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## Legislative Innovation in State Brownfields Redevelopment Programs

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# ARTICLES

HEIDI GOROVITZ ROBERTSON\*

## Legislative Innovation in State Brownfields Redevelopment Programs

### INTRODUCTION

States throughout the country have created legislation and administrative programs to encourage the cleanup and redevelopment of urban brownfield<sup>1</sup> land.<sup>2</sup> In part, these efforts respond

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<sup>1</sup> The term "brownfield" has been used broadly and narrowly. According to the United States Environmental Protection Agency (EPA), brownfields are "abandoned, idled, or underused industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination." *USEPA web page* (visited 09/26/2000) <<http://www.epa.gov/swerosps/bf/glossary>>. The term "brownfield" typically describes contaminated land that is not so contaminated that it is at serious risk of a federal or state enforcement action. Lenders and developers, however, consider even "mild" contamination too serious a liability threat; for this reason, among others, brownfields tend to lie fallow rather than be redeveloped.

The definition of "brownfields" or "brownsites," however, is an area of some debate. This stems in part from an inability to value a contaminated site for which there is no useful, current market value. Further, given the broad spectrum of local economies and land use objectives, it is difficult to reach consensus on a definition of the term. Broad definitions include all contaminated former industrial properties that are not available for redevelopment. Narrower definitions limit brownfields to large city properties that are both abandoned and large enough to support significant redevelopment. See GENERAL ACCOUNTING OFFICE, *SUPERFUND BARRIERS TO BROWNFIELD REDEVELOPMENT* (1996). See also ROBERT A. SIMONS, *TURNING*

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to the federal government's recent focus on the issue.<sup>3</sup> However, leadership in method and approach has come, not from the federal government, but from the states.<sup>4</sup> States have approached the cleanup and redevelopment of contaminated land in a variety of ways, some choosing to create voluntary cleanup programs, others imposing mandatory cleanup programs, and still others us-

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BROWNFIELDS INTO GREENBACKS 30 (1998) (using a "broad, urban definition of brownfields"). In addition, some of the state and local laws designed to encourage redevelopment of industrial sites are not actually geared to "brownsites" any more than any other underused or unused former industrial site. See Bernard A. Weintraub & Sy Gruza, *The Redevelopment of Brownsites*, 9 NAT. RESOURCES & ENV'T, Spring 1995, at 57.

<sup>2</sup> See, e.g., ARIZ. REV. STAT. ANN. § 49-282.05 (West 2000); ARK. CODE ANN. § 8-7-1101 *et seq.* (Michie 2000); COLO. REV. STAT. § 25-16-301 *et seq.* (2000); CONN. GEN. STAT. ANN. § 22a-133a *et seq.* (West 2000); DEL. CODE ANN. tit. 7, § 9101 *et seq.* (2000); FLA. STAT. § 288.107 (2000) and FLA. STAT. § 376.77 *et seq.* (2000); GA. CODE ANN. §12-8-200 *et seq.* (2000); IND. CODE ANN. § 13-25-5-1 *et seq.* (West 2000); IOWA CODE ANN. § 455H.101 *et seq.* (West 2000); KAN. STAT. ANN. § 65-161 *et seq.* (1997); KY. REV. STAT. ANN. §§ 224.01-450 to 224.01-465 (Michie 2000); LA. REV. STAT. ANN. § 30:2285 *et seq.* (West 2000); ME. REV. STAT. ANN. tit. 38, § 343-E (West 2000); MD. CODE ANN., ENVIR. § 5 (2000); 1998 MASS. ACTS 206; MICH. COMP. LAWS § 324.20101 *et seq.* (2000); MINN. STAT. §§ 115B.01-115B.24 (2000); 1998 MISS. LAWS 528; MO. REV. STAT. § 260.565 *et seq.* (2000) and MO. REV. STAT. § 447.700 *et seq.* (2000); MONT. CODE ANN. §§ 75-10-730 through 75-10-738 (2000); NEB. REV. STAT. §§ 81-15,181 to 81-15,188 (2000); NEV. REV. STAT. ANN. § 459.610 *et seq.* (Michie 2000); N.H. REV. STAT. ANN. § 147-F:1 *et seq.* (2000); 1997 N.J. LAWS 278; N.M. STAT. ANN. § 74-4G-1 *et seq.* (Michie 2000); N.Y. ENVTL. CONSERV. LAW §§ 56-0501 to 56-0511 (McKinney 2000); N.C. GEN. STAT. § 130A-310.30 *et seq.* (2000); OHIO REV. CODE ANN. § 3746 (West 2000); OKLA. STAT. ANN. tit. 27A, § 2-15 (West 2000); OR. REV. STAT. § 465.325 (2000); R.I. GEN. LAWS § 23-19.14-1 *et seq.* (2000); TEX. HEALTH & SAFETY CODE ANN. §§ 361.601 to 361.613 (West 2000); UTAH CODE ANN. § 19-8-101 *et seq.* (2000); VT. STAT. ANN. tit. 10, § 6615a (2000); VA. CODE ANN. § 10.1-1429.1 to .3 (Michie 2000); W. VA. CODE § 22-22-1 *et seq.* (2000); WIS. STAT. ANN. § 292.15 (West 2000).

<sup>3</sup> See William W. Buzbee, *Brownfields, Environmental Federalism, and Institutional Determinism*, 21 WM. & MARY L. & POL'Y REV. 1, 2, 39 (1997) (noting that federal, state, and local programs exist to encourage brownfields redevelopment, and that the states have been innovators in this area, whereas the federal government is usually the leader in data gathering and investigation into pollution control strategies).

<sup>4</sup> See *id.* See also U.S. EPA-OSPS Brownfields Homepage (visited 9/26/2000) <<http://www.epa.gov/swerosps/bf/#bfini>> (containing information regarding EPA's Brownfields Cleanup Revolving Loan Fund Pilots, National Brownfields Assessment Pilots, among other brownfields programs). Additionally, according to the website, "on August 5, 1997, President Clinton signed the Taxpayer Relief Act (HR 2014/PL 105-34), which included a new tax incentive to spur the cleanup and redevelopment of brownfields in distressed urban and rural areas." The Clinton Administration also implemented the Brownfields National Partnership Action Agenda, announced in May 1997, which "outlines a comprehensive approach to the assessment, cleanup, and sustainable reuse of brownfields, including specific commitments from 15 Federal agencies."

ing combinations of these approaches. Regardless of method, however, the push to clean brownfield land is grounded in a widespread desire to return that land to productive use, and also in the more fundamental desire to repair the environment in which we live and work.

This Article examines state legislative and administrative efforts to redevelop urban brownfield land by reducing the environmental barriers to redevelopment. I have argued in the past that, despite the best efforts and best intentions of citizens, legislators, and bureaucrats, real success will elude state brownfields programs, in part, because they tend to ignore the non-environmental factors that present significant barriers to redevelopment, especially in urban areas.<sup>5</sup> Here, I argue that some of the legislative innovations in those same state brownfields programs, although created to facilitate the programs' goals, may be risky or unwise without some alterations. This Article analyzes two important innovations in states' efforts to encourage brownfields redevelopment: the application of cleanup standards determined by the intended future use of the land, and the use of licensed or certified environmental professionals to oversee and certify the cleanup of brownfield sites. These two innovations illustrate instances where legislatures or state administrative agencies attempted to streamline a process to facilitate the program's or legislation's goal of reducing the environmental barriers to brownfields redevelopment, thus facilitating cleanup and redevelopment.

The first innovation, setting cleanup standards according to the future use of the land, is an innovative approach to making contaminated land more attractive to potential redevelopers. The rationale for this innovation is that reduced cleanup standards can make the cleanup faster and less costly, thereby moving brownfield land quickly and cost-effectively into productive use. I will conclude that although such standards certainly reduce the cleanup costs associated with choosing and redeveloping a contaminated property, the remaining externalities render the innovation risky on several levels.

The second innovation, the use of private professionals to certify the completion of a cleanup, is an innovative method for cre-

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<sup>5</sup> See generally Heidi Gorovitz Robertson, *One Piece of the Puzzle: Why State Brownfields Programs Can't Lure Businesses to the Urban Cores Without Finding the Missing Pieces*, 51 RUTGERS L. REV. 1075 (1999).

ating efficiencies in the agency oversight process. I will conclude that this innovation, in some of its existing forms, appears to be effective and efficient. However, in its most extreme form, this innovation may amount to an abrogation of government responsibility that could put neighborhoods and people at risk due to the questionable quality of oversight.

Some states have been particularly innovative in their efforts to reduce the environmental barriers to redevelopment, thereby hoping to encourage redevelopment of brownfield land.<sup>6</sup> In particular, many states have allowed cleanup standards to vary according to the intended future use of the land.<sup>7</sup> This means that

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<sup>6</sup> Note that many barriers to the redevelopment of contaminated urban properties are non-environmental, for example, the size and location of a site, the size and configuration of the existing building, the available infrastructure, local crime rates, or access to transportation. See generally Robertson, *supra* note 5.

<sup>7</sup> See, e.g., BROWNFIELDS LAW AND PRACTICE, THE CLEANUP AND REDEVELOPMENT OF CONTAMINATED LAND (Michael B. Gerrard, ed. 2000) [hereinafter BROWNFIELDS LAW AND PRACTICE], AL.01[5]; ALA. CODE § 22-30A-6; AZ.01[1][e][ii]; ARIZ. ADMIN. CODE R18-7-205; BROWNFIELDS LAW AND PRACTICE CA.01[5]; CAL. HEALTH & SAFETY CODE § 25356.1.5(d) (only future use restricted with proper institutional controls); BROWNFIELDS LAW AND PRACTICE, IL.01[2][c]-[d]; IA.01[5][c]; IOWA CODE ANN. 455H.204(2)(a) to (e); IOWA ADMIN. CODE r. 567-137.6(455H); BROWNFIELDS LAW AND PRACTICE, MD.01[6] (if limited use to industrial/commercial, then must record in land records); BROWNFIELDS LAW AND PRACTICE, MN.01[1][h] and MN.02[6]; see MINN. POLLUTION CONTROL AGENCY VOLUNTARY INVESTIGATION AND CLEANUP GUIDANCE DOCUMENT NO. 13, PROCEDURES FOR ESTABLISHING SOIL CLEANUP LEVELS (rev. Sept. 1994) (intended or actual use of land taken into consideration when determining cleanup levels to be achieved); BROWNFIELDS LAW AND PRACTICE, MO.01[5][a]; see Memorandum of Agreement (MOA) Between MDNR and EPA (Sept. 5, 1996) (MOA language contemplates some flexibility depending on future use, but neither the legislation nor the regulations address the issue); BROWNFIELDS LAW AND PRACTICE, NY.01[5]; Technical and Administrative Guidance Memorandum No. HWR-94-1046, (future use considered if volunteer wants to deviate from usual cleanup standards); BROWNFIELDS LAW AND PRACTICE, OH.01[2][b]; OHIO ADMIN. CODE § 3745-300-08(B)(2)(c) (establishing three categories of future use, including residential, commercial, and industrial); BROWNFIELDS LAW AND PRACTICE, OK.01[4][a]; OKLA. STAT. ANN. tit. 27A. § 2-14-304(B) (the Brownfields Act explicitly provides that the remediation or no action necessary proposal must be based on the potential risk to human health and safety and to the environment posed by the environmental contamination, taking into account the proposed use of the brownfield as industrial/commercial, agricultural or residential); BROWNFIELDS LAW AND PRACTICE, SC.01[5] (less stringent cleanup standards for VCP sites where a non-responsible party has agreed to undertake the cleanup, as long as the proposed cleanup is sufficient for and consistent with the proposed future use of the site and does not interfere with or preclude additional state-ordered remedial activity by a responsible party. The South Carolina Dept. of Health and Environmental Control requires non-responsible party to enter into a restrictive covenant with DHEC, which imposes land use restrictions commensurate with the extent of the cleanup);

cleanup standards applicable to sites slated for industrial use are less stringent than those which would apply to sites intended for residential or commercial use. States have also become more flexible with respect to the cleanup methods or remediation methods they allow.<sup>8</sup>

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BROWNFIELDS LAW AND PRACTICE, UT.01[5]; UTAH CODE ANN. § 19-8-114(2) (after considering the proposed future use of the property, UDEQ may approve cleanup plans that do not require removal of all releases on the property if the response action will be completed in a manner that protects human health and the environment, among other things); BROWNFIELDS LAW AND PRACTICE, WA.01[4][b].

<sup>8</sup> See, e.g., IOWA CODE ANN. § 455H.205 (West Supp. 1999); GA. COMP. R. & REGS. r. 391-3-19.07 (1998) generally and GA. COMP. R. & REGS. r. 391-3-19.07(10)(a) (1999) (specifically authorizing engineering controls, such as capping, point of use treatment, and slurry walls, as part of plans to reduce or eliminate the potential for human exposure to contaminants at a site). Some states allow the use of deed restrictions on brownfield properties as a way to control the future use of land, thereby reducing the risk of human exposure to remaining contaminants. See OHIO REV. CODE ANN. § 3746.05 (West 2000). For a thorough analysis of the use of institutional controls in cleanup programs, see John Pendergrass, *Use of Institutional Controls as Part of a Superfund Remedy: Lessons from Other Programs*, 26 ENVTL. L. REP. 10,109 (1996) (discussing the use of institutional controls to ensure the safety of cleanups under reduced or variable cleanup standards). New York state, in its Voluntary Cleanup Program, requires the party conducting the cleanup to place appropriate deed restrictions on the property to ensure it is not used for a “higher” use than that for which it met cleanup standards. See Charles E. Sullivan, NY Dep’t of Envtl. Conservation Voluntary Cleanup Program 2 (undated) (on file with author); see also Glen M. Vogel, *An Examination of Two of New York State’s Brownfields Remediation Initiatives: Title V of the 1996 Bond Act and the Voluntary Remediation Program*, 17 PACE ENVTL. L. REV. 83, 107 (1999). See also BROWNFIELDS LAW AND PRACTICE, *supra* note 7, at DE.01[6][e][iii] (release from liability dependent on many site-specific factors, including institutional controls (such as deed restrictions)); BROWNFIELDS LAW AND PRACTICE, at GA.01[5]; GA. COMP. R. & REGS. r. 391-3-19.08(7) (providing for use of restrictive covenants); GA. COMP. R. & REGS. r. 391-3-19.07 (providing for engineering controls); BROWNFIELDS LAW AND PRACTICE, at IA.01[5][e]; IOWA CODE ANN. 455H.201(4) (West 2000); IOWA ADMIN. CODE r. 567-137.9(5) (2000) (providing for institutional or technical controls); BROWNFIELDS LAW AND PRACTICE, at KS.01[5][a]; KAN. ADMIN. REGS. § 28-71-11(g) (only allow institutional controls where these controls will protect human health and the environment, and restrictive covenants are used, and where they are not a substitute for evaluating remedial actions which are technically and economically practicable); BROWNFIELDS LAW AND PRACTICE, at KY.01[5]; KY. REV. STAT. ANN. § 224.01-465(2) (Michie 2000) (indicates that use of institutional controls, specifically deed binding land use limitations is allowed in accordance with a remediation plan); BROWNFIELDS LAW AND PRACTICE, at LA.01[5][c]—LA. REV. STAT. ANN. § 30:2286(B) (partial remediation allowed only where owner imposes and records use restrictions on future use of property); BROWNFIELDS LAW AND PRACTICE, at MN.01[1][h]; MINN. STAT. § 115B.175 Subd. 2 (2000) (allowing for use of institutional and engineering controls when considering final remedy); BROWNFIELDS LAW AND PRACTICE, at MS.01[2][b]; MISS. CODE ANN. § 49-35-5(i), 1998 MISS. LAWS 528, § 3(i); Regulation Subpart I, § 103 (providing for land use restrictions—deed, use,

