer their properties to a public entity or work with a public entity to obtain an appropriate property. The public entity then would proceed with the NFR Letter process as titleholder, thereafter conveying the remediated NFR site to the "person."

While the legislation does not provide for specific compliance verification requirements as a follow-up to the cleanup process, an NFR Letter is voidable in the event the site is not managed in full compliance with the brownfields law or with the approved remediation plan.[130] These letters are also voidable if the NREPC determines that any facts upon which the remediation plan was based were unknown at the time the NFR Letter was issued, were known but not disclosed, or were false.[131]

This brownfields law is relatively new in Kentucky, but it clearly provides brownfields redevelopers with a new approach to the remediation issue. Because of the "public entity" limitation in the Kentucky legislation,[132] creative partnering may be required to structure the brownfields deal. This could foster a new and positive atmosphere in which to solve brownfields problems.

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[128] *See supra* Part II.C. 1.b. and notes 77-84.

[129] KY. REV. STAT. ANN. § 224.01-464(3) (Michie 1996).

[130] KY. REV. STAT. ANN. § 224.01-465(4) (Michie 1996).

[131] *Id.*

[132] *See* KY. REV. STAT. ANN. § 224.01-460(1). *See also supra* notes 107-110 and accompanying text.

b. Ohio

The industrial heritage of Ohio makes brownfields a pervasive problem in the state. To encourage the cleanup and reuse of these brownfields properties, Ohio created a voluntary remediation program. The 1994 law[133] is a very comprehensive and complete statute, and its accompanying regulations offer thorough guidance to participating volunteers.[134] Although there are some commonalties between the programs, Ohio's Voluntary Action Program (VAP) provides a much greater level of detail than does its Kentucky counterpart.

Except for those properties that are explicitly exempted,[135] virtually any site is eligible for cleanup through Ohio's VAP. Ohio offers volunteers several financial incentives to participate in the program. These incentives take various forms: tax abatements,[136] tax credits,[137] and low interest loans.[138]

To participate in the Ohio program, a volunteer must undertake a "voluntary action."[139] A voluntary action may include one or more of the following elements: a Phase I property assessment,[140] a Phase II property assessment,[141] a sampling plan,[142] a remediation plan,[143] remedial activities,[144] and other such activities as the volunteer considers to be necessary or appropriate to address the contamination at a particular site.[145] No prior notice is required in order to commence a voluntary action and no public participation is required prior to the remediation activities.[146]

Depending upon the results of the Phase I or II property assessments, remedial action may be required at the site. Program

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[133] *See* OHIO REV. CODE ANN. §§ 3746.01-.99 (Anderson 1996).

[134] *See* OHIO ADMIN. CODE §§ 3745-300-01 to -15.

[135] *See* OHIO REV. CODE ANN. § 3746.02 (Anderson 1996). *See also* OHIO ADMIN. CODE § 3745-300-02.

[136] *See* Ohio Rev. Code Ann. §§ 5709.87-.88 (Anderson 1994). For a brief note on funding sources for Ohio's voluntary cleanup program, *see* GAO REPORT, *supra* note 97, at 27.

[137] *See* OHIO REV. CODE ANN. 3746.12.1 (Anderson 1996).

[138] *See* OHIO REV. CODE ANN. §§ 166.07, 6111.036, 6123.01(E), 6123.036, 6123.041 (Anderson 1994).

[139] OHIO REV. CODE ANN. § 3746.01(0)(Anderson 1996).

[140] OHIO REV. CODE ANN. § 3726.10(A)(1) (Anderson 1996); Ohio Admin. Code § 3745-300-06 (Anderson 1997).

[141] OHIO REV. CODE ANN. § 3726.10(A)(2) (Anderson 1996); Ohio Admin. Code § 3745-300-07 (Anderson 1997).

[142] OHIO REV. CODE ANN. § 3726.10(A)(3) (Anderson 1996).

[143] OHIO REV. CODE ANN. § 3726.10(A)(4) (Anderson 1996).

[144] OHIO REV. CODE ANN. § 3726.10(A)(5) (Anderson 1996).

[145] OHIO REV. CODE ANN. § 3726.10(A)(6) (Anderson 1996).

[146] *See* GAO REPORT, *supra* note 97, at 19 n.d., 44 n.a.

volunteers conducting remedial activities may consult the Ohio regulations to assist in the formulation and implementation of a remediation plan.[147] The Ohio VAP provides for two alternative cleanup approaches: (1) Generic numerical standards, or (2) property-specific risk assessment procedures.[148]

The generic numerical standards are based upon the intended use of a property after the completion of the voluntary action, and these use categories include industrial uses, commercial uses, and residential uses.[149] These generic numbers specify soil cleanup standards for various listed carcinogenic and noncarcinogenic chemicals, as well as for PCBs and lead.[150] There are also generic unrestricted potable use standards for groundwater.[151]

If the property has hazardous constituents for which there are no generic standards or if the volunteer prefers this alternative, a property-specific risk assessment may be performed. The Ohio program sets forth detailed procedures for conducting property-specific risk assessments.[152] These procedures identify applicable risk goals that may not be exceeded based upon the reasonably anticipated use of the property,[153] and they list factors which must be taken into account when developing the property-specific risk assessment.[154]

A property-specific risk assessment is comprised of five parts: (1) The selection of chemicals of concern, (2) the exposure assessment, (3) the toxicity assessment, (4) the characterization of risk, and (5) the uncertainty analysis.[155] When implementing remediation activities pursuant to a property-specific risk assessment, the use of institutional controls, such as deed restrictions or engineering controls through the use of landscaping or fences, are acceptable remedies.[156]

There sometimes are circumstances under which it is technically infeasible to comply with either the generic numerical standards or the

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[147] *See* Ohio Admin. Code §§ 3745-300-01 to -15 (Anderson 1997).

[148] OHIO REV. CODE ANN. § 3746.04(B)(I)-(B)(2) (Anderson 1996); OHIO ADMIN. CODE §§ 3745-300-08, -09 (Anderson 1997).

[149] OHIO REV. CODE ANN. §3746.04(B)(I) (Anderson 1996); OHIO ADMIN. CODE § 3745-300-08(B)(2)(c) (Anderson 1997).

[150] OHIO ADMIN. CODE § 3745-300-08(B)(3) (Anderson 1997).

[151] OHIO ADMIN. CODE § 3745-300-08(C) (Anderson 1997).

[152] OHIO ADMIN. CODE § 3745-300-09 (Anderson 1997).

[153] OHIO ADMIN. CODE § 3745-300-09(C) (Anderson 1997).

[154] OHIO ADMIN. CODE § 3745-300-09(D) (Anderson 1997).

[155] OHIO ADMIN. CODE § 3745-300-09(D)(3) (Anderson 1997).

[156] OHIO REV. CODE ANN. § 3746.05; OHIO ADMIN. CODE § 3745-300-09(D)(2)(c)-(d)(Anderson 1997). However, Ohio requires an Operation and Maintenance Plan when a cleanup remedy includes such institutional controls that are not recorded on a deed or such engineering controls. *See* OHIO ADMIN. CODE § 3745-300-15(A)(2)(a)-(b) (Anderson 1997).

property-specific risk assessment procedures. Under these conditions, volunteers may apply to the Ohio Environmental Protection Agency (OEPA) for a variance.[157] The Ohio program also provides for the issuance of a "consolidated standards permit" covering all of the permits, licenses, or other approvals required in connection with a voluntary action.[158] A progressive feature of the VAP, this consolidated standards permit covers virtually all environmental permitting issues, including air, water, and waste.

Upon completion of a remediation, or at any time a volunteer believes that a property meets the relevant cleanup standards, volunteers may engage a Certified Professional[159]and Certified Laboratories[160] to verify that the applicable standards have been achieved. The Ohio VAP provides certification procedures for consultants and laboratories that demonstrate certain qualifications.[161]

The Certified Professional reviews all relevant investigatory and remedial information pertaining to the property, including sampling data, and all other demonstrations "based upon the findings of a phase I or phase II property assessment."[162] Based upon this review, the Certified Professional may conclude that the property does not achieve the applicable standards and must so inform the volunteer.[163] The Certified Professional need not, however, notify the OEPA of this fact, except in "sufficiently important" situations where the safety, health, or welfare of the public would not be protected.[164] Unless such a "sufficiently important" situation exists, a volunteer's participation in the Ohio program would remain confidential. The fact that a volunteer has entered into the VAP is not admissible in any civil, criminal, or administrative proceeding and it does not constitute an admission of criminal liability or an acknowledgment that conditions at a property pose a threat to the public or the environment.[165] Further, any information, documents, reports, data, or samples generally are not admissible in any civil or

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[157] OHIO REV. CODE ANN. § 3546.09 (Anderson 1996); Ohio Admin. Code § 3745-300-12 (Anderson 1997).

