
The Effectiveness of Pennsylvania's Act 2: Are Good Mechanics Enough?

Shari Shapiro*

I. INTRODUCTION

In *Going by the Book*, authors Eugene Bardach and Robert Kagan state, “A regulation requirement is unreasonable if compliance would not yield the intended benefits.”¹ In the hazardous waste contamination context, one of the difficulties facing environmental regulators is the multiple interlocking problems which may result in contradictory solutions—a regulation designed to achieve one set of intended benefits creates new, secondary problems.

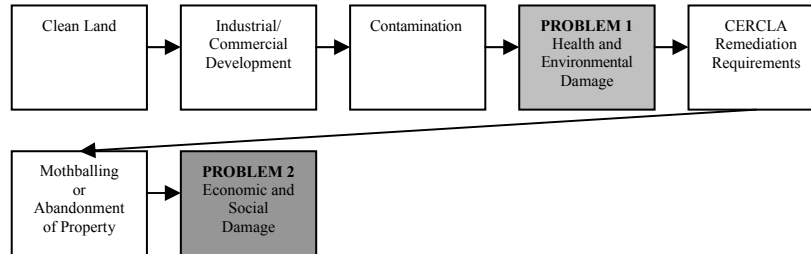
Through Federal CERCLA legislation and its state law analogs, the government tried to alleviate the health and environmental damage that resulted from properties contaminated with hazardous waste. However, by virtue of the structure of those regulations, contaminated properties in urbanized areas were either abandoned or simply left idle by their owners. The result was a secondary set of economic and social problems—most notably the degradation of cities and overdevelopment of uncontaminated property on the urban fringe—layered on top of the continued presence of the health and environmental threats. The concept can be easily

* Associate in the Environmental Department of Obermayer Rebmann Maxwell and Hippel, LLP in Philadelphia. J.D., University of Pennsylvania Law School, 2005, with a certificate in Law and Policy from the Wharton School of Business; B.A., Development Studies and Modern European History, Brown University, 1997, *Phi Beta Kappa*, *Magna Cum Laude*, Honors in Development Studies.

¹ EUGENE BARDACH & ROBERT A. KAGAN, *GOING BY THE BOOK* 7 (1982).

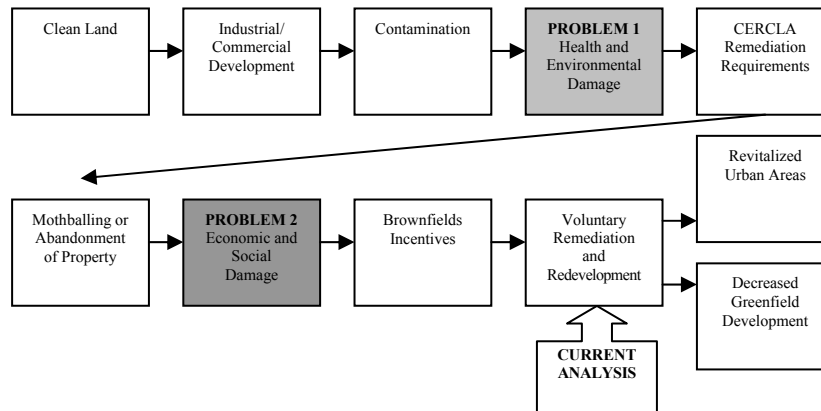
conceptualized with a causal chain:

Figure 1: Interlocking Contamination Problems



In response to this chain of events, states (and now to some degree the federal government) have enacted so-called “brownfields” legislation which encourages the remediation and redevelopment of formerly contaminated properties by lowering the environmental cleanup standards, providing protection from liability, and giving financial incentives. In theory, this redevelopment will alleviate the problems associated with abandoned and mothballed sites.

Figure 2: Ultimate Goal of the Brownfields Laws



Pennsylvania has one of the most progressive brownfields schemes, the Land Recycling and Environmental Remediation Standards Act (Act 2).² This paper evaluates the effectiveness of Act 2 regulations in encouraging redevelopment and remediation. The evaluation stems from interviews of representatives from several of the major constituencies using the regulation: the Acting Director of the Land Recycling Program of the Pennsylvania Department of Environmental Protection (PaDEP), an environmental lawyer, an environmental consultant, and a real estate developer.³ The overall response to Act 2 by this group of constituents was positive.

² 35 PA. STAT. ANN. §§ 6026.101-908 (2003).

³ An interview with a lender of funds to developers of contaminated property would have made this

The various representatives commended Act 2 for its facilitation of redevelopment of formerly contaminated properties; however, it remains unclear from their responses whether remediation and redevelopment of properties pursuant to Act 2 *really work* to alleviate the resulting problems of urban decline and greenfield overdevelopment. Therefore, while the regulated community's positive response is significant, evaluation of the larger social and economic effectiveness of the Act by PaDEP, with insights and data contributed by the regulated community, considers whether Act 2 truly meets its regulatory aims and provides insights for further improvements.

II. CERCLA

A. Background

The contamination at the Love Canal site in New York is prototypical of the health and environmental threat from land contaminated with toxic chemicals, and was one of the incidents which led to the enactment of Comprehensive Emergency Response, Compensation, and Liability Act,⁴ better known as CERCLA or Superfund.⁵ The town of Love Canal was built on a hazardous waste landfill which had been capped over with clay.⁶ Several decades later, the materials seeped through the cap and into residents' homes causing a myriad of health problems, including miscarriages, headaches, skin rashes, and cancers.⁷ As a result, the federal government had to permanently relocate 700 families.⁸ Love Canal was not an isolated incident.⁹ In fact, when the United States Environmental Protection Agency (EPA) started to catalogue contaminated sites that needed to be remediated, the Agency identified thousands of sites nationwide. Dire situations, like the adverse health impacts in Love Canal, required immediate action.

CERCLA and its state law analogs¹⁰ were directed solely at counteracting the environmental and health concerns caused by contamination. CERCLA has four major sections: 1) A system for information gathering and analysis; 2) Federal authority to respond to and clean up releases of hazardous substances; 3) A Hazardous Substance Response Trust Fund ("Superfund") to underwrite clean-up; 4) A liability scheme for those responsible for releases of hazardous substances.¹¹

study more complete; however, despite many attempts to secure an interview with a member of this group, the author was unsuccessful.

⁴ Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. §§ 9601 – 9675 (2000).

⁵ John C. Cruden, *CERCLA Overview* (American Law Institute (ALI) & American Bar Association (ABA) Environmental Law Course of Study Materials), Feb. 8-10, 2006, at 83.

⁶ SALZMAN & THOMPSON, *supra* note 29, at 197.

⁷ *Id.*

⁸ Press Release, Environmental Protection Agency (EPA), New York State Announce Temporary Relocation of Love Canal Residents (May 21, 1980), *available at* <http://www.epa.gov> (last visited Feb. 14, 2006).