restrictive zoning); MISS. CODE ANN. § 49-35-5(g), 1998 MISS. LAWS 528, § 3(g), Regulation Subpart I, §103 (providing for engineering controls: "physical or hydraulic"); BROWNFIELDS LAW AND PRACTICE, at MO.01[5][c][xi] (institutional controls, restrictive covenants for sites remediated to non-residential standards and includes an easement for inspection by Missouri Department of Natural Resources (MDNR) for life of the covenant); BROWNFIELDS LAW AND PRACTICE, at MT.01[5][b]; MONT. CODE ANN. § 75-10-701(11) (2001) (providing institutional controls including deed restrictions, reservations, covenants, etc.); BROWNFIELDS LAW AND PRACTICE, at NJ.01[3]; N.J. STAT. ANN. §§ 58:10B-12(g), 58:10B-13 (West 2000) (providing for institutional or engineering controls); BROWNFIELDS LAW AND PRACTICE, at NC.01[5][b]; N.C. GEN. STAT. § 130A-310.32(b) (2000) (remediation standards are based on use restrictions), and *see generally*, Land-use Restrictions May Be Imposed to Reduce Danger to Public Health at Contaminated Sites: N.C. GEN. STAT. § 143B-279.9 (2000); BROWNFIELDS LAW AND PRACTICE, at OK.01[2][c]; OKLA. ADMIN. CODE 252:220-5-3 (2000) (the VCP application must include a remedial options evaluation, which discusses risk-based cleanup levels, economic feasibility, technical feasibility, and reliability for all options considered, including a discussion of institutional control needed for each option to maintain future uses); BROWNFIELDS LAW AND PRACTICE, at OR.01[5][b][ii]; OR. REV. STAT. 465.315(1)(c) (2000) (providing that a variety of means may be used for remedial action, including containment or engineering controls, institutional controls, such as zoning or deed restrictions limiting the use of the site); BROWNFIELDS LAW AND PRACTICE, at PA.01[5]; *see* PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, NO. 2530-FS-DEP 1849, FACT SHEET 7: LAND RECYCLING PROGRAM, SPECIAL INDUSTRIAL AREAS (1995); 25 PA. CODE § 250.503(d) (2000) (providing that the standards for cleanup of special industrial sites are characteristically more lenient than other PA voluntary cleanup standards. These cleanups may use treatment, storage, containment, or control methods, or any combination of these to address site contamination as long as the remediation protects against any immediate, direct or imminent threats to public health or the environment); BROWNFIELDS LAW AND PRACTICE, at TX.01[3]; 30 TEX. ADMIN. CODE § 350 *et seq.* The Texas Risk Reduction Program rules include provisions that affect property assessment, notice requirements, remedy standards, and institutional controls and create tiered, unified performance-based standards for investigation and cleanup of site contamination. In addition, they incorporate requirements governing appropriate notice to off-site property owners and options for utilizing institutional controls (deed notices, restrictive covenants, VCP certificates of completion, zoning ordinances, etc.) in lieu of complete remediation under certain circumstances. A copy of the final TRRP rules can be obtained from TNRCC's VCP web page at <<http://www.tnrcc.state.tx.us/permitting/remed/vcp>>; BROWNFIELDS LAW AND PRACTICE, at VA.01[5][b]; 9 VA. ADMIN. CODE § 20-160-90(B)(1) & (2) (No restriction on use for sites that have been remediated to Tier I background levels or if a risk assessment shows the site is acceptable for future residential use. For sites that do not achieve the unrestricted use classification, restriction on use such as institutional and engineering controls will be required. For example, the Department of Environmental Quality might require that a commercial property never be developed for residential use); BROWNFIELDS LAW AND PRACTICE, at WV.01[3][g]; W. VA. CODE ST. R. tit. 60-3, Appendices 60-3D and 60-3E (sample land use covenant forms) (any limitation on the use of a remediated property that is required to meet applicable standards must be contained in a land use covenant); BROWNFIELDS LAW AND PRACTICE, *supra* note 7, at WY.01[1]; 1999 WYO. SESS. LAWS No. 67 (Senate File 147). A copy of the bill is available at <<http://legisweb.state.wy.us/99sessin/enroll/senate/sea0067.htm>>. This law will become effective July 1, 2001 and adopts site-specific corrective action re-



Although states throughout the country have created brownfields redevelopment laws and programs,<sup>9</sup> Ohio's Voluntary Action Program (VAP) is innovative in several important ways.<sup>10</sup> This Article therefore uses it as an example to provide context for a discussion of legislative innovation in state brownfields laws. First, Ohio's program allows cleanup standards to vary in stringency according to the intended future use of the land.<sup>11</sup> Second, it requires private environmental professionals, certified by the Ohio Environmental Protection Agency (Ohio EPA), to investigate contamination levels and, according to standards set by Ohio EPA, to certify the cleanup as requiring no further action.<sup>12</sup>

In considering whether the potential risks presented by these innovations are too extensive in light of the benefits they offer, this Article proposes variations on those innovative themes that might provide some of the benefits with fewer risks. Part I discusses the effects of tying cleanup standards to the intended future use of the land. Part II discusses the various forms of privatization in brownfields site assessment and oversight. Finally, Part III briefly discusses other innovations in state brownfields redevelopment programs.

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quirements that may be inconsistent with federal law Resource Conservation and Recovery Act (RCRA). It expands the use of institutional controls and exempts from the state's cleanup requirements landowners who did not cause or contribute to the contamination. This bill is unlikely to become effective because the Governor is fighting it, although he allowed it to become law by not vetoing it.

<sup>9</sup> See generally Joel B. Eisen, *Brownfields of Dreams?: Challenges and Limits of Voluntary Cleanup Programs and Incentives*, 1996 U. ILL. L. REV. 883 (1996). See also TODD S. DAVIS AND KEVIN D. MARGOLIS, *BROWNFIELDS: A COMPREHENSIVE GUIDE TO REDEVELOPING CONTAMINATED PROPERTY* (1997); *BROWNFIELDS LAW AND PRACTICE*, *supra* note 7.

<sup>10</sup> The Ohio program has been called a "leader in this field." Anne Slaughter Andrew, *Brownfield Redevelopment: A State-Led Reform of Superfund* 10 NAT. RESOURCES & ENV'T 27, 36 (1999).

<sup>11</sup> OHIO ADMIN. CODE § 3745-300-08 (2000). In addition to the first two innovations, Ohio's program, like many others throughout the country, permits some controversial remediation methods for meeting its less stringent cleanup standards, such as those for properties intended for commercial and industrial uses. Such measures include using fences to keep people away from contaminated areas and deed restrictions to control the future use of the property. OHIO ADMIN. CODE § 3745-300-08(B)(1)(b)(iv) (2000).

<sup>12</sup> OHIO ADMIN. CODE § 3745-300-05 (2000).

## I

**CLEANUP STANDARDS DETERMINED BY THE  
INTENDED FUTURE USE OF THE SITE**

One innovative approach in states' brownfields redevelopment legislation is the linking of site cleanup standards to the intended future use of the land. Although the United States Environmental Protection Agency (EPA) has been experimenting with considering land use in the Comprehensive Environmental Response, Compensation and Liability Act's (CERCLA) remedy selection process, the states have been the real pioneers in applying this model.<sup>13</sup> In their efforts to remove environmental barriers to brownfields redevelopment, states have begun departing from the traditional rigid health-based standards.<sup>14</sup> Several studies and reports have supported these efforts, finding a general belief that cleanup standards should be based on actual threats to human health and the environment.<sup>15</sup> The goal of programs with risk-based standards is to assign cleanup standards that are sufficiently stringent to make properties safe for the owners' intended future use, but no more so. This is an effort to make cleanups satisfactory yet cost efficient, thereby encourag-

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<sup>13</sup> See Memorandum from Elliott P. Laws, Assistant Administrator, *Land Use in the CERCLA Remedy Selection Process*, OSWER DIRECTIVE NO. 9355.7-04 (May 25, 1995). However, it is questionable to assume that states will be able to execute this more effectively than the federal government. See Warren L. Ratliff, *The De-Evaluation of Environmental Organization*, 17 J. LAND RESOURCES & ENVTL. L. 45 (1997). See also Robert R. Kuehn, *The Limits of Devolving Enforcement of Federal Environmental Laws*, 70 TUL. L. REV. 2373, 2386-87 (1996). For example, research indicates that in environmental law, the devolution of federal powers to the states is risky to public health and the environment. Rena I. Steinzor, *Devolution and the Public Health*, 24 HARV. ENVTL. L. REV. 351 (2000).

<sup>14</sup> It is questionable that states will do any better with flexible standards than they have done with rigid standards.

<sup>15</sup> See PENNSYLVANIA ENVIRONMENTAL COUNCIL REPORT OF REUSE OF INDUSTRIAL SITES ROUNDTABLES, at 2 [hereinafter PENNSYLVANIA ENVIRONMENTAL COUNCIL REPORT]. Stakeholders believe it appropriate to develop generic health-based standards for particular substances to be applied to any site, but this should not preclude cleanups to site-specific standards based on actual risks determined by future land use. *Id.* at 4. See also UNITED STATES CONFERENCE OF MAYORS, BROWNFIELDS REDEVELOPMENT ACTION AGENDA: INITIAL FRAMEWORK (1996). In its five recommendations to the President and Congress, the U.S. Conference of Mayors states that "the selection of cleanup standards based on a property's end use can result in significant savings for the developer and enhance the likelihood that a facility will be remediated and redeveloped." Therefore, the Mayor's report recommends that the federal government push to expedite brownfields redevelopment by recommending cleanup standards based on the future end-use of the land. *Id.*

ing businesses and others to clean and redevelop contaminated properties.<sup>16</sup>

The question of how stringent cleanup standards must be, or “how clean is clean,” has plagued legislators, administrators and the regulated community at the state and federal levels since the inception of Superfund-type laws.<sup>17</sup> There are several general notions about what constitutes sufficiently clean. Under the first notion, a cleanup standard should require a landowner to return a property to its pre-release, or pristine condition. The second idea is that cleanup standards should require landowners to clean all contaminated properties to a residential-use standard so that current or future owners could use land for any purpose, up to and including residential use. The third theory is that cleanup standards should require landowners to clean contaminated property only to the level necessary for its intended future use, whether residential, commercial, or industrial. It is this third notion that may be called a risk-based, flexible, variable, or tiered system.

States offering such systems of standards tend to offer one or more of the following as options for program participants: cleanup to background conditions,<sup>18</sup> cleanup to generic numeric standards,<sup>19</sup> or cleanup to site-specific, risk-based standards.<sup>20</sup> In

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<sup>16</sup> See GEORGE V. VOINOVICH, OHIO'S VOLUNTARY CLEANUP AND REDEVELOPMENT, A REPORT FROM GOVERNOR GEORGE V. VOINOVICH (Spring 1998) [hereinafter GOVERNOR'S REPORT], at 1.

<sup>17</sup> See Pendergrass, *supra* note 8, at 10,109. See also Donald A. Brown, *EPA's Resolution of the Conflict Between Cleanup Costs and the Law in Setting Cleanup Standards under Superfund*, 15 COLUM. J. ENVTL. L. 241 (1990).

<sup>18</sup> See Clement Dinsmore, *Financial Barriers and Incentives to Brownfields Cleanup and Reuse* 40 (Jan. 1996) (unpublished manuscript, on file with the author). The definition of the term “background” varies among states, but can mean the natural and/or manmade condition of the site, minus those conditions attributable to the contamination at issue. *Id.* Background standards have been defined as pristine, pre-industrial conditions set by the state agency. Joanne R. Denworth, *Use Restricted-Use Standards Sparingly*, THE ENVTL. FORUM, May-June 1995 at 28, 30.

<sup>19</sup> These are health-based standards established for various toxic and carcinogenic substances, largely based on EPA standards. See Denworth, *supra* note 18, at 30. See also Dinsmore, *supra* note 18, at 40. Here, the states establish risk assumptions to which the remediating party can make limited modifications. See Dinsmore, *supra* note 18, at 40.

<sup>20</sup> These standards are based on the anticipated future use of the site, for example, limited close exposures for workers at industrial or commercial sites. See Denworth, *supra* note 18, at 30. See also Dinsmore, *supra* note 18, at 40. Here, the volunteer remediator can choose to engage in a more exhaustive analysis of site conditions than may be applicable under other systems of standards. See Dinsmore, *supra* note 18, at 40.

allowing these options, specifically with respect to this third category, states hope to accept reduced cleanup standards, or partial cleanups, in exchange for efficient redevelopment.

There are several problems with these risk-based approaches, however. First, a danger in tying cleanup standards to the intended future land use is that the future land use may not be eternally controllable, thereby placing future land users at risk from exposure to remaining contamination. If, for example, the land use of a contaminated industrial site changed to residential use, without additional cleanup, there would be a threat to public health.<sup>21</sup> Many programs attempt to alleviate or reduce this concern by employing institutional controls, such as restrictions on land use, to reduce the risks of exposure to remaining contamination.

There are also several externalized effects that remain when a cleanup is completed at less than the most stringent standards. First, in many instances risk-based standards provide a mechanism for allowing groundwater contamination to remain in place. This is problematic because science does not provide precise knowledge of groundwater migration. Second, although environmental justice concerns have gained significant exposure in the past decade, most programs using risk-based standards do not address those concerns; that is, risk-based standards often ignore the fact that many poor and minority communities host abandoned industrial sites that are being remediated to reduced cleanup standards under state brownfields programs. As such, these communities become neighbors to sites cleaned up to lesser standards, and, due to their proximity to the site, may be at risk for exposure to remaining contamination. Finally, the fact that current landowners can use the land now, but place restrictions on future use effectively shifts much of the true cost of remediation and the reduced value of the land to future landowners and even to future neighboring landowners.

#### ***A. A Variety of Approaches Using Risk-Based Standards***

In Ohio, a landowner who volunteers to participate in the state's brownfields program can choose to clean up the property to generic numeric standards, which are health-based standards determined according to the human health risk of the chemical

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<sup>21</sup> See PENNSYLVANIA ENVIRONMENTAL COUNCIL REPORT, *supra* note 15, at 4.

or carcinogen.<sup>22</sup> However, in certain circumstances, the property owner may instead elect to seek a property-specific risk assessment in which the potential risks associated with the intended future use of the land will help determine the applicable cleanup standards.<sup>23</sup> Although use of a property-specific risk assessment does not preclude the landowner from applying generic numeric standards, and does not prevent application of those standards following the property-specific risk assessment, the option provides an opportunity for flexibility. In some circumstances, a property-specific risk assessment will be mandatory, rather than elective. This is true when, for example, exposure pathways that would accompany an intended future use present more risk than that against which the generic numeric standards protect.<sup>24</sup>

Similarly, in Colorado's program cleanup standards are based upon actual risk to human health and the environment according to a set of established criteria. Prior to setting cleanup standards, Colorado considers the present and proposed uses of the site, the ability of contaminants to move in a way that would expose humans and the environment to unacceptable risk, the potential risks associated with cleanup options, and the economic and technical feasibility of cleanup alternatives.<sup>25</sup>

The Indiana brownfields law also provides for flexible cleanup standards, which allow the owner of a contaminated parcel to select the level of cleanup desired. However, unlike in most other states with risk-based cleanup standards, in Indiana the choice of cleanup level directly affects the level of liability protection the owner will receive from the state: "The more extensive the cleanup, the more extensive the protection from future liability."<sup>26</sup> At its highest level of cleanup, Indiana provides the voluntary remediator with protection from future liability to public and private claimants with respect to the release or threatened release that was the subject of the approved voluntary remediation work plan.<sup>27</sup> Protection from liability, however, does not ex-

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<sup>22</sup> See OHIO ADMIN. CODE § 3745-300-09(B) (2000). See also Dinsmore, *supra* note 18, at 40.

<sup>23</sup> See OHIO ADMIN. CODE § 3745-300-09(B)(1).

<sup>24</sup> See OHIO ADMIN. CODE § 3745-300-09(B)(2).

<sup>25</sup> See COLO. REV. STAT. ANN. § 25-16-305 (West 2000).

<sup>26</sup> Georgette C. Poindexter, *Addressing Morality in Urban Brownfield Redevelopment: Using Stakeholder Theory to Craft Legal Process*, 15 VA. ENVTL. L.J. 37, 53 (1995).