[158] OHIO REV. CODE ANN. § 3746.15 (Anderson 1996).

[159] *See* OHIO REV. CODE ANN. §§ 3746.01(E), 3746.07.1, 3746.10(B)(l)(b), 3746.11 (Anderson 1996). *See also* OHIO ADMIN. CODE § 3745-300-05 (Anderson 1997).

[160] *See* OHIO REV. CODE ANN. §§ 3746.01(D), 3746.10(B)(l)(a) (Anderson 1996). *See also* OHIO ADMIN. CODE § 3745-300-04 (Anderson 1997).

[161] *See supra* notes 160-61.

[162] *See* OHIO REV. CODE ANN. § 3746.10(C) (Anderson 1996); OHIO ADMIN. CODE § 3745-300-13(B) (Anderson 1997).

[163] OHIO REV. CODE ANN. § 3746.11(B) (Anderson 1996).

[164] OHIO REV. CODE ANN. § 3746.07.1(B)(1).

[165] OHIO REV. CODE ANN. § 3746.28(A)-(D).

administrative proceeding brought against a volunteer.[166] If, on the other hand, the Certified Professional determines that the property meets the applicable cleanup standards, he or she will prepare a "No Further Action" Letter (NFA Letter) concerning the property for the volunteer. This NFA Letter must follow a prescribed format[167] and it must contain detailed information about the property, the remediation process, the contaminants at the site, any use or deed restrictions, and compliance with applicable standards.[168] Copies of pertinent documents must be a part of the NFR Letter.[169]

If a volunteer wishes to receive a covenant not to sue from the OEPA, the Certified Professional must submit the original NFA Letter to the Director of that agency.[170] A covenant not to sue releases the volunteer from all civil liability to the State of Ohio, except for claims for natural resource damages or CERCLA costs incurred by Ohio in connection with the property.[171] This release remains effective so long as the property continues to comply with the applicable standards upon which the issuance of the covenant was based.[172]

The covenant not to sue would not protect volunteers from liability under federal environmental laws.[173] Ohio is negotiating an MOA with the U.S. EPA concerning its Voluntary Action Program. Until this MOA is final, however, volunteers may wish to negotiate PPAs or comfort letters with the U.S. EPA to limit their federal liability exposure.[174]

There are certain obstacles to the issuance of a covenant not to sue. For instance, a fee is charged for the issuance and for various other documents and services under the Ohio program.[175] Further, the OEPA must comply with certain time deadlines and other restrictions guiding the issuance of covenants not to sue.[176] The Director of the OEPA must deny a covenant not to sue if the NFA Letter does not comply with VAP

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[166] OHIO REV. CODE ANN. § 3746.28(C).

[167] OHIO REV. CODE ANN. § 3746.11; OHIO ADMIN. CODE § 3745-300-13(H).

[168] OHIO REV. CODE ANN. § 3746.11; OHIO ADMIN. CODE § 3745-300-13(E).

[169] OHIO ADMIN. CODE § 3745-300-13(E).

[170] OHIO REV. CODE ANN. §§ 3746.11-.12.

[171] OHIO REV. CODE ANN. § 3746.12(A)(1).

[172] OHIO REV. CODE ANN. § 3746.12(B)(1) (Anderson 1996). The covenant may not be revoked due to later modifications of the applicable cleanup standards.

[173] *See, e.g.* OHIO REV. CODE ANN. § 3746.02 (Anderson 1996).

[174] *See supra* notes 100-105, 128 and accompanying text.

[175] OHIO REV. CODE ANN. § 3746.13(C) (Anderson 1996); OHIO ADMIN. CODE § 3745-300-03 (Anderson 1997).

[176] OHIO REV. CODE ANN. § 3746.13 (Anderson 1996). The deadlines vary from 30 days to 90 days, depending upon the involvement of consolidated standards permits or engineering and institutional controls.

requirements, if the NFA Letter was submitted fraudulently, or if the remedy identified in the NFA Letter does not protect public health and safety and the environment.[177]

Once a covenant not to sue has been issued, Ohio publishes a notice in the local newspaper.[178] The covenant, the supporting NFA Letter, and any use restrictions on the property must be recorded in the same manner as a deed[179] and filed in the county recorder's office in the county in which the property is located.[180] These restrictions and documents run with the property and are transferable.

The Ohio program requires the Director of the OEPA to conduct audits on properties that receive NFA Letters to ascertain compliance with applicable standards.[181] VAP sites involving institutional controls that restrict the use of the property are subject to inspection requirements.[182] If the audit reveals that a property no longer complies with the applicable standards, the Director must give the covenant-holder a period of time to bring the property into compliance.[183] If the covenant-holder violates the compliance schedule, the covenant not to sue may be revoked.[184] Non-compliance with the Ohio VAP not only may result in the revocation of a covenant not to sue, it also may result in substantial penalties.[185] Civil penalties of up to $25,000 per day can be imposed for submitting materially false or inaccurate information or data or for violating a consolidated standards permit.[186] Criminal prosecutions also are possible for knowing, or reckless violations.[187]

The Ohio program contains a very interesting cost recovery provision.[188] Under this provision, volunteers may recover in a civil action the costs of conducting a voluntary action[189] from the owners and

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[177] OHIO REV. CODE ANN. § 3746.12(C) (Anderson 1996).

[178] *See* GAO REPORT, *supra* note 97, at 59.

[179] OHIO REV. CODE ANN. § 3746.14 9 (Anderson 1996).

[180] *Id.*

[181] OHIO REV. CODE ANN. § 3746.17 (Anderson 1996); OHIO ADMIN. CODE § 3745-300-14 (Anderson 1997). The Director must also audit the Certified Professional and the Certified Laboratory to ensure their performance and continuing qualifications. *Id. See also* GAO REPORT, *supra* note 97, at 57.

[182] *See* OHIO REV. CODE ANN. § 3746.17.1 (Anderson 1996). *See also* GAO REPORT, *supra* note 97, at 57.

[183] OHIO REV. CODE ANN. § 3746.12(B) (Anderson 1996); OHIO ADMIN. CODE § 3745-300-14(O)(3)-(5) (Anderson 1997).

[184] *See supra* note 184.

[185] OHIO REV. CODE ANN. §§ 3746.22, .99 (Anderson 1996).

[186] *Id.*

[187] *Id.*

[188] OHIO REV. CODE ANN. § 3746.23 (Anderson 1996).

[189] See OHIO REV. CODE ANN. § 3746.23(A) (Anderson 1996) for a list of the types of "costs" a volunteer can recover.

operators of the property who caused or contributed to a release of a hazardous substance.[190] Liability under this provision is based upon the respective degrees of responsibility of the owners, operators, and others. Factors for the allocation of such responsibility include the nature and amount of hazardous substances stored, treated, disposed of, used, and released by each party; the length of time that each party owned or operated the property; each party's history of environmental compliance in the use and operation of the property; and any other appropriate factors.[191] Liability under the VAP cost recovery provision is explicitly made retroactive,[192] and contractual allocation of this liability for cleanup costs is expressly permitted.[193]

The Ohio program is a thorough and thoughtful response to that state's brownfields crisis. Commentators have hailed the VAP statute as "praiseworthy" and contend that it goes a long way toward counteracting the chilling effect of CERCLA.[194] The program's guidance and procedures certainly offer some much needed certainty to the befuddling brownfields issue.

c. Pennsylvania

To solve the problem of unused and abandoned industrial brownfields sites, Pennsylvania created an innovative Land Recycling Program (LRP). This program began in 1995 with the enactment of a three-bill package;[195] the accompanying regulations recently were published.[196] The Pennsylvania program represents a fundamental shift

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[190] OHIO REV. CODE ANN. § 3746.23(B) (Anderson 1996). This section provides several exemptions from liability, including, under certain circumstances: innocent parties; state and political subdivisions thereof; an owner or operator who caused or contributed to a release of petroleum at the property; and certain holders, fiduciaries, or trustees. *See* OHIO REV. CODE ANN. § 3746.23(G) (Anderson 1996). The Ohio VAP statute grants additional liability protection to public utilities, including a person engaged in the storage and transportation of natural gas, *see* OHIO REV. CODE ANN. § 3746.24 (Anderson 1996); the state and its officers and employees, *see* OHIO REV. CODE ANN. § 3746.25 (Anderson 1996); any person protecting a security interest, *see* OHIO REV. CODE ANN. § 3746.26 (Anderson 1996); and fiduciaries or trustees, *see* OHIO REV. CODE ANN. § 3746.27 (Anderson 1996).