⁹ Another example of large scale environmental damage occurred at Times Beach in Missouri. The contamination was so extreme that the EPA closed down the entire town and relocated more than 2000 residents. Times Beach One-Page Summary, U.S. Environmental Protection Agency, <http://www.epa.gov> (last visited Feb. 14, 2006).

¹⁰ Most states have a similar statutory scheme. For example, in Pennsylvania it is the Hazardous Sites Cleanup Act, 35 PA. STAT. ANN. §§ 6020.101-6020.1305 (2003).

¹¹ STEVEN FERREY, ENVTL. L. 336 (2d ed. 2001).

The information gathering and analysis aspect of the scheme requires “any person in charge of a ‘facility’ who has knowledge of a ‘release’ of a reportable quantity of any hazardous substance to notify the EPA’s National Response Center of the release.”¹² “Facility” and “release” are defined in the extensive definition section of CERCLA¹³; definitions are broad in scope, requiring almost anyone in charge of a property to report *any* hazardous substance that has been or could be released from its container.

The second component of CERCLA allows the EPA to clean up hazardous waste sites on an emergency- or longer-term basis, or to force Potentially Responsible Parties (PRPs)¹⁴ to remediate. EPA creates a list of contaminated sites, evaluating the extent of the contamination on each site.¹⁵ The most contaminated sites are then put on the National Priority List (NPL), authorizing the EPA to take remedial action. The remedial actions must conform to the National Contingency Plan (NCP), which details the procedures for clean up of contaminated sites, including how much money should be spent to clean up the site and the extent of removal, remediation, and other actions.¹⁶ The remediation requirements are quite strict. For example, adherence to CERCLA may require remediation of contaminated water to the levels established by the Safe Drinking Water Act (SDWA), regardless of whether the water will, in fact, be used for drinking water.¹⁷

The third component, Superfund, is less important now than when it was established because the funds have largely been depleted. Originally, the governmental cleanup activities under CERCLA were funded by a “polluter pays” scheme wherein a tax was levied on the industries which contributed the most to the creation of contaminated Superfund sites.¹⁸ The taxation authority expired in 1995 and has not been renewed.¹⁹

The Superfund money was designed to pay for governmental clean up activities, enabling effective response to emergency or time critical situations, and providing a source of funding for cleanup where no PRP was identifiable. Now, EPA must rely on voluntary or mandatory cleanups by PRPs,²⁰ taxpayer funded cleanups followed by reimbursement from PRPs²¹ or taxpayer funded cleanups without reimbursement (where no viable PRPs are available). As a result of the funding shortages, EPA can address fewer contaminated sites, and has been forced to slow or stop cleanups

¹² *Id.* at 337 (summarizing 42 U.S.C. § 9603).

¹³ 42 U.S.C. §9601.

¹⁴ The four categories of “potentially responsible parties” which may be liable under CERCLA are: 1) owners and operators of a “facility” from which hazardous substances are threatened to be released or are actually released; 2) persons who owned or operated a facility at the time of hazardous substance disposal; 3) persons who arranged for disposal of hazardous substances; 4) persons who transported hazardous substances and selected the disposal site. 42 U.S.C. § 9607(a)(1-4).

¹⁵ 42 U.S.C. § 9605(a)(8)(B).

¹⁶ FERREY, *supra* note 11, at 341 (summarizing 42 U.S.C. §9605).

¹⁷ 42 U.S.C. § 300f-300j-26. Specifically, SDWA Maximum Contaminant Levels can be used to establish site cleanup criteria under CERCLA through the process detailed in 40 C.F.R. 300.400(g).

¹⁸ PENNENVIRONMENT RESEARCH AND POLICY CENTER, EMPTY POCKETS: FACING HURRICANE KATRINA’S CLEANUP WITH A BANKRUPT SUPERFUND 5 (Dec. 2005) [hereinafter EMPTY POCKETS].

¹⁹ Cruden, *supra* note 5, at 83.

²⁰ 42 U.S.C. § 9606(b).

²¹ 42 U.S.C. § 9607(a).

already underway.²² Therefore, without the authorization of additional funds by the government, the “Superfund” aspect of CERCLA has diminished in importance.

The fourth and final component, liability, has been a major source of controversy in the CERCLA scheme. CERCLA does not distinguish between parties that caused the contamination and the subsequent owners of contaminated property.²³ CERCLA does not have different standards of PRP liability depending on whether the releases were willful or innocent—strict liability applies across the board.²⁴ Under CERCLA’s joint-and-several liability structure, *any* PRP must compensate the EPA for remedial action taken or remediate the property themselves.²⁵ However, any PRP held liable can generally sue for contribution to the clean up from other PRPs.²⁶

B. Drawbacks of the CERCLA Regulatory Scheme

CERCLA is a regulatory scheme that members of the environmental and property fields love to hate. Two of the primary sources of ire are: the strict clean up standards and the broad liability provisions. Many developers and landowners complain that the clean up standards are too stringent because they force remediation to meet an unnecessarily high degree of decontamination given the characteristics and proposed use of the site.²⁷ For example, critics argue that forcing a developer to clean a site’s contaminated groundwater to meet the extremely high Safe Drinking Water Standard²⁸ is unnecessary if nobody will be drinking the water.²⁹ In cases in

²² EMPTY POCKETS, *supra* note 18, at 5.

²³ There is an innocent landowner defense to CERCLA liability which theoretically protects a landowner if they have pursued “all appropriate inquiry into the property consistent with good commercial or customary practice in an effort to minimize liability” and do not know or have reason to know of any hazardous substance released or threatened to be released. 42 U.S.C. § 9601(35)(A)(i), (35)(B). However, this defense has historically been *extremely* hard to prove and has thus far not functioned to limit liability significantly. See Geraldine Evans, *CERCLA and RCRA Minimize Your Liability*, 18 GPSOLO MAG. 1, 8 Apr./May 2001, available at

<http://www.abanet.org/genpractice/magazine/archives.html> (“The statute sets forth criteria for establishing that the defendant had no reason to know of the contamination. CERCLA indicates that the defendant must have undertaken, at the time of acquisition, “all appropriate inquiry” into the previous ownership consistent with good commercial practice. This translates into a requirement for some type of preacquisition property audit or survey to identify potential environmental hazards. The Act leaves to the courts the task of determining whether a purchaser claiming to be an innocent landowner under CERCLA has made all appropriate inquiry. To date, however, the courts have not articulated a standard, and the EPA has not issued any guidance that meaningfully deals with what constitutes an ‘appropriate inquiry.’”) However, a Final Rule refining “all appropriate inquiry” was promulgated by EPA on November 1, 2005, which may strengthen this defense. 70 Fed. Reg. 66070 (Nov. 1, 2005). See generally DEPARTMENT OF ENVIRONMENTAL PROTECTION (PADEP), PROGRAMS, INCENTIVES AND INITIATIVES FOR THE PENNSYLVANIA LAND RECYCLING PROGRAM (2003) [hereinafter PROGRAMS, INCENTIVES AND INITIATIVES].

²⁴ Cruden, *supra* note 5, at 86.