<sup>27</sup> IND. CODE ANN. § 13-25-5-18(a), (b) (West 2001). After the volunteer and the Department of Environmental Management have signed a voluntary remediation

tend to a pre-existing condition on the site that the state agency was not aware of when it issued the certificate of completion.<sup>28</sup> Significantly, after the volunteer remediator and the department have signed a voluntary remediation agreement, no person<sup>29</sup> may bring an action related to any release that is the subject of the agreement, including an administrative action, against the volunteer remediator.<sup>30</sup>

Similar to other states with flexible cleanup standards, Pennsylvania's brownfields law provides for compliance with one or more cleanup levels which include background standards,<sup>31</sup> statewide health-based standards,<sup>32</sup> and/or site-specific standards.<sup>33</sup> If a volunteer remediator pursues the background standards for all regulated substances, or statewide health-based standards for residual exposure factors, the "[s]ites are rewarded with exemption from deed notice requirements. . . . Consequently, subsequent transfer[s] of remediated property [are] not subjected to the stigma of being a formerly contaminated site."<sup>34</sup>

Before 1994, Connecticut required that participants in that state's cleanup program clean contaminated sites to pristine levels.<sup>35</sup> But in its brownfields redevelopment law Connecticut adopted a more flexible system. Despite an uneasiness with the idea, the Connecticut legislature authorized the state Depart-

agreement, no person may bring an action, including an administrative action, against the volunteer or any other party acting under the agreement on behalf of the volunteer for any cause of action related to any release or threatened release of any hazardous substance or petroleum that is the subject of the agreement. IND. CODE ANN. § 13-25-5-18(e).

<sup>28</sup> IND. CODE ANN. § 13-25-5-18(c).

<sup>29</sup> IND. CODE ANN. § 13-11-2-158(a). "Person," for purposes of environmental management laws "means an individual, a partnership, a copartnership, a firm, a company, a corporation, an association, a joint stock company, a trust, an estate, a municipal corporation, a city, a school city, a town, a school town, a school district, a school corporation, a county, any consolidated unit of government, political subdivision, state agency, a contractor, or any other legal entity."

<sup>30</sup> IND. CODE ANN. § 13-25-5-18(e).

<sup>31</sup> PA. STAT. ANN. tit. 35, § 6026.302 (West 2000).

<sup>32</sup> PA. STAT. ANN. tit. 35, § 6026.303.

<sup>33</sup> PA. STAT. ANN. tit. 35, § 6026.304.

<sup>34</sup> R. Michael Sweeney, *Brownfields Restoration and Voluntary Cleanup Legislation*, 2 ENVTL. L. 101, 104 (1995).

<sup>35</sup> See Terry J. Tondro, *Reclaiming Brownfields to Save Greenfields: Shifting the Environmental Risks of Acquiring and Reusing Contaminated Land*, 27 CONN. L. REV. 789, 797 (1995).

ment of Environmental Protection to institute differentiated or flexible standards based on proposed future uses of a site.<sup>36</sup>

Massachusetts' brownfields program is similar to Connecticut's, as it applies different cleanup standards to properties according to the intended future use of the land, and uses land use restrictions, called "activity and use limitations" to control future use.<sup>37</sup> Cleanup standards for brownfields in Connecticut, Massachusetts, and Colorado, as in Ohio and many other states, now vary depending on the landowner's intended future land use—for residential, commercial or industrial purposes.

An important issue regarding the use of these various risk-based cleanup standards is whether, when they allow contamination to remain on-site, these standards can sufficiently protect fu-

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<sup>36</sup> See *id.* at 797.

<sup>37</sup> For example, the Massachusetts regulations identify sites according to current use and the intended future use and categorizes them accordingly. MASS. REGS CODE tit. 310 § 40.0923 (1998) provides:

The documentation of the Risk Characterization shall identify and describe the Site Activities and Uses associated with the disposal site and the surrounding environment . . .

- (1) The Site Activities and Uses shall include all current and reasonably foreseeable uses and activities occurring at the disposal site or in the surrounding environment which could result in exposure to oil and/or hazardous material by Human or Environmental Receptors. . . .
- (2) The current Site Activities and Uses associated with the land itself, with structures in and on the land, and with the groundwater, surface water, soil, sediment or other medium which could result in exposure of Human or Environmental Receptors to oil and/or hazardous material shall be identified and described. . . .
- (3) The reasonably foreseeable Site Activities and Uses shall include any possible activity or use that could occur in the future to the extent that such activity or use could result in exposures to Human or Environmental Receptors that are greater than the exposures associated with current Site Activities and Uses, except that:

. . . .  
(6) Examples of Site Activities and Uses associated with Human Receptors include, without limitation:

- (a) the use of a building as an office, store or residence;
- (b) the use of water as drinking water, for washing floors or watering lawns;
- (c) the cultivation of fruits and vegetables destined for human consumption (e.g., gardening or farming) and the cultivation of ornamental plants;
- (d) the excavation of soil;
- (e) recreational activities, such as playing baseball, swimming, fishing and hiking;
- (f) leisure activities, such as picnicking, sunbathing and entertaining.

. . . .

ture land users from harm due to exposure to remaining contaminants. To determine the existence and degree of health risk related to redevelopment of a property with contamination retained on site, one must consider several factors concurrently. The first is whether there is a toxin or hazardous substance (e.g., benzene from petroleum, lead, arsenic, PCBs) present in the soil, air or groundwater at a contaminated site.<sup>38</sup> The second is whether the contamination is present in a form and concentration that is dangerous to humans (e.g., 5 parts per billion for benzene).<sup>39</sup> The third is whether there is a transmission mechanism, or pathway, by which the substance can enter the ecosystem or the human body (e.g., inhalation, dermal exposure, or ingestion by drinking or through the food chain).<sup>40</sup> Finally, one must examine the potential for actual contact between the human and the hazardous material (e.g., by children, the elderly, construction workers, or tenants in a building).<sup>41</sup> Breaking the connection between any two of these factors ensures safety at the site and keeps risks low. For example, an impenetrable cap placed over residual contamination can perform this function by blocking the pathway between the contamination and human contact.

Regulators and scientists often categorize risks for carcinogenic toxins in terms of the number of cancer deaths in the population. For example, a stringent cleanup level (less risk remaining onsite, but more expensive to clean) would be one cancer death in a population of one million ( $10^{-6}$ ).<sup>42</sup> A more lenient standard (with more risk remaining on site) would be one death in 10,000 ( $10^{-4}$ ).

Despite flexibility in applicable standards, states argue that they have adhered to standards sufficient to protect public health, particularly from cancer risk.<sup>43</sup> This is primarily because

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<sup>38</sup> See AMERICAN CHEMICAL SOCIETY, UNDERSTANDING RISK ANALYSIS—A SHORT GUIDE FOR HEALTH, SAFETY, AND ENVIRONMENTAL POLICY MAKING 7 (1998) [hereinafter UNDERSTANDING RISK ANALYSIS].

<sup>39</sup> See Junius C. McElveen, Jr., *Risk Assessment in the Federal Government: Trying to Understand the Process*, 5 TUL. ENVTL. L. J. 45, 56 (1991).

<sup>40</sup> See UNDERSTANDING RISK ANALYSIS, *supra* note 38, at 9. See also McElveen, *supra* note 39, at 67.

<sup>41</sup> See Amy L. Edwards, *ASTM Task Group Developing Guide on Institutional Controls*, ENVIRONMENTAL COMPLIANCE AND LITIGATION STRATEGY, Dec. 1997; UNDERSTANDING RISK ANALYSIS, *supra* note 38, at 9.

<sup>42</sup> See UNDERSTANDING RISK ANALYSIS, *supra* note 38, at 8. See also McElveen, *supra* note 39, at 62-67.

<sup>43</sup> See Dinsmore, *supra* note 18, at 40.



they have put mechanisms in place to prevent human exposure to contaminants remaining on brownfield sites. The mechanisms vary, but as a group, are called institutional controls.

***B. Protecting People from Remaining Contamination Through the Use of Institutional Controls***<sup>44</sup>

To protect public health by ensuring that future land owners and land users do not use land cleaned to an industrial standard for residential use, reduced cleanup standards are usually accompanied by restrictions on the future use of the land. State environmental agencies attempt to control future land use through various forms of institutional controls.<sup>45</sup> Institutional controls can reduce the likelihood that contaminated land will be redeveloped to a higher use, for which risks to human health through exposure to remaining contamination would be greater than for the current use. Although institutional controls once were merely an interim measure used to protect people from exposure until a site cleanup was complete, these controls are now used to provide long term protection from exposure, when total site remediation is not contemplated.<sup>46</sup>

Institutional controls either prohibit certain kinds of site uses, or at a minimum, notify potential owners or land users of hazardous substances remaining on site and of conditions that are not protective of all uses.<sup>47</sup> An institutional control, for example,

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<sup>44</sup> See Robert A. Simons and Heidi Gorovitz Robertson, *Deed Restrictions and Other Institutional Controls as Tools to Encourage Brownfields Redevelopment*, 7 ENVTL. L. & PRAC. 31-38 (1999).

<sup>45</sup> See Simons and Robertson, *supra* note 44. See also Pendergrass, *supra* note 8; Larry Schnapf, *Protecting Health and Safety with Institutional Controls*, 14 NAT. RESOURCE & ENV'T 251 (2000).

<sup>46</sup> See Amy L. Edwards and Karis Lynn North, *Institutional Controls Minimize Risks at Restored Brownfields*, LEGAL TIMES, June 16, 1997, at S40.

<sup>47</sup> See Laws, *supra* note 13. See also 40 C.F.R. § 300.430(a)(1)(iii)(D).

EPA expects to use institutional controls such as water use and deed restrictions to supplement engineering controls as appropriate for short- and long-term management to prevent or limit exposure to hazardous substances, pollutants, or contaminants. Institutional controls may be used during the conduct of the remedial investigation/feasibility study (RI/FS) and implementation of the remedial action and, where necessary, as a component of the completed remedy. The use of institutional controls shall not substitute for active response measures (e.g., treatment and/or containment of source material, restoration of ground waters to their beneficial uses) as the sole remedy unless such active measures are determined not to be practicable, based on the balancing of trade-offs among alternatives that is conducted during the selection of remedy.

may include deed restrictions, restrictive covenants, use restrictions, water use restrictions, deed notice requirements, zoning, permitting, access controls, special notice or recording requirements, contractual obligations, and financial responsibility requirements.<sup>48</sup> These control mechanisms are expected to render the property safe for its intended use, despite less stringent cleanup standards.

Institutional controls can, for example, prevent the use of construction methods that could damage a contamination barrier. They can prohibit the installation of water supply wells, the use of pile construction, and even the digging of foundations.<sup>49</sup> Institutional controls can require that a permanent cap remain on site and that the landowner maintain it.<sup>50</sup> Restrictions may also limit the ability of landowners to sell their property. Institutional controls can provide notice of remaining contamination to subsequent landowners, possibly increasing the likelihood that risk will remain low over time, despite the fact that contamination remains on site. The most common restrictions limit the future use of the land, and state brownfields programs using risk-based cleanup standards evaluate risk at a site in terms of the intended use (post-remediation) of the land.

For example, petroleum or lead contamination remaining under a shopping center's landscaped area would render that site, although suitable for its current commercial use, inappropriate for residential use.<sup>51</sup> A parking lot that is serving as a cap or barrier against human exposure to remaining underground contamination would be inappropriate for use as a residential site without further cleanup.<sup>52</sup> The developer can realize substantial cost savings by keeping the contamination on site and limiting potential human exposure to it through institutional or engineering controls. Because residual contamination may exceed safe levels for children playing in the dirt, a brownfields program would likely require some form of institutional control to prevent the property from being used for residential purposes in the future without further remediation.

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<sup>48</sup> *Id.* See, e.g., ALASKA ADMIN. CODE tit. 18 § 78.995(59) (1997).

<sup>49</sup> See *Institutional Controls*, 24.02[2][a] in BROWNFIELDS LAW AND PRACTICE, *supra* note 7.

<sup>50</sup> *Id.*

<sup>51</sup> See John Pendergrass, *Sustainable Redevelopment of Brownfields: Using Institutional Controls to Protect Public Health*, 29 ENVTL. L. REP. 10,243 (1999).

<sup>52</sup> See *id.* at 10,243.

Less stringent cleanup standards cost less but imply important trade-offs. Primary among those trade-offs is the genuine concern regarding whether deed restrictions will suffice in the long term to protect future land users from the contamination remaining at the site.<sup>53</sup>

This question, whether institutional controls can provide sufficient protection for humans from remaining contamination, depends very much on the mechanism by which the control is imposed. Institutional and engineering controls generally fall into two broad categories, first, those that derive from property law, and second, those that derive from governmental authority.<sup>54</sup> The controls that lie in common law property law, sometimes called proprietary controls, are essentially contractual arrangements in deeds or other instruments of property transfer.<sup>55</sup> Restrictions can generally be placed on the property only in conjunction with a conveyance. Therefore, it is difficult to create a restriction, at least of the proprietary form, when a cleanup has occurred outside the context of a real estate transfer.<sup>56</sup> These forms of restriction also must satisfy certain formalities to be effective.<sup>57</sup>

The types of restrictions that a landowner may create in connection with a transfer of an interest in land include restrictive covenants, easements, reversionary interests, and equitable servitudes.<sup>58</sup> Deed restrictions, although not a term used in traditional property law, are any of the above described mechanisms by which a landowner promises either to use, or not to use the

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<sup>53</sup> One danger left by deed restrictions and other institutional controls is the reduction in the value of the property with limited future use. And the more protective the measure, the more expensive, in terms of the reduction of the future value of the land, the restriction becomes. Further, the valuable possibility of using restricted land for "higher" land uses creates a temptation to manipulate the administrative record.

<sup>54</sup> See Schnapf, *supra* note 45. See also Pendergrass, *supra* note 51.

<sup>55</sup> See Schnapf, *supra* note 45, at 252.

<sup>56</sup> See Schnapf, *supra* note 45, at 252.

<sup>57</sup> See Schnapf, *supra* note 45, at 252. "There must be a written instrument that satisfies the applicable statute of frauds, the parties must intend that the deed restriction attach to the land, it must 'touch and concern' the land, and there must be 'privity of estate.'" Schnapf, *supra* note 45, at 252. This means, as with the other proprietary forms of control, that deed restrictions must usually be created in connection with a transfer of land. For the restriction to remain attached to the property for multiple transfers, the restriction must continue to be recorded with the deed.

<sup>58</sup> See Schnapf, *supra* note 45, at 252.

land in a certain way or for certain purposes.<sup>59</sup> Restrictive covenants, for example, are promises by landowners either to do or not to do certain things with their land.<sup>60</sup> These are usually used in cases with multiple landowners, such that the restrictions can be enforced by and against one another.<sup>61</sup> They can be used, for example, to prevent landowners from using the groundwater beneath a property, drilling wells, or digging ditches. They can also be used to require landowners to maintain a fence that protects humans from exposure to on-site contamination.

Covenants that run with the land are enforceable against subsequent owners of the same land, provided the person seeking to enforce the restriction is entitled to the benefit of the restriction.<sup>62</sup> Equitable servitudes are similar to restrictive covenants, but are enforceable in equity rather than law.<sup>63</sup> This means that rather than collecting damages for a violation of a restriction, the enforcer can force compliance. An obvious problem with using servitudes to restrict land use is that they are meaningless if the party with the right of enforcement declines or neglects to enforce them. For example, a neighboring property owner may have the right to enforce a land use restriction contained in a covenant, but may choose not to do so, instead supporting a lucrative development. Also, if the owner of the restricted parcel were to purchase the properties of those entitled to enforce the restrictions, there would no longer be anyone left to enforce it. For these reasons, it would make some sense for enforcement authority to be held by a state agency, but in the absence of legislative action to the contrary, that is not the nature of common law-based controls. Like other proprietary controls, covenants and servitudes must satisfy certain formalities of creation.<sup>64</sup>

Restrictive covenants and equitable servitudes can be terminated in several ways.<sup>65</sup> This may be necessary when, for example, a future landowner has remediated a restricted piece of

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<sup>59</sup> See Schnapf, *supra* note 45, at 252.

<sup>60</sup> See ROGER A. CUNNINGHAM, ET. AL., *THE LAW OF PROPERTY* § 8.13 (2nd ed. 1993).