[191] OHIO REV. CODE ANN. § 3746.23(D) (Anderson 1996).

[192] OHIO REV. CODE ANN. § 3746.23(E) (Anderson 1996).

[193] OHIO REV. CODE ANN. § 3746.23(F) (Anderson 1996). This subsection, however, states that any such contractual cost does not affect the parties' liabilities or obligations to Ohio.

[194] *See* Michel, *supra* note 25, at 464.

[195] PA. STAT. ANN. tit. 35, §§ 6026.101-.908 (West Supp. 1997) [hereinafter Act 2], PA. STAT. ANN. tit. 35, §§ 6027.1-.14 (West Supp. 1997) [hereinafter Act 3], PA. STAT. ANN. tit. 35, §§ 6028.1-.5 (West Supp. 1997) [hereinafter Act 4].

[196] 25 PA. CODE § 250. The final rule making was considered at the June 17, 1997 meeting of the Pennsylvania Environmental Quality Board. *See* Pennsylvania DEP Homepage, http://www.dep.state.pa.us.

in the Commonwealth's environmental policy and philosophy. Like the Ohio VAP, Pennsylvania's legislation is very detailed, and it adopts a common sense approach for achieving desired environmental results.

The LRP includes three bills: (1) Act II, the Land Recycling and Environmental Remediation Standards Act;[197] (2) Act III, the Economic Development Agency, Fiduciary and Lender Environmental Liability Protection Act;[198] and (3) the Industrial Sites Environmental Assessment Act.[199] The four cornerstones of the LRP are uniform cleanup standards based on health and environmental risks, standardized review procedures, releases from liability, and financial assistance.[200]

Pennsylvania's LRP applies to any site where remediation is either voluntarily conducted or is required by law.[201] Under Act II of the LRP, any person who proposes or is required to remediate a contaminated property and who seeks liability protection must select and attain compliance with one or more of three cleanup standards: background standards, statewide health standards, or site-specific standards.[202] A person may select any one of these standards or may use any combination thereof to implement a site remediation.[203] There also are separate provisions for eligible "Special Industrial Areas."[204]

A person selecting the background cleanup standard must meet the background concentration for each regulated substance in each environmental medium, such as soil or groundwater.[205] "Background" is defined as the concentration of a regulated substance that is present at a site, "but is not related to the release of regulated substances at the site."[206] Background levels may be demonstrated by an analysis of various environmental media in and around the site or through the use of background default values.[207] A person might select background cleanup

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[197] *See supra* note 195.

[198] *See supra* note 195.

[199] *See supra* note 195.

[200] *See* PA. DEP'T ENVTL. PROTECTION, LAND RECYCLING PROGRAM FACT SHEET 1 - OVERVIEW OF THE LAND RECYCLING PROGRAM (1995).

[201] *See* PA. STAT. ANN. tit. 35, § 6026.106(a) (West Supp. 1997) (citing other Pennsylvania environmental cleanup laws); 25 PA. CODE § 250.2. *See also* PA. STAT. ANN. tit. 35, § 6026.904 (West Supp. 1997) (detailing Act 2's relationship to other federal and state laws); 25 PA. CODE § 250.10; PA. DEP'T ENVTL. PROTECTION, TECHNICAL MANUAL [hereinafter TECHNICAL MANUAL] & Supplement to the Technical Manual [hereinafter SUPP.].

[202] PA. STAT. ANN. tit. 35, § 6026.301(a) (West Supp. 1997); 25 PA. CODE § 250.2.

[203] PA. STAT. ANN. tit. 35, § 6026.301(b) (West Supp. 1997); 25 PA. CODE § 250.2(b).

[204] PA. STAT. ANN. tit. 35, §§ 6026.305, 502 (West Supp. 1997); 25 PA. CODE §§ 250.501-.503.

[205] PA. STAT. ANN. tit. 35, § 6026.302(a) (West Supp. 1997).

[206] PA. STAT. ANN. tit. 35, § 6026.103 (West Supp. 1997).

[207] *See* PA. STAT. ANN. tit. 35, § 6026.302(b)(1) (West Supp. 1997). *See also* TECHNICAL MANUAL & SUPP.

standards in areas of historic contamination to avoid the remediation of off-property effects.

To initiate a background standard cleanup, a notice of intent to remediate must be submitted to the Pennsylvania Department of Environment Protection (PaDEP).[208] The notice should include a brief description of the location of the site, a listing of contaminants involved, a description of the future use of the site, and the proposed remediation measures.[209] The PaDEP will publish an acknowledgment noting receipt of this notice in the Pennsylvania Bulletin.[210] A copy of the notice of intent to remediate also must be provided to the municipality in which the site is located and a summary of the notice must be published in a local newspaper.[211]

Regarding the cleanup process, background standards generally are met through the use of treatment and removal technologies. Engineering and institutional controls such as fencing or future land use restrictions may not be used to attain background levels.[212]

When the cleanup is concluded, a final report demonstrating attainment of the background standard must be submitted to the PaDEP.[213] The appropriate fee must accompany the report.[214] The report should describe, as appropriate, the procedures and conclusions of the site investigation, the basis for selecting the environmental media of concern, the removal or decontamination procedures, and the sampling methodology and the analytical results that demonstrate background attainment.[215] Notice of the submission of the final report to the PaDEP must be sent to the relevant municipality and must be published in the

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[208] PA. STAT. ANN. tit. § 6026.302(e)(1) (West Supp. 1997); 25 PA. CODE § 250.5; TECHNICAL MANUAL & SUPP.

[209] PA. STAT. ANN. tit. 35, § 6026.302(h)(1)(i) (West Supp. 1997); TECHNICAL MANUAL & SUPP. (The Technical Manual and Supplement contain a sample notice of intent to remediate with instructions.).

[210] PA. STAT. ANN. tit. 35, § 6026.302(h)(1)(i) (West Supp. 1997).

[211] PA. STAT. ANN. tit. 35, § 6026.302(h)(1)(ii) (West Supp. 1997); TECHNICAL MANUAL & SUPP. The Technical Manual and Supp. contain a "Municipal/Public Notice Confirmation" form for remediators to complete and include a newspaper notification sample. *Id.*

[212] PA. STAT. ANN. tit. 35, § 6026.302(b)(4) (West Supp. 1997). However, institutional controls may be used to maintain the background standards after remediation occurs. *Id. See also* 25 PA. CODE § 250.204(g); TECHNICAL MANUAL & SUPP.

[213] PA. STAT. ANN. tit. 35, §§ 6026.302(b), .302(e) (West Supp. 1997); 25 PA. CODE §§ 250.204, .701-.708; TECHNICAL MANUAL & SUPP. If the final report fails to demonstrate attainment of background, the PaDEP may require additional remediation or the person may select an alternative cleanup standard. *See* PA. STAT. ANN. tit. 35, § 6026.302(c) (West Supp. 1997); TECHNICAL MANUAL & SUPP.

[214] PA. STAT. ANN. tit. 35, § 6026.703(a)(1) (West Supp. 1997); 25 PA. CODE § 250.7.

[215] PA. STAT. ANN. tit. 35, § 6026.302(b)(2) (West Supp. 1997); 25 PA. CODE §§ 250.204, .701-.708; TECHNICAL MANUAL & SUPP.

area newspaper and in the Pennsylvania Bulletin.[216] The PaDEP has 60 days to review the report and it will publish a notice of its final action on the report in the Pennsylvania Bulletin.[217]

Persons demonstrating compliance with the background standard for all regulated substances will not be subject to the Pennsylvania statutory deed acknowledgment requirements concerning hazardous waste disposal.[218] Further, an existing acknowledgment in the deed of a property achieving background may be removed.[219]

A cleanup under the statewide health standard must attain medium-specific concentration (MSCs) for regulated substances or background, if the background standard is numerically greater.[220] These MSCs, which appear in the LRP regulations,[221] were established with reference to existing federal and state health-based numerical standards for residential and nonresidential use and to health advisory levels.[222] These statewide standards are no more stringent than those adopted by the federal government.[223]

Persons utilizing the statewide health standards must first submit a notice of intent to remediate to the PaDEP. Like the notice for background standards, this document should briefly describe the location of the site, the relevant contaminant, the intended future use of the property, and the proposed remediation measures.[224] The PaDEP shall acknowledge the receipt of this notice in the Pennsylvania Bulletin.[225]

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[216] PA. STAT. ANN. tit. 35, § 6026.302(e)(2) (West Supp. 1997); TECHNICAL MANUAL & SUPP. A sample newspaper notification and a copy of a "Municipal/Public Notice Confirmation" form are included in the Technical Manual and Supplement. *Id.* No prior notice of any sort is required to be made or published if the person conducting the remediation submits the final report demonstrating attainment of the background standard within 90 days of a release occurring after July 18, 1995. *See* PA. STAT. ANN. tit. 35, § 6026.302(e)(4) (West Supp. 1997); TECHNICAL MANUAL & SUPP.