²⁵ *Id.*

²⁶ 42 U.S.C. § 9613(f). *But see* Cooper Industries, Inc. v. Aviall Services, Inc., 543 U.S. 157 (2004) (denying PRPs who engaged in voluntary cleanups the ability to obtain contribution from other PRPs without first having been named as a party in a “civil action” under 42 U.S.C. §§ 9606 or 9607(a)).

²⁷ See M. Reisch, *Superfund and Brownfields in the 107th Congress*, Congressional Research Service, 2003 (noting “[CERCLA’s] cleanup standards and remedy selection procedures are also controversial. Requirements for treatment, permanence, and application of both federal and state regulations have led to what some critics characterize as overly strict risk assessment, and increased costs and delay at many sites.”).

²⁸ See *supra* note 17 and accompanying text.

²⁹ JAMES SALZMAN & BARTON H. THOMPSON, JR., ENVTL L. & POL’Y 210 (2003).

which the cost of remediation may be far more expensive than the value of the land, it begs the question: how clean is necessary, cost-efficient *and* environmentally-protective?³⁰

The liability issue has several facets. One, the small “mom-and-pop” landowner may be forced to bear the liability for a small amount of contamination. The expense of the liability could far exceed an amount they could afford to expend to remediate. To address this issue, the Small Business Liability Relief and Brownfields Revitalization Act provides some relief for small businesses from CERCLA’s stringent liability requirements, but the exemptions are limited in scope.³¹ Therefore, the criticism that CERCLA creates overwhelming liability, unaffordable to small businesses, remains valid.

The unwillingness of owners and potential owners to voluntarily remediate or develop formerly contaminated properties in light of the liability they may assume under CERCLA is a much larger issue. If a developer purchases a property and later contamination comes to light, the developer can be held liable.³² As a result, developers and banks are more likely to develop uncontaminated, so-called “greenfield” sites.³³ Current owners may be unwilling to remediate the properties they already own for fear that, despite their efforts at reclamation, they will still be liable for additional claims by the EPA.³⁴ As a result, owners and prospective

³⁰ Salzman and Thompson use the example of a Superfund site which would cost \$71,000 to isolate and \$3.6 million to remediate. CERCLA would require the remediation. *Id.*

³¹ The Small Business Liability Relief and Brownfields Act provides for two limitations on liability which are designed to work to blunt the full force of CERCLA liability on small business owners. Summary of Small Business Liability Relief and Brownfields Revitalization Act, Environmental Protection Agency, <http://www.epa.gov/swerosps/bf/html-doc/2869sum.htm> (last visited Feb. 15, 2006).

The Act includes a “De Micromis” Exemption where: the total amount of the material containing hazardous substances they contributed was less than 110 gallons of liquid materials or 200 pounds of solid materials; and, all or part of disposal, treatment, or transport occurred before April 1, 2001. *Id.* However, the exemption does not apply if: materials contributed or could contribute significantly, either individually or in the aggregate, to the cost of the response action or natural resource restoration; the person fails to comply with an information request; the person impedes or impeded, through action or inaction, a response action or natural resource restoration at the facility; the person has been convicted of a criminal violation for conduct to which the exemption would apply. *Id.* In addition, there is a Municipal Solid Waste (MSW) Exemption which exempts persons from Superfund response cost liability as generators for the disposal of municipal solid waste if the person is: an owner, operator, or lessee of residential property; a business that employed on average not more than 100 individuals in the three years prior to notification of potential liability and is a ‘small business concern’ as defined by the Small Business Act; a nonprofit organization that employed not more than 100 individuals during the preceding year at the location from which the MSW was generated. *Id.* However, the MSW exemption does not apply if: waste contributes or could contribute significantly, either individually or in the aggregate, to the cost of the response action or natural resource restoration; person fails to comply with an information request; person impedes or impeded, through action or inaction, a response action or natural resource restoration at the facility. Finally, the Act provides for conditional expedited settlements with eligible persons that demonstrate an inability or limited ability to pay response costs based on whether the settlor can pay and still maintain basic business operations, includes consideration of financial condition and ability to raise revenues. *Id.*

³² K. Wernstedt & R. Hersh, *Through a Lens Darkly*, 9 RISK: HEALTH, SAFETY & ENVIRONMENT 153 (Spring 1998) (“Under Superfund . . . owners and operators of properties have recourse against previous owners, and at the same time themselves can be liable for cleanup under certain conditions even if they were not responsible for generating, transporting, or disposing of the hazardous wastes.”).

³³ See Julia A. Solo, *Urban Decay and the Role of Superfund*, 43 BUFF L. REV. 285, 297-98 (1995) (citing many examples of businesses choosing to build on undeveloped land because of concern for CERCLA liability).

³⁴ For example, if the owner’s cleanup efforts do not meet the standards expected by the EPA under

purchasers choose not to remediate contaminated properties without the investment of scarce EPA resources. The EPA, of course, cannot remediate every site. Ironically, rather than achieving successful clean-up and reuse of the land, CERCLA has led owners to set aside for future use or virtually abandon their properties, leaving them to litter the urban landscape, dormant and unused.

III. BROWNFIELDS REGULATIONS

A. Background

Brownfields laws have been passed to address the two main criticisms of CERCLA, remediation standards and liability, and to standardize and streamline the remediation process.³⁵ Additionally, brownfields laws are designed to address the problems encountered in revitalizing urban areas. The Small Business Liability Relief and Brownfields Revitalization Act³⁶ defines a brownfield site as “real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant or contaminant.”³⁷ Conversely, Elizabeth Glass Geltman defines a “brownfield” as an “[u]rban or urbanized site location; industrial or commercial land use; actual or perceived environmental contamination (though the amount may not be known or quantified); not the subject of imminent environmental enforcement; located in a distressed economic region.”³⁸ Geltman’s definition is more accurate insofar as it specifically incorporates the issues of urbanized land and economic distress, which brownfields laws are designed to alleviate.

States have been the major source of brownfields legislation, although the federal government has made some movement towards incorporating brownfield-remediation mechanisms into CERCLA, as well.³⁹ The statutes vary, but reflect a common desire to “return land to productive use, and . . . repair the environment in which we live and work.”⁴⁰ This paper focuses on the Pennsylvania brownfields

CERCLA, they may still be liable despite their best attempts at proactive remediation.

³⁵ George W. Bush, Remarks during Signing of H.R. 2869, The Small Business Liability Relief and Brownfields Revitalization Act 2 (Jan. 11, 2002), *available at*

<http://www.whitehouse.gov/news/releases/2002/01/print/20020111-3.html> (“The law I sign today addresses the problem of land which has already been developed, and then abandoned. American cities have many such eyesores—anywhere from 500,000 to a million brownfields are across our nation. These areas once supported manufacturing and commerce, and now lie empty—adding nothing of value to the community, and sometimes only causing problems. Many communities and entrepreneurs have sought to redevelop brownfields. Often they could not, either because of excessive regulation or because of the fear of endless litigation. As a consequence, small businesses and other employers have located elsewhere—pushing development farther and farther outward, taking jobs with them, and leaving cities empty.”).