<sup>61</sup> See Pendergrass, *supra* note 51, at 10,248.

<sup>62</sup> See Cunningham, *supra* note 60, at 468.

<sup>63</sup> See Cunningham, *supra* note 60, at 469.

<sup>64</sup> See Schnapf, *supra* note 45, at 252. These must be created in writing, be intended to restrict the uses of the land rather than restricting a person from taking a particular action, and the new owner must take the land with actual or constructive notice of the restriction. See Schnapf, *supra* note 45, at 252.

<sup>65</sup> See Cunningham, *supra* note 60, at 481.

former brownfield land such that a restriction on future land use no longer makes sense. In this situation, the court would find that conditions have changed so much since the creation of the agreement that the purpose for it no longer exists. Covenants and servitudes may terminate on their own terms, if, for example, they were written only to apply for a certain number of years or in certain circumstances. A court may terminate them upon a finding of acquiescence, that is, that the party entitled to enforce the agreement has failed to enforce it, or agreements like it, against other parties.<sup>66</sup> Courts also will terminate these agreements, on rare occasion, upon a finding of relative hardship, when the harm that would be caused to the defendant by enforcement outweighs the benefit enforcement would provide to the plaintiff.<sup>67</sup>

Reversionary interests are another form of property law-based control that one landowner may impose on those holding other interests in the same land. For example, if a landowner conveys a piece of contaminated property, but retains a right of re-entry, or some other reversionary interest, the landowner might exercise that right and retake the property if the holder of the possessory interest violates restrictions or conditions contained in the conveyance.<sup>68</sup> Thus, if the landowner transferred the present possessory interest in the land with a condition that the land be used for industrial purposes only, and retains a reversionary interest in the land, that landowner can enforce the condition. However, several problems exist with this form of control. First, it leaves the original landowner, and possibly that landowner's heirs, responsible for enforcing the condition when that may not be a role those parties are willing to play. Second, the remedy for failure to abide by the applicable condition is for the estate to revert to the holder of the reversionary interest.<sup>69</sup> This party, who may well be the heir to the original landowner, may want nothing to do with the contaminated property. The new holder of the reversionary interest may not be interested in the problem of remaining contamination. Again, enforcement authority would more usefully be held by a state agency.

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<sup>66</sup> JOSEPH W. SINGER, *PROPERTY LAW, RULES, POLICIES, AND PRACTICES* 512 (2d ed. 1997).

<sup>67</sup> *Id.* See also Mary R. English and Robert B. Inerfeld, *Institutional Controls for Contaminated Sites: Help or Hazard?*, 10 *RISK: HEALTH, SAFETY & ENV'T* 121, 126 (1999).

<sup>68</sup> See Pendergrass, *supra* note 51, at 10,248.

<sup>69</sup> See Pendergrass, *supra* note 51, at 10,248.

An easement is a right to use land that belongs to someone else.<sup>70</sup> Easements can be attached to, and run with the land (easement appurtenant), or be attached to a person, corporation or government entity (easement in gross).<sup>71</sup> Although either type of easement might be effective as an institutional control for a brownfield, it is more likely for such easements to be “in gross.”<sup>72</sup> An easement, for example, could grant a right of access to land, for inspection purposes, to a government entity. The easement holder has a right to bring an enforcement action to force the landowners to allow the easement holder to take the action allowed through the easement—usually entry under a right of way.<sup>73</sup> As with some other proprietary controls, this places great responsibility on the easement holder, either a person or an institution, to exercise its rights under the easement to protect people from contamination.

Some state brownfields laws have easements, created by statute, which allow the state environmental agency to enter and inspect the property to enforce the terms upon which a Covenant Not to Sue, or No Further Action letter was issued.<sup>74</sup> Other states require the landowner to transfer an easement to the state agency, for the purposes of inspection and enforcement, during the course of settlement negotiations. It is early to predict how well state agencies will do with the authority their states have given them to enforce these statutory modifications on common law land use restrictions. However, the idea of enforcing land use restrictions is new to state environmental agencies, and the restrictions become weak if the agencies neglect or choose not to engage in this traditionally private matter. As a practical matter, environmental agencies do not generally have mechanisms in place to enforce land use restrictions. And, if and when they do have mechanisms in place, they may not choose to make the implementation of those mechanisms a priority.

Because these property law based restrictions are generally dependant on a real estate transfer,<sup>75</sup> some states have statutorily created systems whereby, in the absence of a transfer, the pro-

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<sup>70</sup> See Cunningham, *supra* note 60, at 436-37.

<sup>71</sup> See Cunningham, *supra* note 60, at 441.

<sup>72</sup> See Pendergrass, *supra* note 51, at 10,250-51.

<sup>73</sup> See Cunningham, *supra* note 60, at 436-41. See also Schnapf *supra* note 45, at 252.

<sup>74</sup> See Schnapf, *supra* note 45, at 253.

<sup>75</sup> See Pendergrass, *supra* note 51, at 10,249.

gram participant would unilaterally record the required restriction with the deed.<sup>76</sup> In fact, some states use restrictions that are similar to the property law based forms of land use control, but that are based in statute rather than common law. For example, in addition to its “activity and use limitations,” Massachusetts has created statutory easements that are exempt from the common law limitations that would limit the effectiveness of their common law counterparts.<sup>77</sup> In Arizona, when a soil cleanup does not satisfy a residential use standard, the statute requires that an “environmental mitigation use restriction” be recorded in the property records.<sup>78</sup> Michigan, Ohio, and California have statutorily created various forms of restrictive covenants that run with the land.<sup>79</sup>

Connecticut, which has created “environmental land use restrictions” that run with the land, has also provided a statutory back-up plan.<sup>80</sup> If a court finds that the statutory restrictions are unenforceable, the statute provides that the landowner must abate the remaining pollution to standards acceptable for residential or recreational uses.<sup>81</sup> In New Hampshire, remediated brownfield sites must maintain a record of any use restriction placed on the property, those use restrictions must run with the land, and if they are violated, the site’s release from liability to the state is voidable.<sup>82</sup> Further, New Hampshire has made some statutory changes in brownfield restrictions that remove some common law limitations. Specifically, New Hampshire has legislated that the traditional property law rule against perpetuities and rules against unreasonable restraints on alienation do not apply to these restrictions.<sup>83</sup> Without these statutory modifications, the common law property rules would make it difficult, if not impossible, to enforce some restrictions over the long term. Be-

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<sup>76</sup> See Pendergrass, *supra* note 51, at 10,249.

<sup>77</sup> See English and Inerfeld, *supra* note 67, at 131.

<sup>78</sup> See Pendergrass, *supra* note 51, at 10,249, citing ARIZ. REV. STAT. § 49-152B (1997).

<sup>79</sup> See English and Inerfeld, *supra* note 67, at 131 (citing Susan C. Borinsky, *The Use of Institutional Controls in Superfund and Similar State Laws*, 7 FORDHAM ENVTL L.J. 1 (1995)).

<sup>80</sup> See Pendergrass, *supra* note 51, at 10,249, citing CONN. GEN. STAT. § 22a-133a-133k(a)(3) (1995).

<sup>81</sup> See English and Inerfeld, *supra* note 67, at 131.

<sup>82</sup> See Pendergrass, *supra* note 51, at 10,250, citing N.H. REV. STAT. ANN. § 147-B:F:6 (1996).

<sup>83</sup> See Pendergrass, *supra* note 51, at 10,250, citing N.H. REV. STAT. ANN. § 147-B:F:6 VI(b)(c) (1996).

cause these programs and tools are all quite young, it is too soon to know whether they will be effective in the long term.<sup>84</sup> Also, one potential problem they raise is that, despite the benefits discussed above of enforcement authority lying with state agencies, that authority carries with it an administrative burden. Agencies may well not have the administrative capacity to carry out these tasks. We know that zoning and planning boards tend not to do title searches prior to approving building permits and zoning changes.<sup>85</sup> They leave private matters to private property owners. Although these statutorily created restrictions make land use restrictions a public matter, it is not clear that agencies are prepared to manage them.

States often require one or more of these land use restrictions when a state environmental agency gives a brownfield project a letter of completion or covenant not to sue, despite the fact that contamination remains on site. For example, Ohio requires that No Further Action letters and Covenants Not to Sue be recorded with the deed to the property.<sup>86</sup> New Hampshire has a similar provision that requires the recording of "use restrictions" where cleanup decisions were based on assumptions regarding the future use of the land.<sup>87</sup> The restriction must be filed with the applicable deed recording office, usually the miscellaneous liens section of the county recording office, and becomes part of the property's permanent title record.<sup>88</sup> Landowners, present or future, can have the restriction removed only upon remediation of the site in accordance with applicable cleanup standards. Land use restrictions may be removed when the applicable environmental agency that originally required them files a waiver of the restriction with the county recording office.<sup>89</sup>

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<sup>84</sup> I have made several attempts to determine what state agencies know about the longer term effectiveness of their institutional controls. However, as far as I can tell, no agency has enough information to take a position on this.

<sup>85</sup> For example, a 1998 Report of the International City/County Management Association indicated that seventy-two percent of local governmental bodies surveyed did no search titles before making zoning changes. See CHRISTINE GASPAR AND DENISE VAN BURIK, LOCAL GOVERNMENT USE OF INSTITUTIONAL CONTROLS AT CONTAMINATION SITES 15 (1998).

<sup>86</sup> OHIO REV. CODE ANN. § 3746.14 (West 2000).

<sup>87</sup> N.H. REV. STAT. ANN. § 147-F:13V, F:15 (2000).

<sup>88</sup> *Id.*

<sup>89</sup> In New York, once a deed restriction is properly in place on the deed, it cannot be removed without first notifying the Department of Environmental Conservation. This same principle applies in other instances where the deed restriction was imposed as part of a remediation plan, or in exchange for a liability release from the



Institutional controls more clearly derived from governmental authority include those “exercised through planning and zoning processes and ordinances, subdivision plats, building permits, siting restrictions and groundwater use restrictions,” such as well-drilling prohibitions or well use permits.<sup>90</sup> States have broad authority, through their police power, to regulate the behavior of private citizens for the protection of public health, safety, and welfare.<sup>91</sup> States grant municipalities the power to enact and enforce zoning regulations. Through their zoning and planning processes, localities can exercise significant control over land use. However, this is very much a political process, and can be changed by future groups of local politicians.<sup>92</sup>

Zoning has some potential to be effective as an institutional control in brownfields redevelopment.<sup>93</sup> There are four primary reasons for this. First, because zoning decisions are local, and therefore closest to the brownfield site, the local governmental body can monitor the use of the land. Second, zoning and institutional controls share a common purpose, to promote and protect public health and welfare—although both have significant economic components as well. Third, because zoning is a highly public process, it can increase awareness of the land use and contamination issues, both regarding a particular site and in general, and increase public acceptance of land use controls. Fourth, zoning systems already exist and need no separate statutory or regulatory authority to function as an institutional control. Finally, zoning is flexible, and can be made site-specific through variances, and conditional and special use permits.<sup>94</sup>

Zoning is not a perfect tool, however. Because zoning boards are political, and heavily influenced by the extent of public concern with respect to a change, they could easily vote to eliminate restrictions when their constituencies have forgotten the underlying purpose or importance of the original zoning decision that restricted the land use. This could happen when a developer

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state. Deed restrictions might also be removed, like covenants and other property law based land use controls, when they are obsolete or abandoned, etc. See Cunningham, *supra* note 60, at 463.

<sup>90</sup> Schnapf, *supra* note 45, at 253.

<sup>91</sup> See Pendergrass, *supra* note 51, at 10,245.

<sup>92</sup> See Pendergrass, *supra* note 51, at 10,245.

<sup>93</sup> See Pendergrass, *supra* note 51, at 10,246-48.

<sup>94</sup> See Pendergrass, *supra* note 51, at 10,246-47.

wants to put houses near a former brownfield that now looks, but is not, perfectly green and safe.<sup>95</sup>

Also within the category of governmental authority based controls are informational devices (notice, registry, transfer act requirements, and public outreach), consent orders and permits, access controls, and monitoring requirements.<sup>96</sup> One form of control in the broader category of informational devices, deed notice requirements, can help future landowners by providing them with information regarding the character and location of remaining contamination. Like a deed restriction, some deed notice requirements will attach this notification to the deed such that it runs with the land, thereby notifying subsequent landowners that the property is contaminated in some specific way. In such systems, the deed notification remains in place until further cleanup makes it unnecessary.<sup>97</sup> A deed notification often will provide a brief summary of the site's history, explain the nature and circumstances of the contamination, present warnings with respect to land or water use, and refer to documents that will contain more specific information.<sup>98</sup> A deed notice requirement may require actual notice or disclosure to a future purchaser of a property, rather than merely recording the notice with the deed to the land.<sup>99</sup> However, with some deed notice requirements, the notice appears with the deed, thereby constructively notifying the next purchaser of the property, but it does not continue onto the next deed unless the new owner takes some specific action. In this situation, subsequent owners would not be notified unless their title searches went back more than one transfer, which is unusual.

Other mechanisms for providing notice to subsequent landowners include requiring the publication of legal notices in newspapers or the posting of signs on the property. As with deed notice requirements, except for posted signs, these notices would not be likely to reach tenants, who typically do not perform title or other searches prior to signing a lease. To combat this problem, some communities have created Geographical Information

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<sup>95</sup> See Pendergrass, *supra* note 51, at 10,247.

<sup>96</sup> See Amy L. Edwards, *Types of Institutional Controls*, ENVIRONMENTAL COMPLIANCE AND LITIGATION STRATEGY, Dec. 1997.

<sup>97</sup> See Pendergrass, *supra* note 51, at 10,251-52.

<sup>98</sup> See *Institutional Controls*, 24.02[2][a] in BROWNFIELDS LAW AND PRACTICE *supra* note 7.

<sup>99</sup> See Pendergrass, *supra* note 51, at 10,253-54.

System registries of contaminated sites and posted them on the web. Through these web sites, interested tenants or neighbors can find some information about the environmental status of a particular site.<sup>100</sup>

Unlike zoning regulations, which may be subject to the whims of local governmental bodies, other forms of restrictions run with the land from the current property owner to subsequent owners. Unlike permits, which may contain conditions or restrictions pertaining to land use, deed restrictions attach to the land, rather than the permit holder. Permits bind the current property owner, or permit holder, but new landowners would need their own permits, and are not bound by those of their predecessors. Therefore, in theory, deed restrictions are readily available through a standard title search, and should provide adequate protection against harm for future site users.

In addition, engineering controls, such as parking lots or clay barriers, fences, encapsulation, or membranes beneath landscaping can help programs with tiered cleanup standards control risk. The manner and extent to which these are imposed and enforced depends on applicable state law.

Some states maintain a registry, usually linked to or derived from the requirements of the Resource Conservation and Recovery Act or the Comprehensive Environmental Response, Compensation, and Liability Act, of a list of sites that have been used in the past for hazardous substance disposal.<sup>101</sup> In the future, local registries may maintain a list of sites within their jurisdictions that are restricted in terms of use or transfer. Potential purchasers of land could consult the registry to determine the status of a candidate site. A site's listing in this type of registry could be-

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<sup>100</sup> See Schnapf, *supra* note 45, at 253.

<sup>101</sup> See Judith G. Tracy, *Beyond Caveat Emptor: Disclosures to Buyers of Contaminated Land*, 10 STAN. ENVTL. L.J. 169, 206 (1991) (citing Iowa Code Ann. § 455B.426 (West 1990) (registry of abandoned or uncontrolled sites)); MO. ANN. STAT. § 260.440 (West 1990) (registry of abandoned or uncontrolled hazardous waste sites); TENN. CODE ANN. § 68-46-212(d) (1987 & Supp. 1990) (notice on deed that cleanup or containment occurred on property); W. VA. CODE § 20-5E-20 (1989) (disclosure in deed that property was used for storage, treatment, or disposal of hazardous waste); WISC. STAT. ANN. 144.442(4)(a) (West 1989 & Supp. 1990) (inventory of sites that may cause environmental pollution). For example, the Massachusetts' Department of Environmental Protection "maintains online databases that identify superfund sites (the NPL or National Priorities list), potential Superfund Sites (CERCLIS), and four RCRA databases," through its Waste Management Branch. See BARBARA A. LAAKSO AND RICHARD J. GALLOGLY, LAND USE AND ENVIRONMENTAL ISSUES, MASSACHUSETTS PARALEGAL PRACTICE MANUAL (1997).

come a part of the site's chain of title, thus providing an additional avenue for notice to a prospective purchaser of the site.