[217] PA. STAT. ANN. tit. 35, § 6026.302(e)(3) (West Supp. 1997); 25 PA. CODE § 250.8; TECHNICAL MANUAL & SUPP. If the PaDEP does not notify the person submitting the report of substantive deficiencies within the statutory 60-day period, the final report will be deemed approved. PA. STAT. ANN. tit. 35, § 6026.302(e)(3); TECHNICAL MANUAL & SUPP.

[218] *See* PA. STAT. ANN. tit. 35, § 6026.302(d) (West Supp. 1997); TECHNICAL MANUAL & SUPP. *See also supra* note 66.

[219] PA STAT. ANN. tit. 35, § 6026.302(d); TECHNICAL MANUAL & SUPP.

[220] PA. STAT. ANN. tit. 35, § 6026.303 (West Supp. 1997); 25 PA. CODE §§ 250.2, .301-.312; TECHNICAL MANUAL & SUPP.

[221] 25 PA. CODE Appendix A, Tables 1-4, 6-7.

[222] PA. STAT. ANN. tit. 35, § 6026.303(a) (West Supp. 1997).

[223] *Id. See also* TECHNICAL MANUAL & SUPP.

[224] PA. STAT. ANN. tit. 35, § 6026.303(h)(1)(i) (West Supp. 1997); 25 PA. CODE § 250.5; TECHNICAL MANUAL & SUPP. The Technical Manual and Supplement contain a notice of intent to remediate form. *Id.*

[225] PA. STAT. ANN. tit. 35, § 6026.303(h)(1)(i) (West Supp. 1997); TECHNICAL MANUAL & SUPP.

The municipality in which the site is located must also receive a copy of the notice of intent to remediate and a summary of the notice must be published in a local newspaper.[226]

The remediator then may begin the cleanup. Like background, statewide health is typically remediated through the use of treatment or removal technologies. Soils must be cleaned to a depth of fifteen feet.[227] Institutional and engineering controls may not be used to attain the statewide health standard, but these controls may be used to maintain the standards after remediation.[228] Care must be taken during a statewide health standard cleanup to ensure that any discharges to surface water or any air emissions comply with applicable laws and regulations.[229]

A final report that documents attainment of the statewide health standard must be submitted with the proper fee to the PaDEP.[230] The report should include a description of the site investigation process and conclusion, the cumulative effects of the contaminants in environmental media, the basis for selecting the environmental media of concern and the residential or nonresidential exposure factors, the removal and treatment procedures, the sampling methodology, and analytical results.[231] The local municipality must be notified that the final report has been submitted, and this final submission also must be noticed in the Pennsylvania Bulletin and in the neighborhood newspaper.[232] The PaDEP must review the final report within 60 days of its receipt and a notice of the agency's final actions on the report will appear in the

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[226] PA. STAT. ANN. tit. 35, § 6026.303(h)(1)(ii) (West Supp. 1997); TECHNICAL MANUAL & SUPP. (samples included).

[227] PA. STAT. ANN. tit. 35, § 6026.303(b)(4)-(5) (West Supp. 1997); 25 PA. CODE § 250.305; TECHNICAL MANUAL & SUPP.

[228] PA. STAT. ANN. tit. 35, § 6026.303(e)(3) (West Supp 1997); 25 PA. CODE §§ 250.312, .708; TECHNICAL MANUAL & SUPP.

[229] PA. STAT. ANN. tit. 35, § 6026.303(b)(1),(2) (West Supp. 1997); 25 PA. CODE § 250.706; TECHNICAL MANUAL & SUPP.

[230] PA. STAT. ANN. tit. 35, § 6026.303(e)(2) (West Supp. 1997); 25 PA. CODE §§ 250.312, .701-.708; TECHNICAL MANUAL & SUPP. If attainment of statewide health standards is not demonstrated, the PaDEP may require additional remediation or the person may select background or site-specific standards. *See* PA. STAT. ANN. tit. 35, § 6026.303(f) (West Supp. 1997). *See also* PA. STAT. ANN. tit. 35, § 6026.703(a)(1) (West Supp. 1997) (fees); 25 PA. CODE § 250.7; TECHNICAL MANUAL & SUPP.

[231] PA. STAT. ANN. tit. 35, § 6026.303(e)(2) (West Supp. 1997); 25 PA. CODE §§ 250.312, .701-.708; TECHNICAL MANUAL & SUPP.

[232] PA. STAT. ANN. tit. 35, § 6026.303(h)(2) (West Supp. 1997); TECHNICAL MANUAL & SUPP. (sample notifications and a proof of publication form). No prior notice of any sort is required to be made or published if the person conducting the remediation submits the final report demonstrating attainment of the background standard within 90 days of a release occurring after July 18, 1995. *See* PA. STAT. ANN. tit. 35, § 6026.303(h)(4) 9West Supp. 1997); TECHNICAL MANUAL & SUPP.

Pennsylvania Bulletin.[233] Persons demonstrating compliance with the statewide health standards based upon *residential* exposure factors will not be subject to Pennsylvania's hazardous waste deed acknowledgment requirements.[234]

When a site-specific standard is selected as the remediation target, the LRP process is more involved. Cleanup levels are developed specifically for an individual site based upon the contaminants involved and the exposure factors and conditions unique to the property.[235]

A site-specific remediation begins with the submission of a notice of intent to remediate to the PaDEP, which identifies the location of the property, a listing of relevant contaminants, and the proposed remediation remedies.[236] A copy of this notice also must be provided to the local municipality and it must be published in the Pennsylvania Bulletin and an area newspaper.[237] Subsequently, there is a 30-day public comment period, during which the municipality can request to be involved in the development of the remediation and reuse plans for the site.[238] If requested by the municipality, the remediator must craft a public involvement program to involve the public in the cleanup process.[239]

After the comment period has closed, the remediator must complete a remedial investigation report, a risk assessment report, and a cleanup plan.[240] These reports and plans should address any public

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[233] PA. STAT. ANN. tit. 35, § 6026.303(h)(3) (West Supp. 1997); 25 PA. CODE § 250.8; TECHNICAL MANUAL & SUPP. If, within the 60 days, the PaDEP does not notify the remediator of substantive deficiencies, the report shall be deemed approved.

[234] *See* PA. STAT. ANN. tit. 35, § 6026.303(g) (West Supp. 1997); TECHNICAL MANUAL & SUPP. *See also supra* notes 66 and 219. These requirements will apply when nonresidential statewide health standards were utilized.

[235] PA. STAT. ANN. tit. 35, § 6026.304(a)-(f) (West Supp. 1997); 25 PA. CODE §§ 250.2, .401-.411; TECHNICAL MANUAL & SUPP. If the site-specific standard is numerically less than background, the background standard may be used. *See* PA. STAT. ANN. tit. 35, § 6026.304(h) (West Supp. 1997); TECHNICAL MANUAL & SUPP.

[236] PA. STAT. ANN. tit. 35, § 6026.304(n)(1)(i) (West Supp. 1997); 25 PA. CODE § 250.5; TECHNICAL MANUAL & SUPP. (sample included).

[237] PA. STAT. ANN. tit. 35, § 6026.304(n)(1)(i); 25 PA. CODE §§ 250.5-.6; TECHNICAL MANUAL & SUPP.

[238] PA. STAT. ANN. tit. 35, § 6026.304(n)(1)(ii); 25 PA. CODE §§ 250.5-.6; TECHNICAL MANUAL & SUPP.