³⁶ Small Business Liability Relief and Brownfields Revitalization Act, Pub. L. No. 107-118, 2002 HR 2869 (2002).

³⁷ P.L. 107-118, 211(a) (H.R. 2869).

³⁸ ELIZABETH GLASS GELTMAN, *RECYCLING LAND: UNDERSTANDING THE LEGAL LANDSCAPE OF BROWNFIELD DEVELOPMENT* 4 (2000).

³⁹ Small Business Liability Relief and Brownfields Revitalization Act, Pub. L. No. 107-118, 2002 HR 2869 (2002).

⁴⁰ Heidi Gorovitz Robertson, *Legislative Innovation in State Brownfields Redevelopment Programs*, 16 J. ENVTL L. & LITIG. 1, 3 (2001).

legislation called the Land Recycling and Environmental Remediation Standards Act⁴¹ (“Act 2” or the Act); one of the most innovative in the nation. The Act has won a number of awards and has been used as a model in other states.⁴² Furthermore, on April 21, 2004, PaDEP entered an agreement with the EPA specifying any cleanup which satisfies the Act 2 requirements will also provide exemption from action by the EPA, the first agreement of its kind in the nation.⁴³ This legislation aims to 1) encourage more voluntary clean up, 2) decrease development of greenfields, and 3) revitalize cities by encouraging brownfield development. To accomplish these goals, the legislation incorporates uniform cleanup standards, a standardized review procedure, release from liability, and financial assistance.⁴⁴

B. Uniform Cleanup Standards

To address the aforementioned problem with CERCLA, specifically the stringency of cleanup standards, Act 2 provides three levels of cleanup standards: background, statewide health, and site-specific.⁴⁵

The background standard parallels the CERCLA requirements, obligating the owner to restore the property to its condition prior to contamination.⁴⁶ Remediation to this standard does not require any restriction in the property’s deed indicating contamination, and the property can subsequently be used for any purpose.⁴⁷

Statewide health standards are statutorily mandated maximums for the residual presence of contaminants following cleanup.⁴⁸ This level of remediation provides maximum concentrations of regulated substances for both residential and non-residential uses, which are not as stringent as the background standard, while still “achiev[ing] a uniform state health-based level so that any substantial present or probable future risk to human health and the environment is eliminated.”⁴⁹ A deed restriction is only required if the owner takes the actions necessary to remediate the property to a non-residential standard.⁵⁰

Finally, site-specific standards are the least stringent, but require the most

⁴¹ 35 PA. STAT. ANN. § 101-908 (West. Supp. 2004).

⁴² Telephone interview with David Hess, Acting Director of the Land Recycling Program, Commonwealth of Pa. Dep’t of Env’tl. Prot., in Harrisburg, Pa. (Apr. 15, 2005); Press Release, Pennsylvania Department of Environmental Protection (PaDEP), DEP Co-Sponsors Brownfields 2002 Conference; Land Recycling Program Wins Another Phoenix Award (Nov. 14, 2002), *available at* <http://www.depweb.state.pa.us> (last visited Feb. 16, 2006) (listing multiple major awards received for Pennsylvania’s land recycling program since 1995 and noting that the Federal Brownfields Act was modeled on Pennsylvania’s statute).

⁴³ Press Release, Pennsylvania Department of Environmental Protection (PaDEP), EPA Agreement to Establish One Cleanup Program Process in Pennsylvania (Apr. 21, 2004) (on file with author).

⁴⁴ ELIZABETH GLASS GELTMAN, RECYCLING LAND 163 (2000). *See generally* 35 PA. STAT. ANN. §§ 6026.101-908 (2003).

⁴⁵ 35 P.S. § 6026.301.

⁴⁶ 35 P.S. § 6026.103 (“Background”— The concentration of a regulated substance determined by appropriate statistical methods is present at the site, but is not related to the release of regulated substances at the site.”).

⁴⁷ 35 P.S. § 6026.302(d).

⁴⁸ 35 P.S. § 6026.303 (a), (b).

⁴⁹ 35 P.S. § 6026.301 (a)(2).

⁵⁰ 35 P.S. § 6026.304(g).

disclosure.⁵¹ The site-specific standards allow a remediator to clean up a site to a level specifically linked to the land's future use. By providing some flexibility in the remediation requirements, Pennsylvania legislators have enabled landowners and developers to align costs of remediation with their redevelopment goals. For example, a site that is going to be reused for industrial purposes need only be remediated to the non-residential level. If developers opt to remediate to a site-specific standard, they must undertake a detailed risk assessment of the site, determine the appropriate level of remediation necessary, and get approval from PaDEP for that standard.⁵² A deed restriction is required for site-specific remediation.⁵³

Act 2's tiered system of remediation levels allows for more flexibility than CERCLA's "all-or-nothing" remediation structure; therefore, in theory, since every property need not be returned to its original, pristine condition, the cost-benefit balance for developers may tip in favor of redeveloping brownfield properties, resulting in beneficial social and economic outcomes.

C. Standardized Review Procedure

One of the problems with CERCLA legislation and its state law analogs was that the regulations left an enormous amount of discretion in the remediation process to the environmental department administrators. As a result, potential property developers could not be certain that they would be released from liability if they chose to remediate any given site. For example, the environmental administrator chooses the level of remediation required at a site,⁵⁴ and determines when and whether to issue a release from liability or enter into a covenant not to sue.⁵⁵ While this discretionary structure provides some flexibility in a legal framework that was formally quite rigid, the subjective, seemingly arbitrary nature of the system also makes the process ad hoc and unpredictable.⁵⁶ To address the unpredictable nature of the CERCLA process, Act 2 and PaDEP have designated a clear framework for selecting the appropriate level of remediation, a mechanism for submitting request for approval, and a fixed timeline under which PaDEP must operate.⁵⁷

The first step in the process is the remediator's submission of a Notice of Intent to Remediate (NIR) to PaDEP. The NIR provides a description of the location of the site, a listing of the contaminants involved and the proposed remediation. A copy of the NIR must be provided to the municipality in which the site is located, and a summary of the notice must be published in a newspaper of general circulation serving the site area. The notices must include a 30-day public and municipal comment period during which time the municipality may request to be involved in

⁵¹ 35 P.S. § 6026.301(a)(3).

⁵² 35 P.S. §§ 6026.304(j)-(l).

⁵³ 35 P.S. §§ 6026.304 (m), (n).

⁵⁴ 42 U.S.C. § 9622(a).

⁵⁵ 42 U.S.C. § 9622(f). The covenant not to sue provided a degree of protection for remediators against future action by the regulators, but almost all covenants are subject to a clause allowing for EPA to reopen the matter if unforeseen and unknown conditions arise after remediation. 42 U.S.C. § 122(f)(6)(A).

⁵⁶ Hess, *supra* note 42.