Some states place special requirements on the transfer of contaminated properties. Specifically, a purchaser can void a transaction if the seller failed to disclose or convey certain information regarding the environmental status of the site. For example, a property is subject to the Connecticut Transfer of Hazardous Waste Establishment Act<sup>102</sup> if, after 1980, it generated more than 100 kilograms of hazardous waste in any single month, if at any time it was the site of recycling, storing, handling, disposal or storage of hazardous waste, or if a dry cleaner, furniture stripper, or automobile repair/paint shop was located there after 1967.<sup>103</sup> To transfer any property that fits these characteristics, both the owner and purchaser must execute a specific form provided by the state Department of Environmental Protection's Property Transfer Program.<sup>104</sup> The program has several versions of this form, and which form applies varies according to the environmental condition of the property.<sup>105</sup> The forms range from a simple declaration by the transferor that no hazardous waste has spilled on the premises to written notification that the site has been remediated to applicable standards and will be appropriately monitored.<sup>106</sup>

State environmental agencies can often ensure that deed restrictions and other institutional controls are recorded with the applicable deed. To start, the agency can create a liability release that remains ineffective until the applicable deed restriction is properly recorded or executed. Theoretically, these recorded restrictions should need little additional enforcement as few lenders or purchasers would lend or spend money for a restricted property. At a minimum, the issuing agency could revoke a Covenant Not to Sue, or other liability release, for failure to abide by restrictions or other controls.<sup>107</sup> In Ohio, for example, the state EPA issues a Covenant Not to Sue to a property owner after a certified environmental professional issues a No Further Action letter, indicating that the site has met applicable standards.<sup>108</sup>

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<sup>102</sup> 1998 Conn. Pub. Acts 253.

<sup>103</sup> See CONN. GEN. STAT. § 22a-134(3) (1998).

<sup>104</sup> See CONN. GEN. STAT. § 22a-134(a).

<sup>105</sup> See CONN. GEN. STAT. § 22a-134(10).

<sup>106</sup> See CONN. GEN. STAT. § 22a-134(12-13).

<sup>107</sup> See Schnapf, *supra* note 45, at 253.

<sup>108</sup> OHIO ADMIN. CODE § 3745-300-13 (2000).

That Covenant Not to Sue releases the volunteer remediator from liability to the state agency for environmental issues dealt with in the cleanup process and may be transferred to subsequent owners of the property.<sup>109</sup>

For other institutional controls, such as signage indicating an existing hazard, or fence or cap requirements, enforcement mechanisms are less clear. It is uncertain whether state agencies or local authorities would enforce them. Even once that jurisdictional issue is resolved, it is unclear what kind of priority the applicable authority would give to the enforcement of such controls.

Some federal and state regulators are concerned that deed restrictions lose strength as they grow in age.<sup>110</sup> One reason is that state and local regulators may not have the resources, over time, to enforce restrictions that may not, in the future, seem as important as they did at their inception. This may be especially true for a site with residual contamination that becomes, many years later, covered with grass and trees.

Because present or future landowners may fail to comply with a deed restriction, the restriction itself does not prevent exposure to remaining toxins. Although the noncomplying landowner may subject himself or herself to the health and liability risks associ-

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<sup>109</sup> OHIO ADMIN. CODE § 3745-300-13(K) (2000).

<sup>110</sup> If the goal of institutional controls is to protect humans who may, in the future, be exposed to remaining contamination, one wants the restrictions to be long-lasting. However, the length of their life raises other issues. For example, property law has long been concerned about the power of one generation to control the ownership and use of land by future generations. There are basic policies of property law against unreasonable restraints on alienability, that is, unreasonable restrictions on one's ability to transfer ownership of their land, especially when those restrictions come from past generations. In fact, the famous Rule Against Perpetuities prevents a grantor of property from creating an interest in land that might vest too far in the future. One reason for this is that it gives that ancient landowner too much power over those who come after him. Some might raise the same concerns about deed restrictions that last eternally. Although they protect future land users from remaining contamination, they may severely restrict what future landowners and users may do with their land. There are a couple of ways to handle this. First, one might create deed restrictions of limited duration. Of course, the problem would be that the duration must be sufficient to protect against the remaining risk. If the risk is such that it dissipates over time, the restrictions should not last beyond that time. Second, one might, as in many jurisdictions, make clear a mechanism by which restriction can be removed by cleaning the land to more stringent standards, or testing the land to ensure that the risk has been sufficiently reduced. Third, one might decide that it is enough to provide information to future landowners regarding the environmental status of the site, and let them decide at what level they are willing to bear the risk.

ated with noncompliance, that noncompliance also places others at risk. The failure of a landowner to comply with a deed restriction could lead to release of remaining toxins and contact of those toxins with humans. Therefore, although deed restrictions are permanent by nature, they may appear temporary because they are only as permanent as compliance with them provides.

If a future landowner violates the restriction by using or allowing use of the land in a manner unintended by the volunteer remediator, that landowner places those who interact with the land at some increased degree of health risk, depending on the environmental status of the site. In addition, the violator may incur legal liability to individuals harmed by exposure to the site, and to the agency.<sup>111</sup> If an owner fails to abide by deed restrictions or engineering controls required by the applicable Covenant Not to Sue or No Further Action letter, that landowner would lose the liability protections the document provided.<sup>112</sup>

Also, local planning commissions do not typically evaluate every deed in an area before altering the zoning for that area.<sup>113</sup> They therefore might inadvertently rezone restricted property from industrial to residential use. Although the deed restriction technically would still apply, the property could easily "slip through the cracks," thereby subjecting people to increased risk. Likewise, local authorities that grant building permits do not always examine deeds, and thus could accidentally grant permits that would lead to a land use or construction process that could disturb contaminated soil and increase the possibility of human exposure to a previously controlled risk.<sup>114</sup>

Therefore, although there are many important issues concerning the use of deed restrictions and other institutional controls, the most important is that of institutional memory. Institutional controls should theoretically provide eternal control over the use of the land. Given that many county record departments are computerized, and that most others are heading in that direction, once the deed restriction is filed institutional memory should be quite permanent. However, there are no data to support this assertion, and there remains a risk that the deed restriction, al-

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<sup>111</sup> OHIO REV. CODE ANN. § 3746.22 (2000).

<sup>112</sup> OHIO REV. CODE ANN. § 3746.12(B)(2)-(4).

<sup>113</sup> See Gaspar and Van Burik, *supra* note 85.

<sup>114</sup> See Susan C. Borinsky, *The Use of Institutional Controls in Superfund and Similar State Laws*, 7 FORDHAM ENVTL. L. J. 1, 6 (1995).

though permanent in nature, may fail to protect against human exposure to remaining toxins due to lack of compliance or enforcement. Therefore, independent monitoring or verification in the form of a local registry should be in place.

The option of using land use restrictions and other institutional controls in support of state brownfields redevelopment efforts is critical to the success of these programs. Without institutional controls, we cannot ensure sufficient protection of human health and the environment under circumstances where contamination will remain onsite. Developers often will not assume the high cost of permanent site remediation, opting instead for risk based corrective action. Even with the available tiered cleanup standards, without deed restrictions and other institutional controls landowners and potential developers would not assume the liability risk associated with brownfield properties without significant assurances regarding the long-term safety of the site.

Unlike permanent cleanup of a site, no deed restriction can eliminate risk entirely. However, deed restrictions can significantly reduce risks of human exposure to remaining toxins. They can lower risk for certain land uses, such that land is well-used and human beings protected against exposure. They can allow such land use because they make it possible for developers and landowners to cleanup land economically, while providing some protection from risk and liability. In other words, in conjunction with engineering and other site controls, land use restrictions assist state brownfields programs in encouraging economically feasible urban redevelopment without substantially increasing health risks.

To ensure that land use restrictions and other institutional controls can accomplish the lofty goal of allowing economical cleanup, efficient land use, and protection against human exposure, these restrictions must be enforced. Mechanisms must be developed to ensure that landowners comply with these restrictions and that applicable government agencies enforce them. Whether these restrictions and controls can meet these important challenges remains an open question, but their promise helps justify the innovative approach within state brownfields programs of setting cleanup standards according to the intended future use of the land.

***C. Some Externalized Environmental Effects of Risk-Based Cleanup Standards***

***1. Future Generations of Landowners***

Externalized environmental effects remain when a piece of land is cleaned up to less than pristine standards. Some of the burdens of those externalized effects are borne by future generations of landowners. When a current landowner applies the less stringent levels of risk-based standards, as discussed above, there is always some remaining environmental risk to future owners and users of land. As discussed, this risk is reduced, if not eliminated, through deed restrictions and other institutional controls.

In addition to issues of residual environmental risk, future landowners will suffer from other externalized effects, such as the reduced economic value of the land due to the current landowner's failure to complete a full cleanup. If the increase in current value suits the current landowner's needs, he or she may choose to complete a partial cleanup and accept some of the land use restrictions that go with it. Accepting this reduced economic value may be a calculated decision by current landowners. That is, they know what the land is worth in its contaminated state, and they have determined or predicted the value of the land in its partially remediated state. The landowner gets something more than he had, but something less, in terms of full value, than he might have.

Because the current landowner has less, the future landowner gets less upon transfer. That said, the future landowner may well have paid a reduced price for the now less valuable land. The partially-remediated land is less valuable for several reasons. First, it is less valuable by virtue of its environmentally impaired state. Second, it may be less valuable due to the very restrictions placed on its uses for purposes of protecting human beings from exposure to remaining contamination. The reduced ability to use the land renders it less valuable. Third, the stigma attached to restricted, contaminated, or once restricted or contaminated land, may also reduce its value.

The environmentally impaired state of the property, impaired due to the partial nature of a risk-based cleanup, also contributes to the reduction in property value for future generations of landowners. Environmentally impaired properties are of reduced value to future generations of landowners due, at least in part, to



the high cleanup costs and immeasurable liability associated with environmental contamination. It is these very issues that make contaminated properties undesirable in the first place, and which lead to the creation of brownfields programs to encourage their cleanup and redevelopment.

Future generations of landowners bear externalized costs due to the very land use restrictions placed on the property to protect the same future landowners. For partial cleanups to be viable in terms of the safety of future persons who come into contact with the land, there must be reliable restrictions on use, or other methods of breaking pathways of human exposure to the remaining contamination. Although there are many ways to achieve this, more fully dealt with above, any such methods will reduce the value of the property, at least as compared with the value to future generations of landowners that the property would hold if it had been fully remediated.

Even after a site is partially remediated, it suffers some loss in value due to the stigma attached to its being a formerly, or partially contaminated site. Even if the new owner is operating with full knowledge of the environmental facts surrounding a site, the value of that site is harmed by its past. Based on knowledge of the amount of economic harm the stigma imposes on the site, a potential future landowner can make an informed decision with respect to the investment. However, other people who may interact with the site, perhaps people who are less informed about the true environmental status of the site, may believe the site to be more contaminated and dangerous than it is. People fear health harms at such sites, as well as liability of harm to others. In addition to fear by individuals, banks and insurance companies also fear partially-remediated sites, which adds to the externalized costs borne by future generations of landowners.

In addition, future generations of neighboring landowners will be adversely affected by the partial remediation next door. The value of their property might suffer for any of the reasons discussed above, but in all likelihood, they got none of the benefit. Finally, society at large will suffer because the partially remediated site is now usable for a reduced range of uses. By choosing partial remediation, the current landowner has extended his or her control of land uses and land values, not only to future owners of his or her parcel, but to future owners of other parcels, and to society at large.

## 2. *Groundwater Contamination*

When state brownfields programs relax cleanup standards to a risk-based level appropriate to the intended future use of the land, the standard often does not take into account the remaining contamination of groundwater reservoirs, called aquifers. If contaminated groundwater, at the site location or elsewhere, becomes a source of drinking water, the population using that water supply may be exposed to dangerous contamination. Over half of the United States' population depends on groundwater aquifers for its drinking water.<sup>115</sup> Also, some groundwater re-joins rivers and lakes, which are also significant sources of drinking water and food supply.<sup>116</sup> For example, although placing an impermeable cap over contaminated soil will prevent the upward migration of toxic substances, thereby protecting future land users by limiting their possibility of exposure, a cap will not prevent contamination from seeping downward into groundwater. The standard also may not prevent the underwater migration of toxic substances to neighboring parcels of land, or to connected aquifers.

Groundwater is a particularly difficult problem. One reason for this is that contaminated plumes might move only short distances, or they might move long distances in a single day, depending on hydrological conditions. The difficulty lies in the fact that the direction and rate of flow of groundwater is difficult and costly to predict with any degree of accuracy. These factors, direction and rate of flow, vary significantly due to changes in groundwater use patterns, such as those for drinking water, irrigation, livestock watering, and industrial use.<sup>117</sup> Other factors also affect the migration rate of contaminated groundwater. The viscosity and density of liquid contamination affect the rate of flow.<sup>118</sup> Although there are methods for predicting the sizes, shapes and locations of underground aquifers, the methods are

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<sup>115</sup> See Pamela King, *The Protection of Groundwater and Public Drinking Supplies: Recent Trends in Litigation and Legislation*, 42 VAND. L. REV. 1649, 1649-50 (1989) (citing SENATE COMM. ON GOVERNMENTAL AFFAIRS, PROTECTING OUR NATION'S GROUNDWATER: THE NEED FOR BETTER PROGRAM COORDINATION, S. REP. NO. 100-475, 2d Sess. 2 (1988)).

<sup>116</sup> *Id.* See also T. HENDERSON ET AL., GROUNDWATER STRATEGIES FOR STATE ACTION 2 (1984).

<sup>117</sup> See English and Inerfeld, *supra* note 67, at 136.

<sup>118</sup> See McElveen, *supra* note 39, at 70-71.

not foolproof. Science has not done terribly well predicting or explaining the migration of groundwater contamination.<sup>119</sup>

Although residual groundwater contamination may not create an immediate or direct threat to public health when the groundwater is not currently used for drinking water, such contamination can adversely restrict future groundwater assets. The contamination may also limit neighboring landowners' ability to use neighboring parcels of land that could have groundwater wells. Because groundwater, contaminated or clean, migrates in unexpected ways, groundwater contamination puts users of other parcels of land at risk, as well as users of groundwater in other locations.

When monitoring of a brownfield site shows that contamination has migrated to off-site groundwater, potential users of that groundwater must be notified of the existing dangers. If that groundwater is used for drinking water, users must find alternative sources of water supply. Even though states can use any of a number of institutional controls to restrict or prohibit the drilling of new wells, it is difficult to prohibit or restrict the use of existing wells, and private property owners are under no obligation to have the water in their wells tested. Although some states do provide limited voluntary water testing, more extensive testing for contaminants is costly and technically difficult.

Some states have dealt with the problem of groundwater contamination by devising a method to take groundwater out of the cleanup and redevelopment equation. Some states have established "classified exemption areas" or areas of "urban settings designation" in which the state agency recognized that the groundwater in the area is universally contaminated and will not be suitable for drinking.<sup>120</sup> In these areas, program participants are not held responsible for the condition of the groundwater.

For example, some brownfield sites in urban areas rely on community water systems to supply residents with safe drinking water.<sup>121</sup> Beneath those sites, groundwater that contains chemi-

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<sup>119</sup> In addition to the fundamental difficulty of predicting groundwater flow rates and direction, certain types of contamination do not travel at the same rate as the water. Contamination can be more dense than water, and can get absorbed into porous rock for release at a later time. See Linly Terris and David Rees, *CERCLA Remedy Selection: Abandoning the Quick Fix Mentality*, 21 *ECOLOGY L. Q.* 785, 830 (1994).

<sup>120</sup> See Schnapf, *supra* note 45, at 253. See also McElveen, *supra* note 39, at 70.