[239] PA. STAT. ANN. tit. 35, §§ 6026.304(n)(1)(ii), (o); 25 PA. CODE § 250.6; TECHNICAL MANUAL & SUPP. Public involvement measures may include public meetings and roundtable discussions, the formation of a community-based group, retention of independent, third parties to perform mediation, or other, similar actions. *Id.*

[240] PA. STAT. ANN. tit. 35, §§ 6026.304(a), .304(1) (West Supp. 1997); 25 PA. CODE §§ 250.5; 401, .405, .408-410, .601-.607; TECHNICAL MANUAL & SUPP.

comments that were received during the comment period.[241] The remediator may submit these documents with the prescribed fees to the PaDEP either individually or simultaneously.[242] Further, a notice summarizing the plans and the findings of the reports must be furnished to the local municipality and published in the local paper.[243] The PaDEP has a 90-day review deadline for these reports.[244]

A site-specific cleanup may involve a combination of remediation activities. Standard treatment and removal techniques may be utilized, and institutional or engineering controls and other innovative measures also may be permissible.[245] Any discharge into surface water or any air emission that occurs during or after the site-specific cleanup process must comply with all applicable laws and regulations.[246]

When the site-specific remedy has been completed, a final report shall be submitted to the PaDEP with the required fee.[247] The remediator must provide a summary of the report to the municipality and the summary must be published in the area newspaper.[248] There is a 90-day PaDEP review period for the final report, and the agency will publish a notice of its final actions on the report in the Pennsylvania Bulletin.[249] Site-specific cleanup locations are subject to Pennsylvania's deed acknowledgment requirements.[250]

Pennsylvania's Act II contains separate provisions to encourage

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[241] PA. STAT. ANN. tit. 35, § 6026.304(n)(2)(i) (West Supp. 1997); 25 PA. CODE §§ 250.408-.410; TECHNICAL MANUAL & SUPP.

[242] *See* PA. STAT. ANN. tit. 35, §§ 6026.304(1)(5), .304(n)(3) (West Supp. 1997). *See also* PA. STAT. ANN. tit. 35, § 6026.703(a)(2) (fees); 25 PA. CODE § 250.7; TECHNICAL MANUAL & SUPP.

[243] PA. STAT. ANN. tit. 35, § 6026.304(n)(2)(i); 25 PA. CODE § 250.5, .6; TECHNICAL MANUAL & SUPP.

[244] PA. STAT. ANN. tit. 35, § 6026.304(n)(2)(ii), (n)(3); TECHNICAL MANUAL & SUPP. If the PaDEP does not complete its review in the 90-day period, the report(s) or plan(s) under review is deemed approved. *Id.*

[245] PA. STAT. ANN. tit. 35, § 6026.304(i); 25 PA. CODE § 250.411; TECHNICAL MANUAL & SUPP.

[246] PA. STAT. ANN. tit. 35, § 6026.304(g) (West Supp. 1997); 25 PA. CODE § 250.706; TECHNICAL MANUAL & SUPP.

[247] *See* PA. STAT. ANN. tit. 35, § 6026.304(l)(4); 25 PA. CODE §§ 250.411, .701-.708; TECHNICAL MANUAL & SUPP. *See also* PA. STAT. ANN. tit. 35, § 6026.703(a)(2) (West Supp. 1997) (fees); 25 PA. CODE § 250.7; TECHNICAL MANUAL & SUPP.

[248] PA. STAT. ANN. tit. 35, § 6026.304(n)(2)(i); TECHNICAL MANUAL & SUPP. (samples and verification form included).

[249] PA. STAT. ANN. tit. 35, § 6026.304(n)(2)(ii); 25 PA. CODE § 250.8; TECHNICAL MANUAL & SUPP. The report will be deemed approved if the PaDEP does not respond with deficiencies within the allotted 90 days. PA. STAT. ANN. tit. 35, § 6026.304(n)(2)(ii); TECHNICAL MANUAL & SUPP.

[250] *See* PA. STAT. ANN. tit. 35, § 6026.304(m) (West Supp. 1997); TECHNICAL MANUAL & SUPP. *See also supra* notes 66, 219, and 235.

the redevelopment of Special Industrial Areas.[251] A Special Industrial Area is property used for industrial activities where there is no financially viable responsible person to remediate contamination or is land located within a state-designated enterprise zone.[252] In order to take advantage of the Special Industrial Area provisions, the redeveloper must be a person who did not cause or contribute to contamination on the property.[253]

The regular notice of intent to remediate must be filed with the PaDEP and with the area municipality. Publication is required in the Pennsylvania Bulletin and a local newspaper.[254] A 30-day public comment period follows. At the request of the municipality, a public involvement program plan must be developed and implemented by the redeveloper.

The next step is to conduct a baseline remedial investigation on the property based upon a PaDEP-approved work plan.[255] The baseline report will document existing contamination on the site and describe proposed cleanup measures. This report also should address the existing or potential public benefits of the use or reuse of the property for employment opportunities, housing, open space, recreation, or other use.[256]

A Special Industrial Area cleanup may use treatment, storage, containment, control methods, or any combination thereof.[257] A qualified redeveloper is only responsible for remediation of any immediate, direct, or imminent threats to public health or the environment, such as drummed waste that would prevent the property from being used for its intended purpose.[258] The redeveloper is not responsible for the remediation of any contamination identified in the baseline environmental report and would have no obligations regarding

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[251] PA STAT. ANN. tit. 35, §§ 6026.305, 502 (West Supp. 1997). *See also* 25 PA. CODE §§ 250.501-.503; TECHNICAL MANUAL & SUPP.

[252] PA. STAT. ANN. tit. 35, § 6026.305(a) (West Supp. 1997); 25 PA. CODE § 250.502; TECHNICAL MANUAL & SUPP.

[253] *Id.*

[254] PA. STAT. ANN. tit. 35, § 6026.305(c)(1) (West Supp. 1997); 25 PA. CODE §§ 250.5-.6, .501(b); TECHNICAL MANUAL & SUPP.

[255] PA. STAT. ANN. tit.35, § 6026.305(b) (West Supp. 1997); 25 PA. CODE § 250.503; TECHNICAL MANUAL & SUPP.

[256] *Id.*

[257] TECHNICAL MANUAL & SUPP. *See also* PA. DEP'T ENVTL. PROTECTION, LAND RECYCLING FACT SHEET 7 - SPECIAL INDUSTRIAL AREAS (1995).

[258] PA. STAT. ANN. tit. 35, § 6026.502(b)(1) (West Supp. 1997); TECHNICAL MANUAL & SUPP.

off-property contamination.[259]

The completed baseline environmental report must be submitted to the PaDEP for review. That agency has 90 days to determine whether the report adequately identifies the environmental hazards and risks posed by the site.[260] As part of its review, the PaDEP must consider any timely-received public comments.[261] Based upon the approved baseline report, the PaDEP and the redeveloper will enter into an agreement that outlines cleanup liability for the Special Industrial Area. Persons entering into such an agreement with the PaDEP are subject to Pennsylvania's deed acknowledgment requirements.[262]

Regardless of the cleanup standard that a developer selects under Act II, state and local permits or permit revision will not be required for any LRP remediation activities undertaken entirely on the site.[263] A permit waiver may be available for otherwise applicable requirements in the following circumstances: (1) Compliance with a requirement will result in greater risk to human health, safety, and welfare and the environment than alternative options; (2) compliance with a requirement will substantially interfere with natural or artificial structures or features; (3) the proposed remedial action will attain a standard of performance equivalent to that mandated under the applicable requirement; and (4) compliance with a requirement will not provide a cost-effective remedial action.[264] The PaDEP may not waive the Act II remediation standards.[265]

Pennsylvania's LRP offers broad liability protection for brownfields redevelopers. Under Act II, any person demonstrating compliance with any of Act II's remediation standards will be relieved of further liability for the remediation of the site under state law.[266] The

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[259] PA. STAT. ANN. tit. 35, § 6026.502(b)(2) (West Supp. 1997); TECHNICAL MANUAL & SUPP. *See also* PA. DEP'T ENVTL. PROTECTION, LAND RECYCLING FACT SHEET 7 - SPECIAL INDUSTRIAL AREAS, *supra* note 257. The redeveloper is not relieved of liability for later contamination that it caused at the site. *See* .PA. STAT. ANN. tit. 35, § 6026.502(b)(3) (West Supp. 1997).

[260] PA. STAT. ANN. tit. 35, § 6026.305(d) (West Supp. 1997); 25 PA. CODE § 250.503; TECHNICAL MANUAL & SUPP. If the PaDEP does not respond within 90 days, the report is considered approved.

[261] PA. STAT. ANN. tit. 35, § 6026.305(d).

[262] PA. STAT. ANN. tit. 35, § 6026.305(g) (West Supp. 1997); TECHNICAL MANUAL & SUPP.. *See also supra* notes 66, 219, 235, and 251.