⁵⁷ *Id.*

the development of the remediation and reuse plans for the site.⁵⁸

The plan is deemed approved if the DEP does not respond to the NIR within ninety days.⁵⁹ After approval of the NIR, the remediator follows Environmental Investigation Guidelines created by PaDEP for data reporting and final report submission. The requirements “ensure that the data are necessary, valid, and [provide for] a thorough investigation of the site results.”⁶⁰ The requirements are phased: Phase I is a preliminary site evaluation, Phase II is an initial site characterization, Phase III is a final site characterization, and Phase IV is remediation. In addition to a standardized reporting process for remediation, PaDEP regulations establish the actual pollutant levels and methods for testing pollutant levels required to achieve a release under a chosen remediation standard.⁶¹

After the remediation is completed, a final report is required.⁶² If the report for a statewide health standard is submitted to the DEP, it will be reviewed within sixty days.⁶³ If DEP does not approve the report or respond with a note of deficiency within that time period, the final report is deemed approved and the release from liability ensues.⁶⁴ When a developer submits a final report for a site-specific standard, PaDEP has ninety days to review or respond.⁶⁵ If PaDEP does nothing, the report is deemed approved.⁶⁶

Participants in the program have a standardized process they can follow under the structure of Act 2, decreasing the ad hoc decision-making resulting from the CERCLA process and lending predictability to the enterprise, ultimately helping to incentivize remediation.

D. Release from Liability

The release of program participants from liability is the cornerstone of Act 2. If participants follow the standardized procedure outlined above, they will be released from liability at both the state and federal levels. In a publication by the PaDEP, the cleanup liability protection is neatly summarized:

Any person demonstrating compliance with one or a combination of the cleanup standards is relieved of further liability for the remediation of contamination identified in reports submitted to and approved by DEP. The cleanup liability applies to: current and future owners of the property; any other person who participated in remediation of the site; a person who otherwise develops or occupies the site; a successor or assign of any person to whom liability protection applies; a public

⁵⁸ James W. Creenan & John Q. Lewis, Comment, *Pennsylvania's Land Recycling Program: Solving the Brownfields Problem with Remediation Standards and Limited Liability*, 34 DUQ. L. REV. 661, 687 (1996).

⁵⁹ 35 P.S. 6026.304(n)(2)(ii). In addition to the NIR, DEP is obligated to respond within ninety days to any remedial investigation report, risk assessment report, cleanup plan, or final report filed by the remediator. Creenan & Lewis, *supra* note 58, at 687.

⁶⁰ Creenan & Lewis, *supra* note 58, at 688.

⁶¹ 25 Pa. Code Ch. 250.

⁶² 35 P.S. § 6026.304(l)(4).

⁶³ 35 P.S. § 6026.303(h)(3).

⁶⁴ *Id.*

⁶⁵ 35 P.S. § 6026.304(n)(2)(ii).

⁶⁶ *Id.*

utility to the extent the utility performed activities of the site.⁶⁷

Act 2 also provides protection to the above-named parties against citizen suits and contribution actions from other PRPs. Furthermore, release from liability under Act 2 releases the actor from federal EPA liability.⁶⁸ Also, the liability release provisions are not limited to innocent purchasers of abandoned sites; PRPs who engaged in the contamination can receive liability protection from Act 2, as can current industrial and commercial enterprises.⁶⁹

Expectedly, Act 2 contains a couple of limitations. One constraint is that “[t]he liability release is only to the extent of contamination that is known, reported to the DEP, and approved by the DEP.”⁷⁰ Additionally, cases may be opened in instances of fraud, newly-discovered, possibly preexisting contamination, a participant’s failure to meet chosen cleanup standards, changes in exposure circumstances, and previously non-industrial sites contaminated after the Act’s effective date.⁷¹ The liability release does not exempt parties in all situations, but it does present an important leap forward from CERCLA’s strict liability scheme.

E. Financial Assistance⁷²

Finally, Pennsylvania provides economic incentives to parties interested in redeveloping brownfields, which supports Act 2 by providing additional “jump start” incentives for such redevelopment.⁷³ The state has four main incentive programs. First is the Brownfield Inventory Grants (BIG), which provides municipalities and economic development agencies money to inventory their brownfields and offer them for sale to the private sector.⁷⁴ According to PaDEP, BIG has disbursed over \$300,000 to forty-two local communities.⁷⁵

Second is the Industrial Sites Reuse Program (ISRP), which grants low interest loans to private parties for environmental assessments and remediation of former industrial sites.⁷⁶ The grants have a maximum of \$200,000 for assessments and \$1,000,000 for remediation, not to exceed seventy-five percent of the total cost of the remediation or assessment.⁷⁷ ISRP has a prioritization scheme, giving priority to sites: where contamination is reasonably suspected or known to exist; where there is a bona fide prospective purchaser or some reassurance of redevelopment; where sites

⁶⁷ *Id.* at 7.

⁶⁸ See Scott R. Thistle, *DEP Institutes New Procedures for Act 2*, 6 LAW J. 9 (July 23, 2004) (“The Commonwealth of Pennsylvania and the U.S. Environmental Protection Agency signed an agreement, April 21 [2004], under which owners and developers of contaminated sites may now settle their environmental liabilities under both federal and state law.”).

⁶⁹ PROGRAMS, INCENTIVES AND INITIATIVES, *supra* note 23, at 9.

⁷⁰ Steven F. Fairlie, *The New Greenfields Legislation*, 5 DICK. J. ENVTL. L. & POL’Y 77, 93 (1996).

⁷¹ *Id.*

⁷² PROGRAMS, INCENTIVES AND INITIATIVES, *supra* note 23 at 16-23 (information about the financial assistance programs).

⁷³ *Id.*

⁷⁴ SALZMAN & THOMPSON, *supra* note 29; Commonwealth of Pa. Dep’t of Env’tl. Prot., Brownfield Inventory Grants, <http://www.depweb.state.pa.us/landrecwaste/cwp/view.asp?A=1243&Q=465482>.

⁷⁵ SALZMAN & THOMPSON, *supra* note 29.

⁷⁶ *Id.*; Pa. Dep’t of Cmty. & Econ. Dev., Program Information for the Industrial Sites Reuse Program, <http://www.newpa.com/programDetail.aspx?id=25>.