<sup>121</sup> See OHIO GOVERNOR'S REPORT, *supra* note 16, at 6.

cals from prior industrial activities is not currently being used for drinking water purposes and will not be used for those purposes in the foreseeable future.<sup>122</sup> For these sites, Ohio EPA will issue a groundwater classification known as an Urban Setting Designation (USD).<sup>123</sup> This classification presumes that at these sites, cleaning up groundwater to drinking water standards is not necessary because no one will be drinking the groundwater.<sup>124</sup>

Other possible exposures to contaminated groundwater still must be addressed even with an USD.<sup>125</sup> For example, if contaminated groundwater makes its way to a stream, the resulting discharge cannot cause adverse impact on the aquatic life in the stream, nor can it harm people who might swim in the water.<sup>126</sup>

In Ohio's brownfields program a certified professional must obtain an USD from Ohio EPA<sup>127</sup> with respect to the groundwater below the site in order to release the volunteer from cleanup of ground water. To receive an USD, the property or properties must satisfy certain threshold criteria. The sites must be entirely within cities or towns with a population of twenty thousand or more residents.<sup>128</sup> At least ninety percent of the city or township must be connected to a community water supply.<sup>129</sup> Except in certain circumstances, Ohio EPA cannot grant an USD for a site that is located in an Ohio EPA designated wellhead

<sup>122</sup> See OHIO GOVERNOR'S REPORT, *supra* note 16, at 6.

<sup>123</sup> BROWNFIELDS LAW AND PRACTICE, *supra* note 7, at OH.01[2]. See also OHIO GOVERNOR'S REPORT, *supra* note 16, at 67.

<sup>124</sup> BROWNFIELDS LAW AND PRACTICE, *supra* note 7, at OH.01[2].

<sup>125</sup> BROWNFIELDS LAW AND PRACTICE, *supra* note 7, at OH.01[2].

<sup>126</sup> BROWNFIELDS LAW AND PRACTICE, *supra* note 7, at OH.01[2].

<sup>127</sup> OHIO ADMIN. CODE § 3745-300-10(D)(1) (2000). The request for the approval of an urban setting designation must be in writing and must include, at a minimum, the following: a cover letter, which includes the name and address of the volunteer(s); a description of the location and size of the site, and if known, whether the legislative authority of the city or township where the site is located is in favor of or in opposition to the USD; an affidavit by the certified professional affirming that the urban setting threshold criteria are met; attached true and accurate copies of all documents which form the basis of the certified professional's determination that the USD threshold criteria have been met; attached true and accurate copy of a legal description of the proposed USD site; and notice as required by OHIO ADMIN. CODE § 3745-300-10(D)(2)(b). OHIO ADMIN. CODE § 3745-300-10(D)(2)(a)(i)-(iii).

<sup>128</sup> OHIO ADMIN. CODE § 3745-300-10(D)(1)(a).

<sup>129</sup> However, if less than ninety percent but at least seventy-five percent of the township or city is on a community water supply, and as long as the parcels of land not connected to the community water supply are not and will not be affected by hazardous substances or petroleum on or emanating from the site, then the certified professional may still request an USD. OHIO ADMIN. CODE § 3745-300-10(D)(1)(b).

protection area.<sup>130</sup> The USD is usually also inappropriate when drinking water wells are located within one-half mile of the site boundary.<sup>131</sup> However, even under these circumstances, the certified professional may sometimes still request the USD.<sup>132</sup>

When a site is located over a sole source aquifer<sup>133</sup> in a consolidated saturated zone<sup>134</sup> or an unconsolidated saturated zone<sup>135</sup> capable of sustaining a yield greater than one hundred gallons per minute, the certified professional must demonstrate that there is no reasonable expectation that any drinking water wells will be located within one-half mile of the site.<sup>136</sup> The certified professional must consider several criteria to make this determination.<sup>137</sup>

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<sup>130</sup> The exception to this rule is when the owner of the community water system has endorsed a wellhead protection plan for that wellhead protection area and the owner consents in writing to the urban setting designation. OHIO ADMIN. CODE § 3745-300-10(D)(1)(c).

<sup>131</sup> OHIO ADMIN. CODE § 3745-300-10(D)(1)(d).

<sup>132</sup> First, the drinking water wells must be community water system supply wells with a wellhead protection plan that complies with Ohio EPA's wellhead protection program, and the owner of the public water system must consent in writing to the USD. OHIO ADMIN. CODE § 3745-300-10(D)(1)(d)(i). Second, the certified professional must demonstrate that the capture zones of any wells installed or used for drinking water within one-half mile of the site do not extend under the site. OHIO ADMIN. CODE § 3745-300-10(D)(1)(d)(ii). The "capture zone" is "all unsaturated and saturated subsurface areas that presently contribute or will contribute ground water to a well." OHIO ADMIN. CODE § 3745-300-10(A)(1).

<sup>133</sup> A "sole source aquifer" is "an aquifer designated as a sole source aquifer under section 1424(E) of the Safe Drinking Water Act (1974) at 42 U.S.C. 300F, as amended." OHIO ADMIN. CODE § 3745-300-10(A)(6).

<sup>134</sup> A "consolidated saturated zone" is a "saturated zone in bedrock." OHIO ADMIN. CODE § 3745-300-10(A)(2). The "saturated zone" is a "part or layer of the earth's crust, excluding the capillary zone, in which all voids are filled with water." OHIO ADMIN. CODE § 3745-300-10(A)(5).

<sup>135</sup> An "unconsolidated saturated zone" is "any saturated zone that is not in bedrock, including, but not limited to, saturated zones in soil, gravel, sand, silt, clay or fill materials." OHIO ADMIN. CODE § 3745-300-10(A)(7).

<sup>136</sup> OHIO ADMIN. CODE § 3745-300-10(D)(1)(e).

<sup>137</sup> First, there must be "legally enforceable, reliable restrictions on ground water use," not including those imposed on wellhead protection or for ground water protection purposes. OHIO ADMIN. CODE § 3745-300-10(D)(1)(e)(i). The certified professional must consider whether current land use patterns within one-half mile of the site or ground water quality make development of a well impractical. OHIO ADMIN. CODE § 3745-300-10(D)(1)(e)(ii). The certified professional must also consider whether ninety percent of more of the parcels within one-half mile of the site are connected to a community water system. OHIO ADMIN. CODE § 3745-300-10(D)(1)(e)(iii). The final criteria is whether the capture zone of any wells that could reasonably be expected to be installed or used within one-half mile of the site would not extend under the site. OHIO ADMIN. CODE § 3745-300-10(D)(1)(e)(iv).

Upon receipt of a request for approval of an urban setting Ohio EPA may request any additional information from any of a number of parties,<sup>138</sup> and may hold a public meeting on the question of the designation.<sup>139</sup> Prior to approving an USD, Ohio EPA must consult with the local legislative authority of the city or township.<sup>140</sup> In addition to considering the five threshold criteria,<sup>141</sup> Ohio EPA may also consider the potential impact of the USD on jurisdictions surrounding the site,<sup>142</sup> the potential impact of the USD on regional water resource needs, and the consistency of the USD with existing regional water resource obligations of the city or township where the site is located.<sup>143</sup>

Another critical factor that the Ohio EPA may consider is whether residents in the region of the site are not currently using the groundwater for drinking, and are not reasonably expected to use the groundwater in the future, such that the risk of exposure to humans as a result of the USD is very low.<sup>144</sup> Similarly, the Ohio EPA Director may also consider the availability and feasibility of community water treatment systems that are capable of preventing exposures to groundwater with concentrations of chemical(s) of concern in excess of drinking water standards.<sup>145</sup> Additionally, the Ohio EPA may consider any other relevant information to determine whether the USD will be sufficiently "protective of public health, safety, and the environment."<sup>146</sup>

Pennsylvania does not have a groundwater classification like Ohio's Voluntary Action Program, although it appears to contemplate lesser cleanup standards for groundwater not in an aquifer. Pennsylvania's program allows volunteers to select background, statewide, or site-specific cleanup standards; volunteers in Pennsylvania may also select a combination of these

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<sup>138</sup> OHIO ADMIN. CODE § 3745-300-10(D)(2)(c).

<sup>139</sup> *Id.*

<sup>140</sup> OHIO ADMIN. CODE § 3745-300-10(D)(2)(d). The director may only approve or disapprove the request of approval of an USD *after* meeting with the local legislature. OHIO ADMIN. CODE § 3745-300-10(D)(2)(e) (emphasis added). Additionally, the director may extend the time for considering the request for approval of a USD. OHIO ADMIN. CODE § 3745-300-10(D)(2)(g).

<sup>141</sup> OHIO ADMIN. CODE § 3745-300-10(D)(2)(e)(i).

<sup>142</sup> OHIO ADMIN. CODE § 3745-300-10(D)(2)(e)(ii).

<sup>143</sup> OHIO ADMIN. CODE § 3745-300-10(D)(2)(e)(iii).

<sup>144</sup> OHIO ADMIN. CODE § 3745-300-10(D)(2)(e)(iv), (v). This includes criteria on how to determine whether ground water in the region or area of the site will be used as a future source of drinking water.

<sup>145</sup> OHIO ADMIN. CODE § 3745-300-10(D)(2)(e)(vi).

<sup>146</sup> OHIO ADMIN. CODE § 3745-300-10(D)(2)(e)(vii).

standards. The background standard requires the cleanup to attain those background standards for each contaminant in each environmental medium, including soil or groundwater.<sup>147</sup> Under statewide health standards, the cleanup must attain levels of regulated substances prescribed by the state associated with the specific environmental medium such as soil and groundwater.<sup>148</sup> For site-specific standards, the volunteer must develop cleanup levels specifically for the individual site based on the contaminants, exposures, and conditions unique to that site.<sup>149</sup>

For groundwater in aquifers, the current and probable future use of groundwater must be identified and protected.<sup>150</sup> “[N]atural environmental conditions affecting the fate and transport of contaminants, such as natural attenuation, shall be determined by appropriate scientific methods.”<sup>151</sup> Additionally, Pennsylvania requires that “[g]roundwater not in aquifers be evaluated using current or probable future exposure scenarios” and that appropriate management actions be “instituted at the point of exposure where a person may be exposed to groundwater by ingestion or other avenues to protect human health and the environment.”<sup>152</sup>

However, for special industrial areas,<sup>153</sup> the standards are more lenient than the other three categories, including the standards for groundwater cleanup. In these areas, a volunteer may use treatment, storage, containment, or control methods, or any

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<sup>147</sup> 25 PA. CODE § 250.201-250.204 (2000).

<sup>148</sup> See PA. STAT. ANN. tit. 35, § 6026.303; 25 PA. CODE §§ 250.301-250.312.

<sup>149</sup> PA. STAT. ANN. tit. 35, § 6026.304. See 25 PA. CODE § 250.401-250.411. “For known or suspected carcinogens, soil and groundwater cleanup standards shall be established at exposures which represent an excess upper-bound life-time risk of between 1 in 10,000 and 1 in 1,000,000. The cumulative excess risk to exposed populations, including sensitive subgroups, shall not be greater than 1 in 10,000.” PA. STAT. ANN. tit. 35 § 6026.304 (b).

<sup>150</sup> PA. STAT. ANN. tit. 35 § 6026.304(d)(1)(i).

<sup>151</sup> PA. STAT. ANN. tit. 35 § 6026.304(d)(1)(iii).

<sup>152</sup> PA. STAT. ANN. tit. 35 § 6026.304(d)(2).

<sup>153</sup> Participation in the special industrial areas program for voluntary cleanups is limited to persons who are not deemed responsible for contamination of the site. PA. STAT. ANN. tit. 35, § 6026.305(a). Sites that are eligible for the program include properties used for industrial activities where there are no financially viable responsible persons to clean up the site or where the land is located within an enterprise zone. PA. STAT. ANN. tit. 35, § 6026.305(a); 25 PA. CODE § 250.502. An enterprise zone or targeted community is a geographical area designated by the Pennsylvania Department of Community and Economic Development as deserving of special consideration because of one or more adverse economic factors. PA. STAT. ANN. tit. 73, § 393.22.

combination of these methods to address site contamination as long as the remediation protects against any immediate, direct, or imminent threats to public health or the environment.<sup>154</sup> If groundwater is to be used at the site, it must either be remediated in-ground or at the point-of-use so that it is safe for its intended use. If the property use changes to residential use or to another use that may create a substantial change in exposure conditions, then further remediation may be required.<sup>155</sup>

Therefore, although states do consider, in various ways, the effects of migrating groundwater contamination, the programs vary in the quality with which they do this. As noted, some programs essentially write off contaminated groundwater as hopeless, especially when it is unlikely that the groundwater will be used. However, because the science of groundwater migration is imprecise at best, site-based standards and risk-based standards that do not require groundwater remediation may be inappropriate in some circumstances.

### 3. *Environmental Justice Implications*

Although our environmental laws have helped improve the conditions in which we live and work, many Americans still work, live, and play in unhealthy and unsafe environments.<sup>156</sup> In fact, many brownfields are located in poor or minority communities, especially in urban areas.<sup>157</sup> Numerous studies have indicated that those who live closest to sites with the worst air and

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<sup>154</sup> PA. STAT. ANN. tit. 35, § 6026.305(a).

<sup>155</sup> 25 PA. CODE § 250.503(e).

<sup>156</sup> See Luke W. Cole and Richard Moore, *Attacks on EPA Unfair*, USA TODAY, July 20, 1998, at 14A.

<sup>157</sup> See OFFICE OF TECHNOLOGY ASSESSMENT, THE STATE OF THE STATES ON BROWNFIELDS: PROGRAMS FOR CLEANUP AND REUSE OF CONTAMINATED SITES 4 (1995) [hereinafter OTA Report]. I note that in addition to hosting contaminated, abandoned industrial sites, low-income communities host a disproportionate number of older polluting facilities. These older polluting facilities are subject to lower operating standards than those that apply to newer facilities of the same type, and therefore present disproportionate environmental risk and harm to the surrounding low-income and minority communities. See Heidi G. Robertson, *If Your Grandfather Could Pollute, So Can You: Environmental Grandfather Clauses and their Role in Environmental Inequity*, 45 CATH. U. L. REV. 131 (1995). See also ENVIRONMENTAL PROTECTION AGENCY FINAL REPORT: ENVIRONMENTAL JUSTICE, URBAN REVITALIZATION, AND BROWNFIELDS: THE SEARCH FOR AUTHENTIC SIGNS OF HOPE: A REPORT ON THE "PUBLIC DIALOGUES ON URBAN REVITALIZATION AND BROWNFIELDS: ENVISIONING HEALTHY AND SUSTAINABLE COMMUNITIES." EPA DOCUMENT NUMBER: EPA 500-R-96-002 (Dec. 1996) [hereinafter PUBLIC DIALOGUES].



water pollution, highest levels of lead contamination and pesticide poisoning, and lowest level of environmental enforcement are low-income and minority communities.<sup>158</sup> Because these sites are often abandoned, they leave behind not only environmental and health troubles, but economic and aesthetic issues as well. As a result, local residents suffer all of the problems these sites present: blight on the landscape, potential environmental dangers, decreased tax base, and loss of jobs.<sup>159</sup>

Some argue that cleaning up these sites will spur economic development and rejuvenate these neighborhoods.<sup>160</sup> Communities would benefit from new jobs, an improved tax base and further economic development, in addition to the environmental benefit of a cleaner site.<sup>161</sup> So, many environmental justice advocates support efforts to redevelop brownfields.<sup>162</sup> And although the initial promise of job creation and economic renewal leads many low-income and minority communities to support brownfields redevelopment programs, the use of risk-based cleanup standards may dampen their enthusiasm. The possibility that the cleanup standards applied to these sites will be lower than those for sites near suburban, non-minority communities raises environmental justice concerns and leads some communities to distrust and disfavor the programs.

As discussed above, efforts in most states to make the brownfields cleanup process efficient include options for cleanup standards that allow for less than total site remediation.<sup>163</sup> This can happen in two ways. First, risk-based cleanup standards al-

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<sup>158</sup> See Cole and Moore, *supra* note 156. See also Georgette C. Poindexter, *Separate and Unequal: A Comment on the Urban Development Aspect of Brownfields Programs*, 24 FORDHAM URB. L.J. 1, 9 (1996).