[263] PA. STAT. ANN. tit. 35, § 6026.902(a) (West Supp. 1997); TECHNICAL MANUAL & SUPP.

[264] PA. STAT. ANN. tit. 35, § 6026.902(b) (West Supp. 1997); TECHNICAL MANUAL & SUPP.

[265] *Id.*

[266] PA. STAT. ANN. tit. 35, § 6026.501(a) (West Supp. 1997); TECHNICAL MANUAL & SUPP. This protection does not apply to contamination later caused on the property. *See* PA. STAT. ANN. tit. 35, § 6026.504; TECHNICAL MANUAL & SUPP.

redeveloper also will not be subject to citizen suits or other contribution actions brought by responsible parties.[267] This release from cleanup liability covers: (1) The current or future owner of the site or any other person who participated in the remediation of the site; (2) a person who develops or otherwise occupies the site; (3) a successor or assign of any person to whom the liability protection applies; and (4) a public utility to the extent the utility performs activities on the site.[268] Persons conducting environmental assessments or transaction screens on an LRP property also receive liability protection under Act II so long as they exercise due diligence.[269] Act III extends this state environmental liability protection to economic development agencies, lenders, and fiduciaries.[270] Under this Act, these entities may not be held liable for environmental contamination merely by virtue of owning property in the course of their protected relationships.

The Act II liability relief is subject to several "reopeners."[271] Additional remediation at an LRP site may be required if the PaDEP demonstrates that: (1) Fraud was committed in demonstrating attainment of a standard at the site if the fraud resulted in avoiding the need for further cleanup; (2) newly-identified contamination exceeds the site's remediation standards; (3) the remediation failed to meet one or a combination of the three standards; (4) the level of risk at the site is increased beyond the acceptable risk range due to substantial changes in exposure conditions, such as a change in land use or a change in exposure assumptions;[272] (5) institutional controls were utilized at a site not previously used for industrial purposes, and removal or treatment has become technically or economically feasible for the site.[273]

Further, Pennsylvania's liability release does not apply to federal environmental liability. The PaDEP, however, reports that it is negotiating a "Performance Partnership" with the U.S. EPA's Region III.[274] Under one provision of this agreement, the U.S. EPA reportedly would not initiate an action at an LRP site unless Pennsylvania requested

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[267] PA. STAT. ANN. tit. 35, § 6026.501(a); TECHNICAL MANUAL & SUPP.

[268] *Id.*

[269] PA STAT. ANN. tit. 35, § 6026.501(b) (West Supp. 1997).

[270] PA. STAT. ANN. tit. 35, § 6027.4-6 (West Supp. 1997).

[271] PA. STAT. ANN. tit. 35, § 6026.505 (West Supp. 1997); TECHNICAL MANUAL & SUPP.

[272] Any person who changes the use of the LRP property and causes the level of risk to increase shall be required to undertake additional cleanup measures. *See* PA. STAT. ANN. tit. 35, § 6026.505(4) (West Supp. 1997); TECHNICAL MANUAL & SUPP.

[273] PA. STAT. ANN. tit. 35, § 6026.505(1)-(5) (West Supp. 1997); TECHNICAL MANUAL & SUPP.

[274] *See* PA. DEP'T ENVTL. PROTECTION, PENNSYLVANIA'S LAND RECYCLING PROGRAM: SIX-MONTH PROGRESS REPORT (1996).

federal involvement.[275] To further minimize the potential for federal entanglement, a redeveloper also could approach the U.S. EPA concerning a PPA or a comfort letter for an LRP property.[276] Nor will Act II provide a defense to illegal activities.[277] Act II authorizes the PaDEP to use the enforcement and penalty provisions established under various other Pennsylvania environmental statutes to enforce the LRP.[278] Further, any person who willfully commits fraud to demonstrate attainment with an Act II standard will be subject to an additional $50,000 penalty or to imprisonment for not more than one year for each separate offense.[279]

The LRP includes several financial incentives to encourage participation in the program. The Industrial Land Recycling Fund was created to implement Act II.[280] Act II also establishes the Industrial Sites Cleanup Fund to provide financial assistance to persons who did not cause or contribute to the contamination on an LRP property.[281] Act IV, the Industrial Sites Environmental Assessment Act,[282] authorizes the Pennsylvania Department of Commerce to make grants to municipalities, local authorities, nonprofit economic development agencies, and similar agencies to conduct environmental assessments of industrial properties.[283] Act IV grants may also be used by eligible cities for environmental assessments and remediation of LRP sites.[284]

Pennsylvania's LRP has built a solid record of achievement since its establishment. Currently, there are approximately 201 sites participating in the program and remediation is complete at 100 of these sites.[285] This progressive program won the Innovations in Government Award from the Ford Foundation and the John F. Kennedy School of Government at Harvard University. It has dramatically improved the

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[275] *Id.*

[276] *See supra* notes 100-105,128, and 176 and accompanying text. *See also* PA. STAT. ANN. tit. 35, § 6026.904 (West Supp. 1997).

[277] PA. STAT. ANN. tit. 35, § 6026.905(b) (West Supp. 1997); TECHNICAL MANUAL & SUPP.

[278] *See* PA. STAT. ANN. tit. 35, § 6026.905(a) (West Supp. 1997) (listing the applicable Pennsylvania environmental statutes). The list includes, *inter alia*, the Clean Streams Law, PA STAT. ANN. tit. 35, §§ 691.1-.1001 (West 1997), the Hazardous Sites Cleanup Act, PA. STAT. ANN. TIT. 35, §§ 6020.101-.1305 (West 1997), and the Solid Waste Management Act, PA. STAT. ANN. tit. 35, § 6018.101-.1003 (West 1997).

[279] PA. STAT. ANN. tit. 35, § 6026.905(c) (West Supp. 1997).

[280] PA. STAT. ANN. tit. 35, § 6026.701 (West Supp. 1997).

[281] PA. STAT. ANN. tit. 35, § 6026.702 (West Supp. 1997); TECHNICAL MANUAL & SUPP.

[282] PA. STAT. ANN. tit. 35, § 6028.1-5 (West Supp. 1997).

[283] PA. STAT. ANN. tit. 35, § 6028.2(a)(1) (West Supp. 1997).

[284] PA. STAT. ANN. tit. 35, § 6028.2(a)(2) (West Supp. 1997).

[285] *See* GAO REPORT, *supra* note 97, at 18.

outlook for brownfields redevelopment in Pennsylvania.[286]

d. West Virginia

To preserve its pristine land and to redevelop existing industrial areas, the West Virginia Legislature enacted the Voluntary Remediation and Redevelopment Act (VRRA) in 1996.[287] Combining the elements of the Ohio and the Pennsylvania voluntary cleanup schemes, the VRRA and its implementing regulations[288] establish an administrative program to facilitate voluntary remediation and brownfields revitalization.

The VRRA applies to two types of property: (1) Any non-NPL site that is not subject to a unilateral enforcement order pursuant to certain federal and state laws, or (2) brownfields.[289] The term "brownfield" is defined in the VRRA as any industrial or commercial property which is abandoned or not being actively used by the owner as of July 1, 1996.[290] At non-brownfields sites, redevelopers whose gross negligence or willful misconduct created the release to be remediated may not take advantage of the VRRA.[291] As to brownfields properties, any development authority or person who did not cause or contribute to the contamination at the relevant brownfields site may participate in the West Virginia program.[292] These "innocent" brownfields redevelopers are eligible for loans to finance site assessments and other remediation activities.[293]

The VRRA contains several "pre-application" procedures that only apply to brownfields sites. Brownfields redevelopers must submit a notice of intent to remediate to the West Virginia Division of Environmental Protection (WVDEP).[294] This notice should include a brief description of the location of the site, a list of suspected contaminants, a statement regarding the proposed future use of the property, and a proposal for possible remediation measures.[295] The WVDEP will publish a summary of the notice in a publication of general

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[286] *See* THE ATLANTIC SITELINE, October 1997, at 1 (GEI Consultants, Inc., Atlantic Envtl. Div.).

[287] W. VA. CODE §§ 22-22-1 to 21 (Supp. 1996).

[288] W. VA. STATE R. § 60-3 (1997).

[289] W. VA. CODE §22-22-4,5 (Supp. 1996); W. VA. STATE R. § 60-3-3.

[290] W. VA. CODE § 22-22-2(b) (Supp. 1996); W. VA. STATE R. § 60-3-2.7 (1997).