⁷⁷ SALZMAN & THOMPSON, *supra* note 29.

reside in local or regional development priority areas; where the cleanup of contamination will significantly improve the environment; or, where the project has secured matching investment from other private or public resources.⁷⁸

Third is the Key Sites Initiative, which provides state funds to municipalities for assessment and preparation of remediation plans for brownfields within their areas.⁷⁹ Fourth is the Keystone Opportunity Zones/Keystone Opportunity Expansion Zones, which are cross-over programs. In other words, the Keystone Zones designation combined with other economic incentives greatly reduces or eliminates the tax burden for redeveloping property within those areas (“zones”) that frequently contain brownfields.⁸⁰

F. Criticism of Brownfields Laws

Brownfields laws, while intended to alleviate some of the limitations of CERCLA and its state analogs, are not free from criticism.⁸¹ One major criticism contends that efforts to promote voluntary cleanup cause a state to adopt lower remediation standards, which do not alleviate the existing environmental and health threats.⁸² Another criticism, closely linked to the inadequate remediation, is a lack of consideration for environmental injustice.⁸³ Since most brownfields are located in distressed urban neighborhoods, critics have argued that the lower-income, primarily minority populations of these neighborhoods are stuck with more contaminated property than would be tolerated in other areas.⁸⁴ Notably, the mere expansion of flexibility in cleanup standards associated with brownfields laws is not a panacea; flexible standards must be paired with adequate safeguards against de facto discrimination. The last main criticism is of the allegedly inadequate licensing of the environmental consultants performing the remediation. Act 2’s scheme is based on voluntary remediation performed by private environmental professionals hired by program participants.⁸⁵ Critics are concerned that the environmental consulting industry is subjected to little oversight resulting in improper remediation.⁸⁶

⁷⁸ *Id.*

⁷⁹ *Id.*; Commonwealth of Pa. Dep’t of Env’tl. Prot., Recycling Real Estate into Investment Opportunities, Key Sites Initiative, <http://www.pasitefinder.state.pa.us/KeySites.asp>.

⁸⁰ SALZMAN & THOMPSON, *supra* note 29; Pennsylvania Department of Community and Economic Development, Keystone Opportunity Zone (KOZ) Program, <http://koz.newpa.com/> (“Keystone Opportunity Zones are defined-parcel-specific areas with greatly reduced or no tax burden for property owners, residents and businesses. KOZs have been designated by local communities and approved by the state.”).

⁸¹ SALZMAN & THOMPSON, *supra* note 29.

⁸² Brownfields Guidelines, Environmental Health & Safety Online, <http://ehso.com/brownsfields.htm>.

⁸³ SALZMAN & THOMPSON, *supra* note 29.

⁸⁴ *See generally* Brownfields Communities get 1.8 Million for Job Training, EPA Newsroom, (Dec. 21, 2000), available at <http://yosemite.epa.gov/opa/admpress.nsf/0/60edb7489c92d79e852569bc0070180d?OpenDocument> (“Brownfields are abandoned, lightly contaminated properties often found in economically distressed areas.”).

⁸⁵ 35 PA. STAT. ANN. §§ 6026.101-908.

⁸⁶ Joel B. Eisen, *Brownfields Policies for Sustainable Cities*, 9 DUKE ENVTL. L. & POL’Y F. 187, 197 (Spring 1999).

IV. ACT 2 EFFECTIVENESS STUDY

A. Methodology

Several participants in the Act 2 process were interviewed⁸⁷ over a month-long period to assess how effective the regulation has been from the perspective of those directly affected. The interviewees were: Imron Shah, Acquisitions Associate for O’Neill Properties, a development company specializing in revitalizing abandoned properties; David Hess, the Acting Director of the Land Recycling Program for the Pennsylvania Department of Environmental Protection; Paul Martino, a consultant for Pennoni Associates, a multi-disciplined consulting engineering firm providing services to local, state, and federal governments, private, commercial, industrial, and construction clients, and other professional firms; and, Joseph McGovern, head partner of the Environmental Law Department at Obermayer, Rebmann, Maxwell, and Hippel in Philadelphia.

While each interview was tailored to each participant based on his involvement in the process, participants were asked some common questions in an effort to provide a baseline by which to compare responses and to otherwise address the fundamental issue: how effective is Act 2? The three common questions were: 1) What is the goal(s) of Act 2?; 2) How effective has Act 2 been in meeting these goals?; 3) By what criteria do you, the participant, measure the Act’s effectiveness? The remainder of the paper reviews the responses of the different participants and contains an analysis of responses’ similarities and differences.

B. Overview of the Responses

The participants gave positive responses about Act 2. They uniformly identified remediation of industrial properties as the goal of Act 2, and three out of the four participants identified reuse of green space as a primary goal. Most importantly, each of the participants confirmed that Act 2 has facilitated his professional role in redeveloping industrial property.

Figure 3: Overview of Responses to Common Questions

<u>Participant</u>	<u>What is the goal of Act 2?</u>	<u>How effective has Act 2 been at meeting those goals?</u>	<u>What criteria are you using for measuring effectiveness?</u>
David Hess, PaDEP	Twofold— 1) To provide clarity of remediation requirements so people could plan. 2) To promote reuse of industrial property. They are left unused. They are an unused resource. Act 2 will	Cleaned up 2000 sites over 10 years. Prior to Act 2, the number of sites was much smaller because it would have taken so many resources of DEP—technical review, lawyer time, consent orders, etc. Now, we can achieve more	One of the challenges is how to measure effectiveness. Traditionally, effectiveness was just the number of remediated sites and the amount of acreage. Starting two years ago, there was reporting of the mass of chemicals removed or

⁸⁷ Author provided interviewees a set of questions prior to the interviews.

	<p>help revitalize urban areas. Because revitalizing historically industrial areas, takes pressure off of suburban sprawl. Indirectly, helping to save greenfield development.</p>	<p>cleanup by providing standards and getting out of the way.</p> <p>Also measured by how other states and the federal government have reacted—other states have used our program.</p>	<p>managed.</p> <p>We can't measure the decrease in development of sprawl.</p> <p>The ancillary benefits are hard to measure— increase of tax base, jobs created, economic development.</p>
Imron Shah, O'Neill Properties	<p>It was designed to encourage and foster development by protecting developers from liability from existing environmental conditions . . . It essentially allows you to develop without the fear of liability from the state.</p>	<p>In the past two years, I don't think we have ever walked away from a deal because of environmental issues. Typically we are able to do what we want to do on sites.</p>	<p>In the end if we can build what we want to build then the process is effective.</p>
Paul Martino, Pennoni Associates	<p>To reuse industrial properties for other use and to save green space.</p>	<p>I think it's great.</p>	<p>Approval of the reports. How well we can estimate the amount of work that needs to be done for proper characterization and, ultimately, PaDEP acceptance of the characterization and final report.</p>
Joseph McGovern, Obermayer, Rebmann, Maxwell, & Hippel	<p>To enhance the reuse of already dirty property . . . so as to prevent commercial development of properties that would otherwise remain undeveloped.</p> <p>To prevent clean up decisions from being made on an ad hoc basis.</p> <p>To confer the benefit of protecting public health and the environment by causing clean up of those sites to some acceptable level.</p>	<p>It has been very, very effective . . . Most or all [sites] would not have been cleaned up without the program or the developers may have looked elsewhere and have broken ground on greenfields.</p>	<p>The speed with which clients can get relief. [How quickly they] can know what their liabilities and obligations are. The single most difficult aspect of real estate development . . . up until this program was uncertainty, lack of uniformity, and cost on developer's aspirations.</p>

Some interesting data emerged in evaluating the effectiveness of the Act. PaDEP was concerned with the Act's overall effectiveness, i.e. whether Act 2 is accomplishing its overall policy goals. In contrast, the consultant, the lawyer, and the developer were more concerned with the mechanics of the Act, i.e. how well the Act enables them to perform their jobs. This difference in perspectives creates an

interesting dichotomy. To be effective, a regulation (e.g. Act 2) must provide functionality to allow the targeted participants to accomplish their goals, which in turn works towards the broader aims of the regulation. The means of the regulation must be tailored to meet the ends.