<sup>159</sup> See PUBLIC DIALOGUES, *supra* note 157.

<sup>160</sup> See Andrew, *supra* note 10, at 27. See also PUBLIC DIALOGUES, *supra* note 157.

<sup>161</sup> See Andrew, *supra* note 10, at 27. See also PUBLIC DIALOGUES, *supra* note 157.

<sup>162</sup> See John Rosenthal, Panel Discussion at ABA Satellite Seminar, *Brownfields Redevelopment: Cleaning up the Urban Environment* (Mar. 7, 1996). See also John Rosenthal, *Change Cleanup Standards If and Only If*, THE ENVTL. FORUM, May-June 1995 at 28, 33. John Rosenthal, Director of the NAACP Environmental Justice Program writes that "[T]he NAACP favors changes in . . . standards for brownfields, if and only if the revisions actually generate faster cleanups in people of color communities." Rosenthal, *id.* at 34; E. Lynn Grayson, *Brownfields Redevelopment and Environmental Justice: Conflicting Initiatives?*, ABA SEC. NAT. RESOURCES, ENERGY & ENVTL. L. NEWSLETTER, Jan.-Feb. 1996, at 6; PUBLIC DIALOGUES, *supra* note 157.

<sup>163</sup> See *supra* note 7, and accompanying text.

low landowners to remediate a site to an industrial or commercial standard, which is less clean than a residential standard would require, when the landowner intends to use the site for commercial or industrial purposes. Therefore, the risk-based standards available in many brownfields programs allow less extensive treatment of sites than the numeric health-based standards required under federal and state mandatory cleanup programs. Second, the lower standards of cleanup often permit cleanup methods that allow contamination to be masked rather than truly remediated.<sup>164</sup>

Brownfields programs that allow liability shields for site cleanups that meet standards less stringent than the most rigorous available have come under attack as violating efforts to achieve environmental justice.<sup>165</sup> Some environmental justice advocates are concerned that the use of risk-based standards will lead to substandard cleanups in low-income and minority neighborhoods where many brownfield sites are located.<sup>166</sup> Although flexible standards exist only at the state level, the federal EPA usually defers to state decision-makers on these issues, and compliance with a state risk-based standard will often essentially shield a site owner from federal as well as state liability.<sup>167</sup>

Risk-based standards ask low income and minority communities to accept lower cleanup standards and the consequent higher risk to health and the environment in exchange for economic de-

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<sup>164</sup> See CHARLES BARTSCH & ELIZABETH COLLATON, *COMING CLEAN FOR ECONOMIC DEVELOPMENT*, 4-5 (1996) [hereinafter *COMING CLEAN FOR ECONOMIC DEVELOPMENT*]. See also *BROWNFIELDS LAW AND PRACTICE*, *supra* note 7.

<sup>165</sup> See Samara F. Swanston, *An Environmental Justice Perspective on Superfund Reauthorization*, 9 ST. JOHN'S J.L. COMM. 565, 566-71 (1996) (arguing that flexible cleanup standards will put low-income and minority communities at risk of increased exposure to environmental hazards).

<sup>166</sup> See Rodger C. Field, *Siting, Justice, and the Environmental Laws*, 16 N. ILL. U. L. REV. 639 (1996) (arguing that certain measures can help alleviate the environmental justice concerns attached to brownfields redevelopment programs). See also Working Draft of the National Environmental Justice Advisory Council Report (Jan. 31, 1996).

<sup>167</sup> See Lynn E. Blais, *Environmental Racism Reconsidered*, 75 N.C. L. REV. 75 (1996) (arguing that the current debate on brownfields redevelopment legislation is a microcosm of the environmental racism debate). Note that EPA has not abdicated its authority in any way to bring enforcement actions under CERCLA in cases of inadequate cleanup. It has, however, entered into agreements with many states in which EPA agrees not to enforce against sites complying with state cleanup programs.

velopment.<sup>168</sup> However, even the standards set for a brownfield cleanup on a site-specific basis must at a minimum be protective of human health, according to the intended land use. The justification for accepting this trade-off is that without brownfields programs, many of these sites would not be cleaned up at all, not even to the risk-based, site-specific standards. Brownfields sites would remain abandoned, contaminated blights on their communities, leaving those neighboring communities suffering far more than exposure to contamination. They would suffer the economic and aesthetic burden as well. Finally, by their very nature, brownfields are not the most severely contaminated properties; they are by definition the less contaminated properties not subject to any state or federal enforcement action.<sup>169</sup>

Decision-makers must encourage community participation in decision-making processes and consider overall community goals in determining how to cleanup a site.<sup>170</sup> Residents of affected communities should have some input into the remediation proposals and decision-making processes that lead to brownfield cleanups according to risk-based standards.<sup>171</sup> Residents could help decision-makers determine whether the economic and other values of partial cleanup outweigh the fact that the cleanup will leave some contamination in their midst.

Unfortunately, many communities feel pressure to accept environmentally unfriendly industries and less stringent cleanup standards because they see the alternative as no industry (or jobs) and no cleanup.<sup>172</sup> Environmental justice concerns would be better addressed if residents in affected neighborhoods could voice their opinions regarding whether enhancements to the community as a whole warrant accepting reduced cleanup standards.<sup>173</sup>

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<sup>168</sup> See Stephen M. Johnson, *The Brownfields Action Agenda: A Model for Future Federal/State Cooperation in the Quest for Environmental Justice?*, 37 SANTA CLARA L. REV. 85 (1997). See also Grayson, *supra* note 162; Poindexter, *supra* note 158, at 63.

<sup>169</sup> See Johnson, *supra* note 168, at n.82 (citing Thomas W. Devine, Remarks at ABA Satellite Seminar, Brownfields Redevelopment: Cleaning Up the Urban Environment (Mar. 7, 1996)). See also Linda K. Breggin & John Pendergrass, *Voluntary and Brownfield Remediation Programs: An Overview of the Environmental Law Institute's 1998 Research*, 29 ENVTL. L. REP. 10,339, 10,339-40 (1999).

<sup>170</sup> See Field, *supra* note 166, at 652-53.

<sup>171</sup> See, e.g., Bradford C. Mank, *Reforming State Brownfield Programs to Comply with Title VI*, 24 HARV. ENVTL. L. REV. 115, 119 (2000).

<sup>172</sup> See Vogel, *supra* note 8, at 120.

<sup>173</sup> See Vogel, *supra* note 8, at 120 (citing *Environmental Justice: Brownfields Initiative Grants Citizens New Opportunities to Voice Concerns*, HAZARDOUS WASTE

An agency could achieve this through a notice and comment period prior to an agency approving a liability release, or even perhaps, by allowing a community to approve or disapprove of a brownfields cleanup plan.

Although no state gives a community that level of involvement, some states have built consideration of environmental justice implications into their programs. For example, in Massachusetts, when entering into a Covenant Not to Sue, the Massachusetts Department of Environmental Protection must give first priority to sites located in the fifteen cities with the highest poverty rates in the state. Second priority goes to sites located in economically distressed areas of the remaining municipalities,<sup>174</sup> and third priority to sites located in any remaining municipalities.<sup>175</sup> Many other states, however, have created a decision-making process that is so focused on the private sector that the public has great difficulty playing any role at all. For example, in Ohio it is virtually impossible for the public to play a role in a VAP cleanup. Because the private landowner hires a private consultant to plan and carry out the cleanup, the state may be unaware of the cleanup until the Ohio EPA receives a No Further Action letter from a certified professional.<sup>176</sup> On the basis of that letter the Ohio EPA issues a Covenant Not to Sue.<sup>177</sup> There is no room for the public in this process, and as a result, affected communities have little voice.

Notwithstanding the environmental justice concerns raised by the legislative innovation of risk-based cleanup standards, brownfields redevelopment programs can be a positive force in combating the effects of past environmental racism, despite the application of risk-based standards.<sup>178</sup> This is so because, even

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NEWS, June 9, 1997 (explaining that historically, minority and low-income residents had little interaction with developers)).

<sup>174</sup> An economically distressed area is an area of a municipality that has been designated as an economic target area or that would otherwise meet the criteria for such designation pursuant to Massachusetts General Law ch. 23A, § 3D, or that is the site of a former manufactured gas plant. MASS GEN. LAWS ch 21E, § 2 (Law. Co-op. 1996 & Supp. 2000).

<sup>175</sup> MASS. GEN. LAWS ch 21E, § 3A (j)(2)(b) (Law. Co-op. 1996 & Supp. 2000).

<sup>176</sup> In some cases, however, the Ohio EPA is involved from the start. These cases tend to be the more complicated cases where the volunteer remediator and the certified professional overseeing the project seek technical assistance from the agency.

<sup>177</sup> OHIO REV. CODE ANN. § 3746.12(A) (2000).

<sup>178</sup> See James T. O'Reilly, *Environmental Racism, Site Cleanup and Inner-City Jobs: Indiana's Urban In-Fill Incentives*, 11 YALE J. ON REG. 43, 46-48 (1994).

taking into account the potential negative health effects of risk-based standards, the programs can, by facilitating rebirth of abandoned sites, encourage job creation and improved economies in low-income and/or minority communities. To do this in an environmentally just manner, risk-based standards must be sufficiently rigorous to protect human health and the environment in every community in which brownfields appear. Cleanup standards must be rigorous enough at all sites to ensure adequate control of pollution in any community, but especially in communities already burdened with a disproportionate share of contamination.<sup>179</sup>

#### ***D. The Risk-Based Standards Innovation: Conclusion***

Brownfields redevelopment programs using risk-based standards as an incentive for redevelopment fail to provide for permanent and complete remediation of land. This is particularly apparent when a landowner cleans a property to industrial or commercial standards rather than to the more stringent standards applicable to land intended for residential use.<sup>180</sup>

However, risk-based standards present a capital savings to the volunteer remediator. This is so because these standards allow landowners profitable use of their land following a cleanup that is less expensive than it would have been under more stringent cleanup standards.<sup>181</sup> Some argue that this financial incentive occurs at the expense of the health and environment in the lower income and minority communities that often are neighbors to brownfields land. It may also occur at the expense of future generations of landowners.

Brownfields programs that allow risk-based cleanup standards turn the state into an additional land use regulator. The state becomes a land use regulator because it must ensure that future land use is restricted to the intended use that determined the cleanup standard.<sup>182</sup> If a subsequent owner of the land chooses to use the land for a different category of land use, the state must ensure that the landowner cleans the land accordingly.

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<sup>179</sup> See Field, *supra* note 166, at 652.

<sup>180</sup> See Dinsmore, *supra* note 18, at 40. See also COMING CLEAN FOR ECONOMIC DEVELOPMENT, *supra* note 164.

<sup>181</sup> See Dinsmore, *supra* note 18, at 40.

<sup>182</sup> See Dinsmore, *supra* note 18, at 40.

Finally, brownfields programs with risk-based cleanup standards leave minority communities in environments that, although cleaner than before the brownfields cleanup, are less clean than they might have been under more stringent cleanup standards. The benefits communities are supposed to derive in exchange for the above concessions are reputed to include numerous redeveloped brownfield sites, and the jobs and other economic benefits that accompany them. Risk-based cleanup standards probably drive some properties into redeveloped circulation sooner than they might otherwise arrive there, and their cleanups certainly are more cost effective than those for which the more stringent cleanup standards apply. However, because it is impossible to guarantee eternal land use restrictions, states should use site-specific, use-based standards sparingly<sup>183</sup> and make every effort to protect current neighbors and future users of the land. If we find that brownfields redevelopment is a significant benefit to low-income or minority communities, perhaps state programs should offer incentives, or special benefits, to persons opting to redevelop in a minority community that suffers a disproportionate environmental burden. Perhaps this benefit should accrue if the volunteer opts to remediate the property to a higher degree than is required by law, thus improving both the economic and environmental outlooks of the surrounding minority community.

Even with the availability of risk-based standards, state brownfields programs are not seeing the kinds of significant use proponents hoped for. Despite the improved efficiencies in cost and time, landowners are not rushing to take advantage of the brownfields programs with risk-based cleanup standards. Even if they were, the externalized costs that risk-based cleanups leave behind raise questions about the positive effects these programs can have. For these reasons, innovative risk-based cleanup standards are not the anticipated catalysts of urban renewal, and although such standards have encouraged some cleanups, they carry with them dangers that states must address to make their use safe, fair, and effective.

There are several reasons why these programs are not as effective as they might be, even with the cost savings and liability reductions they provide. Some might argue that even the risk-based standards are too high and costly—but reducing them

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<sup>183</sup> See Denworth, *supra* note 18, at 30.

would exacerbate the problems discussed above. Some might argue that the liability releases states provide are not sufficiently protective. Without protection from liability to the federal government, other state agencies, and third parties, this may well be true. Perhaps, as I have argued elsewhere, cleanup costs and liability protection, which address environmental concerns, are just parts of the complicated reasons why brownfields sites go unremediated. Brownfields programs must address non-environmental barriers to redevelopment to succeed at a higher level. However, cleanups have occurred under these programs that may not otherwise have occurred. With a better understanding of the externalized costs of partial cleanups, states can reduce those costs while retaining the cost saving characteristic that helps encourage cleanup.

## II

### PRIVATIZATION IN SITE ASSESSMENT AND OVERSIGHT: ABDICATION OF GOVERNMENT RESPONSIBILITY OR A REASONABLE DELEGATION?

In its broadest sense, “[p]rivatization means increased governmental reliance on the private sector, rather than on government agencies, to satisfy the needs of society.”<sup>184</sup> Primarily, however, there are three types of privatization of government functions. The first is the sale of government assets to the private sector.<sup>185</sup> The second is “contracting out,” where the government contracts with private entities to carry out certain tasks.<sup>186</sup> And the third is vouchers, where the government provides funds to citizens and allows them to choose a private provider of applicable services.<sup>187</sup> The federal government has encouraged contracting out since President Eisenhower approved a policy stating: “[T]he Federal government will not start or carry on any commercial activity to provide a service or product for its own use if such product or service can be procured from private enterprise through ordinary business channels.”<sup>188</sup>

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<sup>184</sup> See E.S. Savas, *Privatization and Prisons*, 40 VAND. L. REV. 889 (1987).

<sup>185</sup> PRESIDENT’S COMMISSION ON PRIVATIZATION, *PRIVATIZATION: TOWARD MORE EFFECTIVE GOVERNMENT* (1988) [hereinafter *PRIVATIZATION COMMISSION REPORT*], at 1-2. This is also called “denationalization,” or divestment of state-owned enterprises. See Savas, *supra* note 184, at 889.

<sup>186</sup> *PRIVATIZATION COMMISSION REPORT*, *supra* note 185, at 1-2.

<sup>187</sup> *PRIVATIZATION COMMISSION REPORT*, *supra* note 185, at 1-2.

<sup>188</sup> *PRIVATIZATION COMMISSION REPORT*, *supra* note 185, at 1.

These privatization methods have been widespread at the state and local levels as well, reportedly with considerable cost savings both to government and consumers.<sup>189</sup> In addition to the three major forms of privatization, governments have increased the role of the private sector in various other ways, and to lesser degrees, by using franchise arrangements, free-market arrangements, and voluntary efforts.<sup>190</sup>

Outside the area of brownfields redevelopment, one study of the effectiveness of various forms of privatization found that jurisdictions contracted out, either in whole or in part, twenty-seven of the fifty-nine services examined.<sup>191</sup> Further, the public officials that contracted for private services have, in large part, been satisfied with the results.<sup>192</sup> In both large and small jurisdictions, the survey indicated that in varying degrees the privatization of the services led to better services and reduced costs.<sup>193</sup>

President Ronald Reagan's Commission on Privatization (Commission) studied the basic forms of privatization and identified areas of government that could be more effectively performed by the private sector.<sup>194</sup> The Commission's goal was to evaluate the needs of Americans for services in, for example, education, lending, health care, transportation, and social services,<sup>195</sup> and to weigh the risk that private efforts would fail against the costs of alleged failures of existing government efforts.<sup>196</sup> Though the Commission recommended numerous areas where privatization would improve services, cost, and efficiency, the Commission's report clearly acknowledges that the government's role as policy-maker and "creator and enforcer of standards must never be compromised."<sup>197</sup>

For purposes of this article, the next question is what type of privatization, or expansion of the role of the private sector, should exist in state brownfields programs. In most states, privatization is not exactly contracting out, that is, where the govern-

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<sup>189</sup> PRIVATIZATION COMMISSION REPORT, *supra* note 185, at 1-3.