[291] W. VA. CODE § 22-22-4(a) (Supp. 1996); W. VA. STATE R. § 60-3-3.1.e (1997).

[292] W. VA. CODE § 22-22-5; W. VA. STATE R. § 60-3-3.2.b (1997).

[293] W. VA. CODE §§ 22-22-5(b) (Supp. 1996), -6(b); W. VA. STATE R. § 60-3-15 (1997).

[294] W. VA. CODE § 22-22-17(a) (Supp. 1996); W. VA. STATE R. § 60-3-7 (1997).

[295] *Id.*

circulation.[296] A copy of the notice must be provided to the municipality and the county in which the brownfield is located and a summary of the notice published in an area newspaper.[297] There is a 30-day comment period on the notice, during which the public, the county, and the municipality can request to be involved in the development of the remediation and reuse plans for the site.[298] If requested by these parties or by the Director of the WVDEP, the brownfields redeveloper must develop and implement a public involvement program plan concerning the remediation project.[299]

The VRRA application process is generally the same for both brownfields and for non-brownfields properties. Any person who seeks to participate in the West Virginia program must submit an application and an application fee to the WVDEP.[300] The application should contain the applicant's name, address, and financial and technical capability to perform the voluntary remediation, a general description of the site; a site assessment establishing existing contamination of the property; and other information as requested by the Director of the WVDEP.[301] All of the information received by the WVDEP concerning a remediation is available to the public, unless the Director of the WVDEP certifies such information to be confidential.[302] For non-brownfields sites, a summary of the application must be published in a WVDEP publication of general circulation.[303]

The WVDEP Director has 45 days to act upon an application.[304] The Director may reject or return an application only if: (1) a federal requirement precludes the eligibility of the site; (2) the application is not complete and accurate; or (3) the site is ineligible under the provisions of the VRRA.[305] An applicant may appeal the Director's rejection of an application to the West Virginia Environmental Quality Board (WVEQB).[306]

If an application is accepted, the Director of the WVDEP and the applicant will enter into a Voluntary Remediation Agreement concerning

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[296] *Id.*
[297] *Id.*
[298] W. VA. CODE § 22-22-17(b) (Supp. 1996); W. VA. STATE R. § 60-3-7 (1997).
[299] *Id.*
[300] W. VA. CODE § 22-22-4(b), (c) (Supp. 1996); W. VA. STATE R. § 60-3-4 (1997).
[301] *Id.*
[302] W. Va. Code § 22-22-4(d) (Supp. 1996); W. Va. State R. § 60-3-4.4 (1997).
[303] W. Va. State R. § 60-3-7.9 (1997).
[304] W. VA. CODE § 22-22-4(g) (Supp. 1996); W. VA. STATE R. § 60-3-4.5 (1997).
[305] W. VA. CODE § 22-22-4(f) (Supp. 1996).
[306] W. VA. CODE § 22-22-4(h) (Supp. 1996); W. VA. STATE R. § 60-3-4.2.h (1997).

the remediation of the site.[307] This Agreement will provide for the services of a Licensed Remediation Specialist (LRS) to supervise the remediation; recovery of all of the WVDEP's costs; schedules for completion of the cleanup; a listing of all statutes and rules for which compliance is mandated, the terms and conditions of any work plans or reports, a listing of all technical standards to be applied in evaluating these work plans and reports, and a description of any engineering or institutional controls to be imposed on the property.[308] This Voluntary Remediation Agreement may only be modified or amended by mutual written consent of the parties, unless the WVDEP Director determines that there is an imminent threat to the public.[309] Once an Agreement has been executed, the WVDEP may not initiate an enforcement action against an applicant who is in compliance with the VRRA for the contamination that is the subject of the Agreement or for the activity that resulted in the contamination, unless there is an imminent public threat.[310]

All remediation work undertaken in accordance with the Voluntary Remediation Agreement must be supervised by a Licensed Remediation Specialist (LRS).[311] Apparently, LRS's may be either outside consultants or existing employees of the voluntary remediator.[312] To be certified as an LRS by the Director of the WVDEP, an individual must satisfy minimum educational and professional requirements and must pass a licensing examination.[313] It is the duty of the LRS to protect the safety, health, and welfare of the public and the LRS is responsible for any release of contaminants during VRRA remediation activities.[314] LRS's are subject to license suspension or revocation and other stiff penalties for violations of the VRRA and the implementing regulations.[315] However, these Specialists do receive limited liability

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[307] W. VA. CODE § 22-22-7 (Supp. 1996); W. VA. STATE R. § 60-3-6 & apps. 60-3A, -3B (1997) Appendices 60-3A and 60-3B of the regulations contain two sample Voluntary Remediation Agreements.

[308] W. VA CODE § 22-22-7(c) (Supp. 1996); W. VA. STATE R. § 60-3-6 & apps. 60-3A, -3B (1997). The Agreement also may include various other, specified terms, such as a mechanism for alternate dispute resolution between the parties. *Id.*

[309] W. VA. CODE § 22-22-7(d) (Supp. 1996); W. VA. STATE R. apps. 60-3A, -3B (1997).

[310] W. VA. CODE § 22-22-7(f) (Supp. 1996); W. VA. STATE R. § 60-3-6.8 (1997).

[311] W. VA. CODE § 22-22-7(b) (Supp. 1996); W. VA. STATE R. § 60-3-6.1 a (1997).

[312] W. VA. CODE § 22-22-1 (f)-(g) (Supp. 1996); W. VA. STATE R. § 60-3-5 (1997). The VRRA statute and regulations do not expressly state that existing employees may serve as LRS's for corporate voluntary remediators. However, the statute and the regulations speak in terms of, *inter alia*, the "employer" when discussing the duties of an LRS. *Id.*

[313] W. VA. CODE § 22-22-11(b)-(d) (Supp. 1996); W. VA. STATE R. § 60-3-5.

[314] W. VA. CODE § 22-22-11(f) (Supp. 1996); W. VA. STATE R. § 60-3-5.1.b (1997).

[315] W. VA. CODE §§ 22-22-11(j), 12 (Supp. 1996); W. VA. STATE R. § 60 3-5.5.a (1997).

protection under the West Virginia statute for contamination described in a Voluntary Remediation Agreement.[316]

Before the cleanup may begin, the voluntary remediator or the LRS must prepare and submit to the WVDEP Director the work plans and reports required by the Voluntary Remediation Agreement.[317] The Work Plan documents, which are to include the applicant's investigation, will describe the work to be performed, will set forth an implementation schedule, and will detail the verification sampling plan.[318] The Director must approve or disapprove these plans and reports within 30 days.[319]

When developing a VRRA remedial action plan, the planner must consider any reasonably anticipated future human exposures and significant adverse effects to ecological receptors.[320] Similar to the remediation process in Pennsylvania, the West Virginia volunteer shall select and attain compliance with one or a combination of risk-based standards: (1) De minimis standards; (2) uniform standards; and (3) site-specific standards.[321] The de minimis standards establish contaminant levels that pose no significant risks to human health or ecological receptors.[322] The uniform standards use pre-approved analytical methodologies to calculate compound-specific remediation levels.[323] The site-specific remediation standards are based upon a site-specific analysis of present contamination.[324] These standards apply to all contaminated media at a VRRA site, including soil and groundwater. Any of these remediation standards may be attained through a variety of remediation measures, such as treatment and removal technologies, natural attenuation, engineering and institutional controls, or other demonstrated techniques.[325]

If institutional and engineering controls are used, in whole or in part, to achieve a remediation standard, the WVDEP Director will direct that a land use covenant be recorded with the property's deed.[326] The covenant must state whether residential or nonresidential exposure factors were utilized for the remediation. It shall also contain a provision

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[316] W. VA. CODE § 22-22-18(a)(6) (Supp. 1996); W. VA. STATE R. § 60-3 12.3.b.2 (1997).
[317] W. VA. CODE § 22-22-8 (Supp. 1996); W. VA. STATE R. § 60-3-10 (1997).
[318] W. VA. STATE R. § 60-3-10.5 (1997).
[319] W. VA. STATE R. § 60-3-10.3.a (1997).
[320] W. VA. CODE § 22-22-39 (Supp. 1996); W. VA. STATE R. § 60-3-8 (1997).
[321] W. VA. STATE R. § 60-3-9 (1997).
[322] W. VA. STATE R. §§ 60-3-9.2, -9.5 (1997).
[323] W. VA. STATE R. §§ 60-3-9.3. -9 6 (1997).
[324] W. VA. STATE R. §§ 60-3-9.4, -9-7 (1997).
[325] W. VA. STATE R. §§ 60-3-9.8 (1997). W. VA. CODE § 22-22-14(a) (Supp. 1996).
[326] W. VA. CODE § 22-22-14(a) (Supp. 1996); W. VA. STATE R. § 60-3-13 (1997). The restrictions or other requirements described in the covenant will run with the land.