The participants expressed some concerns about the mechanics of Act 2. For example, the developer seemed indifferent to the financial incentives. He did not think that the availability of financial incentives would ultimately dictate whether a development deal came to fruition.⁸⁸ The environmental consultant expressed concern with the lack of uniformity in the implementation of Act 2 across PaDEP offices; each office seems to have a different level of flexibility when applying the regulations to a site. The representative of PaDEP noted the lack of certification and variability in quality of the private environmental remediation companies. The lawyer was concerned about the use of Act 2 as a shield by a polluter who contaminated another's land; Act 2 could limit the degree of cleanliness to which the polluter would be obligated to remediate, while freezing the owner and the courts out of the decision-making process. Additionally, a solution to the hardest and broadest problem remains elusive: how to make the leap from means (redevelopment) to ends (alleviating the economic and social damage).

The overall conclusion from the study appears to be that Pennsylvania has successfully established a mechanism for redeveloping brownfield properties; however, there is a distinct lack of information about Act 2's effectiveness in alleviating the twin problems of economic and social degradation. The state and/or private environmental organizations should direct further investment towards developing a quantitative and qualitative procedure for evaluating the progress (or lack thereof) made through Act 2 to-date. Furthermore, funding should also be used to create a cost-benefit analysis of the financial incentives associated with the Act to ensure that the limited funding available for brownfields redevelopment is delivering the greatest possible positive impact.

C. Detailed Responses

1. *The Regulator*⁸⁹

David Hess noted that historically, PaDEP had a lofty goal that no relief would be granted. "Since [relief was] unattainable, what people had to do was unclear. There was a lot of variation among staff. Uncertainty [persisted regarding] how long [remediation] would take, how much it would cost."⁹⁰ Therefore, according to Hess, Act 2's goals are framed in light of the Agency's former uncertainty:

[The] goal of [Act 2] was clarity of remediation requirements so people could plan. Timeframes for review, actual steps in the process. Now the role of the department is simply to compare what

⁸⁸ The developer's view may result from the fact that his company is mainly involved in larger scale projects. Incentives may change the behavior of smaller entities. It would be interesting to investigate whether the bulk of the remediation was performed on a large or small scale to evaluate the effectiveness and importance of the Act's financial incentives.

⁸⁹ Hess, *supra* note 42.

⁹⁰ *Id.*

was done with the standard, as opposed to the Department telling people how to achieve the cleanup. [We] don't care *how* [the remediation is accomplished]—one approach isn't any better than another. [This] provides more flexibility for the user. [The goal] is certainty—in terms of cost and timing.⁹¹

Beyond this functional goal, the ultimate aim of Act 2 is “[t]o promote reuse of industrial property. [Industrial sites] are left unused . . . an unused resource. [Reuse] will help revitalize urban areas. Because [we are] revitalizing historically industrial areas, [brownfields redevelopment will] take pressure off of suburban sprawl, indirectly helping to save greenfields [from] development.”⁹²

Hess described the difficulties associated with measuring the effectiveness of Act 2:

[We have] cleaned up 2000 sites over 10 years. Prior to Act 2, the number of sites [remediated] was much smaller because it would have taken so many resources of [the] department; technical review, lawyer time, consent orders, etc. Now, [we] can achieve more cleanup by providing standards and getting out of the way. [But, we] can't measure the decrease in development of sprawl, [the] ancillary benefits of increase of tax base, jobs created, economic development are hard to measure.⁹³

One weakness Hess described was the lack of regulation of the private companies that remediate the sites:

One of the side issues, or omissions, [is that] the quality of work done and reported on . . . is a result of the qualification and integrity of the companies that remediate the sites. We don't have standards or certification of [the] companies participating, [so there is a] variability of quality . . . We could do it by regulation, but at this time we haven't.⁹⁴

Hess reported that the majority of entities doing voluntary clean-up under Act 2 are medium-sized industrial companies, and the clean-up process takes an average of six months.⁹⁵

2. *The Developer*⁹⁶

Redevelopment of a brownfield requires a financial investor willing to accept the significant financial and administrative burden associated with conforming to Act 2 and actually building the new project. O'Neill Properties has been assuming those responsibilities and developing projects on brownfields in the Philadelphia region for twenty years, including Superfund and nuclear reactor sites.

We pursue environmentally contaminated sites because we have a twenty-year

⁹¹ *Id.*

⁹² *Id.*

⁹³ Hess, *supra* note 42.

⁹⁴ *Id.*

⁹⁵ *Id.*

⁹⁶ Telephone Interview with Imron Shah, O'Neill Properties Group, in King of Prussia, Pa. (Apr. 18, 2005).

track record of remediating sites, and we see value. No one wants to deal with the sites because of the complexity of working with those issues. We have developed a strategy. While others would shy away we take them on with full vigor because we know that the system is in place to encourage developers to build on them. Act 2 is a catalyst to developers like us to acquire, clean up, and increase the value of the sites.⁹⁷

Imron Shah viewed Act 2 as “designed to encourage and foster development by protecting developers from liability from existing environmental conditions. The way I understand it is you put together your plan, work with DEP, once they’ve signed off, you implement. It essentially allows you to develop without the fear of liability from the state.”⁹⁸

The key factor expressed by Shah was quantifiability of risk. “We have done Superfund, nuclear reactor sites. What other developers don’t realize, no matter how difficult a problem is, the risk is quantifiable. We figure out what it is and then how to address it.”⁹⁹ Shah likes Act 2 *because* the risk is quantifiable. By alleviating liability, developers can more effectively quantify the risk associated with the site and develop the project accordingly: “In the past two years, I don’t think we have ever walked away from a deal because of environmental issues. Typically, we are able to do what we want to do on sites.”¹⁰⁰ Shah concluded that “In the end, if we can build what we want to build, the [Act 2] process is effective.”¹⁰¹

3. *The Consultant*¹⁰²

The role of the environmental consultant in the Act 2 process is to “determine if there are any compounds that are above-standard and evaluate the scientific part of the regulation. I see myself as a go-between between the regulation and the client.”¹⁰³ This is an important role because, under Act 2, private parties perform the remediation.

According to Paul Martino, the goal of Act 2 is “[t]o reuse industrial properties for other use and to save green space, to allow development of former industrial property instead of covering up green space.”¹⁰⁴ He thinks that Act 2 has been effective, although he characterizes its effectiveness more in terms of its functionality, as opposed to the overall goals he expressed.¹⁰⁵ He measures effectiveness by “Approval of the reports. How well we can estimate the amount of work that needs to be done for proper characterization and ultimately the acceptance by PaDEP of the characterization and final report.”¹⁰⁶

Martino’s concerns about the Act were framed in terms of its mechanics, and like

⁹⁷ Shah, *supra* note 96.