that relieves the site remediator and subsequent successors from liability and assigns that civil liability to the state as long as the property complies with the applicable standards in effect at the time the covenant was issued.[327] The owner or operator of a VRRA site is not relieved of permitting requirements for remediation work on the property. The remediation contractor is not required to obtain permits for the remediation activities, but the contractor must comply with all applicable state and federal laws regarding the transportation, treatment, storage, and disposal of contaminants generated as a result of the cleanup.[328]

When the VRRA site meets the applicable standards and all the work has been completed as contemplated in the Voluntary Remediation Agreement, the LRS will issue a final report to the voluntary remediator.[329] This completion report shall verify compliance, include supporting documentation, and describe institutional controls.[330]

Upon receipt of the final report, the volunteer may request a Certificate of Completion from the Director of the WVDEP.[331] The Director must, within 60 days, evaluate the final report.[332] If the Director agrees that the final report was properly issued, a Certificate of Completion shall be provided to the volunteer.[333] The Certificate will incorporate the Voluntary Remediation Agreement, the final report, and any required land use covenants or other institutional or engineering controls pertinent to the property, and it will state that the site meets the applicable standards.[334]

The Certificate of Completion also offers significant liability protection to qualified persons or entities. The Certificate will contain a provision relieving the volunteer remediator and subsequent successors

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[327] *Id.*

[328] W. VA. CODE § 22-22-19(d) (Supp. 1996). *See. e.g.*, W. VA. STATE R. § 60-3-11.3 (1997).

[329] W. VA. CODE § 22-22-13 (Supp. 1996); W. VA. STATE R. § 60-3-12 (1997). The LRS could issue a final report at an even earlier stage the site assessment reveals that all applicable standards are being met at the VRRA site. In this situation, it is possible that no remedial activities would be required. *See* W. VA. CODE § 22-22-13(a) (Supp. 1996); W. VA. STATE R. § 60-3-6.4 (1997).

[330] W. VA. STATE R. §§ 60-3-11.3 to 11.9 (1997).

[331] W. VA. CODE § 22-22-13(a) (Supp. 1996); W. VA. STATE R. § 60-3-12.1.c (1997). The statute and regulations also authorize the WV DEP Director to delegate the responsibility for issuance of a Certificate of Completion to an LRS. W. VA. CODE § 22-22-13(b) (Supp. 1996); W. VA. STATE R. § 60-3-12.4 (1997).

[332] W. VA. STATE R. § 60-3-12.2.a (1997).

[333] W. VA. CODE § 22-22- 13 (Supp. 1996); W. VA. STATE R. § 60-3-12.2.b (1997). If the Director does not agree that the final report was properly issued, a detailed, written notification must be forwarded to the applicant stating in detail the reasons why the report was not deemed properly issued. W. VA. STATE R. § 60-3-12.2.c (1997).

[334] W. VA. STATE R. § 60-3-12.3 (1997).

and assigns from all liability to the state as long as the site meets the applicable standards in effect at the time the Certificate was issued.[335] Further, the contamination identified in an approved Voluntary Remediation Agreement shall not be subject to citizen suits or contribution actions.[336] This relief from further cleanup liability extends to any qualified person demonstrating compliance with the applicable standards, whether by remediation or by site assessment.[337] Qualified persons include: (1) The current or future owner or operator of a VRRA site, including development authorities and fiduciaries who participated in the site remediation; (2) a person who develops or otherwise occupies the site; (3) a successor or assign of any person to whom the liability protection applies; (4) a public utility, including a utility engaged in the transportation and storage of natural gas, to the extent the public utility performs activities on a VRRA site; (5) a remediation contractor; (6) an LRS; and (7) a lender or developer who engages in the routine practices of commercial lending, including providing financial services, holding security interests, and performing workout practices, foreclosures, or the recovery of funds from the sale of a site.[338] The VRRA also limits the liability of persons properly conducting site assessments[339] and also contains a special provision limiting the responsibility of remediation contractors for contamination which occurred at a property prior to the contractor's work at the site.[340] West Virginia's liability protection does not extend to the federal environmental realm. VRRA remediators potentially could look to the U.S. EPA for PPAs or comfort letters as a safe harbor from federal liability.[341]

The VRRA lists several specific circumstances under which a site remediation may be reopened. The Director of the WVDEP might require additional remediation at a VRRA site if: (1) Fraud was committed in demonstrating attainment of an applicable standard at the site; (2) previously unknown contamination which exceeds the applicable standards is identified; (3) substantial changes in exposure conditions at the site have increased the risk significantly beyond the established level; (4) it has become technically and economically practicable to replace institutional or engineering controls with treatment

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[335] W. VA. CODE § 22-22-13(c) (Supp. 1996); W. VA. STATE R. § 60-3-12.3.b (1997).
[336] W. VA. CODE § 22-22-18(a) (Supp. 1996); W. VA. STATE R. § 60-3-12.3.b 2 (1997).
[337] *Id.*
[338] *Id.*
[339] W. VA. CODE § 22-22-18(b) (Supp. 1996); W. VA. STATE R. § 60-3-12 3.b.2 (1997).
[340] W. VA. CODE § 22-22-19(a)-(c), (e) (Supp. 1996).
[341] *See supra* notes 100-105, 128, 175, 276, and accompanying text.

and removal technologies; or (5) the remediation method failed.[342]

There are a variety of enforcement mechanisms in the VRRA. The WVDEP Director may inspect any remediation site to ascertain compliance.[343] At the site, the Director may take samples of wastes, soils, air, surface water, and groundwater, and can access all pertinent records.[344] The VRRA authorizes criminal sanctions for the disclosure of confidential information,[345] for LRS misconduct or fraudulent conduct by any person associated with a remediation,[346] and for the violation of a land use covenant.[347]

Conversely, the VRRA provides a number of affirmative defenses to persons who are alleged to have violated an environmental law or the common law equivalent while conducting a voluntary remediation. Those so accused may plead affirmatively: (1) An act of God; (2) an intervening act of a public agency; (3) migration from property owned by a third party; (4) actions taken or omitted in the course of rendering care, assistance, or advice in with the environmental laws or at the direction of the WVDEP; or (5) an act of a party who was not an agent of the accused.[348] If the alleged liability arises after foreclosure, a lender, fiduciary, developer, or development authority may plead that it exercised due care and took reasonable precautions, in addition to presenting any other available defenses.[349]

West Virginia has high expectations for its voluntary remediation program. According to a survey commissioned by the West Virginia Manufacturers Association, there are 267 premier sites in the state that once employed 20,000 people and that are now thought to be contaminated.[350] It is hoped that the VRRA will lure new investments to these brownfields sites.

III. CONCLUSION

As you can see, the brownfields problem certainly is a top priority for the nation's environmental community. It has attracted the

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[342] W. VA. CODE § 22-22-15 (Supp. 1996); W. VA. STATE R. § 60-3-16 (1997).

[343] W. VA. CODE § 22-22-10 (Supp. 1996). W. VA. STATE R. §§ 60-3 6.1.b.2-.3 (1997).

[344] W. VA. CODE § 22-22-10(c) (Supp. 1996).

[345] W. VA. CODE § 22-22-4(d) (Supp. 1996).

[346] W. VA. CODE § 22-22-12(c)-(d) (Supp. 1996). *See also* W. VA. STATE R. § 60-3-5.5 (1997).

[347] W. VA. CODE § 22-22-14(b) (Supp. 1996); W. VA. STATE R. § 60-3-14.1 (1997).

[348] W. VA. CODE § 22-22-20(a)-(e) (Supp. 1996).

[349] W. VA. CODE § 22-22-20(f) (Supp. 1996).

[350] *Recycling Business Locations*, CHARLESTON GAZETTE & DAILY MAIL, Sept. 8, 1996, at B1.

attention of key governmental policymakers at both the federal and state level and has forged a consensus amongst industry and environmental constituencies. Innovative, practical solutions to the brownfields crisis are being proposed and implemented all across the country and success stories abound.

Is brownfields redevelopment really worth all the fuss? As any good lawyer would respond, "It depends." But, as one prominent American lawyer so eloquently stated, "Our communities demand it. And our children deserve it."[351]

[351] White House Press Release, *supra* note 95.