⁹⁸ *Id.*

⁹⁹ *Id.*

¹⁰⁰ *Id.*

¹⁰¹ Shah, *supra* note 96.

¹⁰² Telephone Interview with Paul Martino, PG, Pennoni Associates, Inc., in Phila., Pa. (May 2, 2005).

¹⁰³ *Id.*

¹⁰⁴ *Id.*

¹⁰⁵ *Id.*

¹⁰⁶ Martino, *supra* note 102.

Shah, Martino focused on predictability.¹⁰⁷ Martino's main concern was

[the] variability in interpretation between offices. In the Southeast region there are a lot of reports completed and approved through Act 2. There hasn't been as much of willingness in the Northeast region. They are a little more firm to the regulations to the letter as opposed to a more flexible approach to characterization. For example . . . usually we ask for some flexibility when we have some information about the previous use of the site so it would require less sampling, [and therefore] cost less to the client. Sometimes it works, sometimes it doesn't.¹⁰⁸

Overall, his clients evaluate the financial aspect of the site in determining whether to redevelop the property.¹⁰⁹ Willingness of his clients to pursue further brownfield projects:

[D]epends on the financial aspect [and] the site itself. How much it might cost to remediate. What can be done with it after the remediation and the timeframe . . . One client did a major project then not another in the last two years. Another one has five or six projects ongoing in different stages of completion.¹¹⁰

Martino had a very different figure for the length of time required for getting through the Act 2 process compared to the Regulator, Hess. Martino stated that it takes his clients fourteen to eighteen months to get through the Act 2 process (as opposed to Hess' six-month average).¹¹¹ However, the projects with which Martino is involved are large projects, and Hess noted that most of the projects done under the Act are medium-sized industrial projects, which may account for the discrepancy.¹¹²

4. *The Lawyer*¹¹³

Joseph McGovern focused on the role of the attorney as facilitator:

The role of the attorney representing someone who is interested in redeveloping [contaminated] property is: 1) To make sure that [the client] takes the steps necessary, and 2) that the process moves as efficiently as possible since there is usually a time constraint and delay results in lost dollars. Since the Act has self-executing aspects to it this is not hard to do.¹¹⁴

Guiding a client on the range of liability afforded by Act 2 is another important role of the attorney:

The most important [step] is to find out [the] cleanup standards [and] what sort of liability protection is available, which is driven by the amount of cleanliness you want to achieve . . . cost effective

¹⁰⁷ *Id.*

¹⁰⁸ Martino, *supra* note 102.

¹⁰⁹ *Id.*

¹¹⁰ *Id.*

¹¹¹ *Id.*

¹¹² *Id.*

¹¹³ Interview, Joseph J. McGovern, Senior Partner, Obermayer Rebmann Maxwell & Hippel LLP, in Phila., Pa. (May, 2005).

¹¹⁴ *Id.*

and doable within the given timeframe and that will meet the needs of the developer in terms of not creating a situation where issues will be reopened . . . The other thing is to make sure the person who is responsible for the cleanup knows the limits to future use of property and future liability from sources not covered by the statute. For example, if there is a cleanup and you are dealing with particularly nasty substances (like known carcinogens) there is a reasonably high likelihood if you use a site-specific standard and science progresses . . . there will have to be additional work.¹¹⁵

The goals McGovern identified for Act 2 were very similar to those of the DEP representative, but also incorporated the overall aim of environmental health. The goals are:

To enhance the reuse of already dirty property so as to prevent commercial development of properties that would otherwise remain undeveloped, to prevent clean up decisions from being made on an ad hoc basis, and to confer the benefit of protecting public health and the environment by causing clean up of those sites to some acceptable level.¹¹⁶

He thinks that Act 2 has been “very, very effective” in meeting those goals. “Most or all [of the sites] would not have been cleaned up without the program or the developers may have looked elsewhere and have broken ground on greenfields.”¹¹⁷ He attributes the success of the regulation to the relationship between the DEP and the regulated community.¹¹⁸

[Act 2 has been] embraced by developers and [there has been] real effort on part of DEP to facilitate the process and make the system work, in contrast to other regulatory programs where there is at best a relationship of only limited cooperation between industry and regulators. DEP has taken the philosophical position that they want to partner with industry.¹¹⁹

McGovern measured the effectiveness of the Act in terms of increasing certainty and reducing the risk of developing contaminated property: “The speed with which clients can get relief. [How quickly they] can know what their liabilities and obligations are. The single most difficult aspect of real estate development . . . up until this program was uncertainty, lack of uniformity, and cost on developer’s aspirations.”¹²⁰

In assessing the drawbacks to the regulation, McGovern drew on his experience with parties who had contaminated the properties belonging to others.¹²¹ They used Act 2 as an offensive weapon, asserting that since they were cleaning up under Act 2, and that such cleanup was voluntary, they should be able to set the cleanup

¹¹⁵ McGovern, *supra* note 113.

¹¹⁶ *Id.*

¹¹⁷ *Id.*

¹¹⁸ *Id.*

¹¹⁹ McGovern, *supra* note 113.

¹²⁰ *Id.*

¹²¹ *Id.*

standards.

This is a bastardization of the program. The polluter's response is that money damages are available, not remediation to cleanliness as before spill. The remedy for giving dollars for diminution in value takes a long time, requires a law suit, there are no attorneys' fees available, and there is something viscerally perverse about a polluter being able to say that the courts and the owners have no say in how clean the site should be. To me this is an inappropriate use of the statute.¹²²

V. CONCLUSION

Act 2 is the gold standard of brownfields laws. It relaxes cleanup standards, limits liability, and provides financial incentives all in an effort to encourage remediation and redevelopment of contaminated industrial sites.¹²³ The extent of the release from liability is broad, now including exemption from actions by the EPA.¹²⁴ The goal of this study was to evaluate Act 2's effectiveness from the inside—from those who deal with the Act daily. This study provides data indicating that the regulation is achieving its goal: to remediate and reuse property. All of the constituents praised the Act, stating that it allows each party to effectively play its role in the remediation process. Still, the participants, including the PaDEP representative, had little information about Act 2's ability to solve the larger social and economic damage caused by abandoned, contaminated property.¹²⁵ Now that the means for remediating brownfields are set, tools to evaluate the ultimate efficacy of following Act 2 would be useful, to ensure that the regulation is not, in Bardach and Kagan's words, "unreasonable."¹²⁶

¹²² McGovern, *supra* note 113.

¹²³ 35 PA. STAT. ANN. §§ 6026.101-908.

¹²⁴ See Thistle, *supra* note 68.

¹²⁵ Hess, *supra* note 42.

¹²⁶ BARDACH, *supra* note 1 at 7.