<sup>190</sup> PRIVATIZATION COMMISSION REPORT, *supra* note 185, at 1-3.

<sup>191</sup> See Savas, *supra* note 184, at 890.

<sup>192</sup> See Savas, *supra* note 184, at 893.

<sup>193</sup> See Savas, *supra* note 184, at 894-95.

<sup>194</sup> See PRESIDENT'S COMMISSION REPORT, *supra* note 185. The Commission that wrote this report was created by President Ronald Reagan in Executive Order No. 12,607 (September 2, 1987).

<sup>195</sup> See PRIVATIZATION COMMISSION REPORT, *supra* note 185 at xi.

<sup>196</sup> See PRIVATIZATION COMMISSION REPORT, *supra* note 185 at xi.

<sup>197</sup> See PRIVATIZATION COMMISSION REPORT, *supra* note 185, at xi.



ment enters into a contract with a private company to provide services on the government's behalf. In such cases state environmental agencies would enter into contracts with environmental consultants for inspections or cleanup oversight. Instead, in Ohio, the state mandates that participants in its brownfields cleanup program contract on their own with private parties,<sup>198</sup> so at least for Ohio, calling it privatization might be a bit of a stretch. Ohio requires that program participants use the public sector to verify and validate the carrying out of state standards, and the state relies on the judgment of these private parties when it releases participants from liability for contamination at the site.<sup>199</sup> Though perhaps not privatization in its strictest sense, Ohio's system is, at minimum, a close cousin of the traditional privatization models outlined above.

Because most state programs are not quite as "privatized" as Ohio's, and because in those states we still see state agencies more clearly exercising their own decision-making authority, perhaps it is more accurate to identify these arrangements as a form of private/public partnership. This Article uses the term "privatization" in its broadest, most inclusive sense, because state brownfields laws require or allow program participants to use private parties in various ways. Only the most "privatized" program requires private parties to effectively make decisions on behalf of the state.

#### ***A. Privatization in State Brownfields Programs: Ohio and Others***

This Section will describe the various forms of privatization that appear in state brownfields programs. It will start with the more privatized of the programs, then describe some of the uses of privatization in states that retain more control within the agency. This Section will then use privatization in other areas of government to help suggest areas of concern with respect to the way privatization is used in some states, and suggest changes that would reduce the negative effects of the particular form of privatization. Specifically, this Section will present lessons learned from the use of privatization in the criminal justice system and in state motor vehicle inspection programs. Finally, it will apply

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<sup>198</sup> See OHIO REV. CODE § 3746.071; OHIO ADMIN. CODE § 3745-300-05.

<sup>199</sup> See OHIO REV. CODE § 3746.12(A).

those lessons to the uses of privatization in state brownfields programs.

Ohio's brownfields program is innovative in its efforts to encourage redevelopment, partly because the program requires participants to use private individuals, called "certified professionals," to carry out tasks and make decisions that have traditionally been government responsibilities.<sup>200</sup> Unlike programs in most other states, the statutes and regulations in Ohio's program do not provide for direct agency oversight of site assessments or cleanups.<sup>201</sup> Instead, the Ohio program relies on private parties to investigate, coordinate, implement, and evaluate the cleanup of participating properties.<sup>202</sup>

Volunteer participants in Ohio's VAP must contract with a certified professional and certified laboratory to oversee Phase I and, if necessary, Phase II site assessments.<sup>203</sup> If there is no evidence of contamination after an initial site assessment, a certified professional may issue a No Further Action letter. Certified professionals are "certified" by Ohio EPA and have the authority to issue No Further Action letters.<sup>204</sup> A No Further Action letter is

<sup>200</sup> OHIO REV. CODE ANN. § 3746.10(B)(1)(b) (West 1998). The Massachusetts brownfields law provides for the use of licensed professionals, but the approach in that law is significantly different because of its use of a "tiered" system. Because of the tiered system, the Massachusetts program has more oversight than Ohio's Voluntary Action Program (VAP). See 1998 Mass. Acts 206; MASS. REGS. CODE tit. 310 § 40.000 (2000).

<sup>201</sup> See BROWNFIELDS LAW AND PRACTICE, *supra* note 7, at § OH.01(2)(c). However, in its effort to secure a Memorandum of Agreement with EPA Region 5, which would provide some comfort for VAP participants with respect to federal liability, Ohio EPA has recently proposed to implement an alternative voluntary cleanup program alongside its classic VAP. Ohio EPA's proposal would allow volunteer participants to opt for an "MOA Track". Sites participating in the MOA Track would be subject to more agency involvement and oversight than those sites in the "Classic VAP." Although Ohio EPA has proposed the MOA Track in its application to EPA for a memorandum of agreement, this program has not been approved by EPA, Region 5. See Ohio EPA website at <<http://www.epa.state.oh.us/derr/vap/moa/moa.html>> (last visited September 26, 2000). See also notes 242 and 243 for further information regarding Ohio's proposed "MOA Track".

<sup>202</sup> OHIO REV. CODE ANN. § 3746.10(B)(1)(b) (2000). The certification requirements for certified professionals are at OHIO ADMIN. CODE § 3745-300-05(B) (2000).

<sup>203</sup> OHIO REV. CODE ANN. § 3746.10(B)(1)(a), (b). See also Daniel Michel, *Comment: The CERCLA Paradox and Ohio's Response to the Brownfield Problem: Senate Bill 221*, 26 U. TOLEDO L. REV. 435, 456 (1995) (including an overview of Ohio's brownfields program).

<sup>204</sup> OHIO REV. CODE ANN. § 3746.07(D) (sets forth standards for certified professionals to apply before the enactment of the applicable regulations). Current regulations are at OHIO ADMIN. CODE 3745-300-05. See also R. Michael Sweeney,

a collection of forms, documents, and affidavits,<sup>205</sup> which collectively state that according to the scientific judgment of the certified professional, the property in question meets the applicable cleanup standards and no further cleanup measures are necessary.<sup>206</sup> If the Phase I site assessment<sup>207</sup> indicates that hazardous substances or petroleum have been treated, stored, managed, or disposed of on the property, the property owner must continue the assessment process to the Phase II site assessment level<sup>208</sup> and also complete a cleanup.

When site cleanup work is completed to the certified professional's satisfaction, the certified professional completes a No Further Action letter and submits it to the Ohio EPA.<sup>209</sup> In exchange, the Ohio EPA grants the volunteer participant a Cove-

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*Brownfields Restoration and Voluntary Cleanup Legislation*, 2 ENVTL. LAW. 101, 125 (Sept. 1995).

<sup>205</sup> A sample No Further Action form and Instructions for Completion of the NFA form are available at <<http://www.epa.state.oh.us/derr/vap/noaction/noaction.html>> (last visited September 26, 2000).

<sup>206</sup> OHIO REV. CODE ANN. § 3746.10(A); OHIO ADMIN. CODE § 3745-300-13. See also E. Lynn Grayson and Stephen A.K. Palmer, *The Brownfields Phenomenon: An Analysis of Environmental, Economic, and Community Concerns*, 25 ENVTL. L. REP. 10,337 (1995).

<sup>207</sup> A Phase I assessment includes:

- a. Review and analysis of deeds, mortgages, easements of record, and similar documents relating to the chain of title;
- b. Review and analysis of previous assessments, studies, or geologic studies of the property and within two thousand feet that are publicly or reasonably available to the Owner or Operator;
- c. Review of environmental compliance histories of persons who owned or operated the property;
- d. Review of aerial photography;
- e. Interviews with managers;
- f. Conducting a walkover inspection; and
- g. Identifying current and past uses of property, adjoining tracks, and surrounding area, including interviews with neighboring residents or employees.

OHIO ADMIN. CODE § 3745-300-06 (2000).

<sup>208</sup> OHIO ADMIN. CODE § 3745-300-07(A)(1) (1998). See also Amy Yersavich, *About Ohio's Voluntary Action Program* (visited April 1, 2001) <<http://www.epa.state.oh.us/derr/vap/aboutvap/aboutvap.html>>. See also Michel, *supra* note 203.

<sup>209</sup> A complete NFA Letter includes proper completion of the "NFA Form", as well as an Executive Summary of the NFA Letter, attachment of NFA Documentation (e.g. risk assessment report, maps, Phase I and Phase II information, and other information referred to in the NFA Form), and payment of applicable fees. Ohio EPA, Division of Emergency and Remedial Response, Voluntary Action Program, Instructions for Certified Professional to Use to Prepare a NFA Letter and the Attached NFA Form in the Format required by Ohio Administrative Code 3745-300-13(H), available at <<http://www.epa.state.oh.us/derr/vap/noaction/noaction.html>>. See also OHIO ADMIN. CODE § 3745-300-13 (2000).

nant Not to Sue (Covenant).<sup>210</sup> This Covenant limits the property owner's legal liability to the Ohio EPA for future clean up of the property.<sup>211</sup> In particular, the Covenant guarantees to the volunteer remediator that the Ohio EPA will not require additional future remedial activities at the site,<sup>212</sup> and thus limits the property owner's environmental liability to the Ohio EPA with respect to that site.<sup>213</sup> The Covenant runs with the land<sup>214</sup> and protects current and future owners from liability to the Ohio EPA for existing contamination, provided the contamination levels do not increase beyond those levels existing at the issuance of the Covenant.<sup>215</sup> The Ohio EPA enforces compliance with the standards by sorting the submitted No Further Action letters into audit categories,<sup>216</sup> and conducting audits of approximately

<sup>210</sup> OHIO REV. CODE ANN. § 3746.12(A); OHIO ADMIN. CODE § 3745-300-13.

<sup>211</sup> OHIO REV. CODE ANN. § 3746-12(A).

<sup>212</sup> OHIO REV. CODE ANN. § 3746.12(A). Michel, *supra* note 203, at 456.

<sup>213</sup> OHIO REV. CODE ANN. § 3746.12(A).

<sup>214</sup> This means that the covenant applies to future owners of the site as well as to the current owner. To run with the land, the covenant must be recorded with the deed to the property along with any additional site restrictions that may also be applicable.

<sup>215</sup> OHIO REV. CODE ANN. § 3746.12(B). See also Michel, *supra* note 203, at 456.

<sup>216</sup> Pursuant to Ohio Administrative Code § 3745-300-14, Ohio EPA initially places each NFA letter into one of three pools for possible audit. The "mandatory audit pool" applies to NFA letters issued in the preceding calendar year to which any of the following apply: the work in support of the NFA was carried out either by a "certified professional" or "certified laboratory" that was certified through the interim program provisions and not under final program rules; there is any evidence of fraudulent work used to produce the NFA letter; the certification of the "certified professional" who issued the NFA letter or of the "certified laboratory" which performed laboratory analysis in support of the NFA letter was subsequently revoked; or the NFA letter was the basis for a Covenant Not to Sue which was subsequently revoked. OHIO ADMIN. CODE § 3745-300-14(A)(4). The Director of Ohio EPA audits all NFA letters in the mandatory audit pool.

The "priority audit pool" applies to NFA letters issued in the preceding calendar year to which either of the following applies: a risk assessment was used to support the NFA letter; the NFA letter relies upon an engineering control; or an institutional control as a remedy to meet applicable standards at the site. OHIO ADMIN. CODE § 3745-300-14(A)(5).

The "random audit pool" applies to all the NFA letters issued in the preceding calendar year which were not selected for the mandatory or priority audit pools. OHIO ADMIN. CODE § 3745-300-14(A)(6). The Director of Ohio EPA randomly selects for audit twenty-five percent of the NFA letters contained in the "priority audit pool." Any NFA letter in the priority audit pool not randomly selected for audit is included in the appropriate random audit pool. At a minimum, the director conducts audits of no less than twenty-five percent of all NFA letters involving remedial activities, and no less than twenty-five percent of all NFA letters not involving remedial activities, submitted to the Director during the preceding calendar year. The Director may conduct audits from the random audit pool as he deems neces-

twenty-five percent of the sites that received a Covenant in the previous calendar year.<sup>217</sup>

This use of certified professionals involves transferring traditional government functions from the public sector to the private sector.<sup>218</sup> Privatization, or even what in this case may fairly be called a public/private partnership, is supposed to save the agency money. In the case of brownfields redevelopment programs, privatization is supposed to provide for high quality site evaluation and remedial work.<sup>219</sup> It is also supposed to relieve the environmental agency of cumbersome and time-consuming oversight and review of voluntary cleanups.<sup>220</sup> This idea, al-

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sary. OHIO ADMIN. CODE § 3745-300-14(A). According to Mr. Michael Allen (Toxicologist, Ohio EPA Voluntary Action Program, Field Auditing Unit):

The decisions made to classify NFAs among pools to prioritize their likelihood of an audit were made, besides the obvious illegal aspects of the fraudulent cases, in reference to their complexity. NFAs that use engineering controls or risk assessments in order to attain applicable standards are in most cases more complicated and more likely to contain situations where a greater scrutiny of details is appropriate.

Electronic mail correspondence from Michael Allen to Jennifer Lukas Jackson, July 5, 2000 (on file with the author).

<sup>217</sup> OHIO REV. CODE ANN. § 3746.17 (West 1998). See Jack Pulley et al., *Developing Brownfield Sites: Comparing Two Approaches*, MICHIGAN LAWYERS WEEKLY, Sept. 25, 1995, at 6. Between 1996 and 1999, Ohio EPA received ninety NFA letters requesting a Covenant Not to Sue. Ohio EPA categorized one of those NFA letters into the "mandatory audit pool," and audited that site. Ohio EPA categorized roughly seventy percent of the remaining NFA letters into the "priority audit pool," and audited about thirty percent of those sites. The remaining NFA letters, approximately thirty percent of the total received were placed in a "random audit pool," of which Ohio EPA audited twenty-seven percent. In sum, Ohio EPA audited twenty-seven sites from among the ninety NFA letters it received, or approximately thirty percent of the total. It appears, therefore, that Ohio EPA has complied with the twenty-five percent audit requirement. Electronic mail correspondence from Michael Allen, Toxicologist, Ohio EPA Voluntary Action Program, Field Auditing Unit, to Jennifer Lukas Jackson July 5, 2000 (on file with the author).

<sup>218</sup> See generally PRIVATIZATION AND ITS ALTERNATIVES (William T. Gormley, Jr. ed. 1991) (including examples of other forms of government use of privatization). See also Dana C. Joel, *Privatization of Secure Adult Prisons: Issues and Evidence*, in 51 PRIVATIZING CORRECTIONAL INSTITUTIONS 53 (Gary W. Bowman et al. eds. 1993).

<sup>219</sup> See OHIO GOVERNOR'S REPORT, *supra* note 16, at 16. The legislative history in Ohio regarding the decision to use this privatized system of site evaluation and cleanup is sparse, but opponent and proponent testimony shed some light on the reasons for choosing it. See *infra* notes 220 and 229 and accompanying text. See also PRIVATIZATION AND ITS ALTERNATIVES, *supra* note 218, at 1-24.

<sup>220</sup> See *Testimony Before the Senate Energy, Natural Resources and Environment Subcommittee* (January 5, 1993) (Diane Kohn, Public Affairs Director for the Toledo Area Chamber of Commerce). See also Elizabeth C. Barton, *Privatization of Environmental Cleanups*, CONN. L. TRIB., Dec. 25, 1995/Jan. 1, 1996, 13A, at 15A (stating

though new to environmental law,<sup>221</sup> is not new to public/private sector interaction. The federal government has privatized, among other things, data processing, billing, payroll, training, regulatory inspections, and background inspections of appointees to federal offices.<sup>222</sup> State governments have privatized prisons,<sup>223</sup> recreational facilities, and transportation.<sup>224</sup> Local governments have privatized public works, health care, building security and many other government services.<sup>225</sup> Many extol this

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that the privatization of key elements of the environmental remediation process in Connecticut was a calculated move to address backlogs in administrative agencies); see also PRIVATIZATION AND ITS ALTERNATIVES, *supra* note 218, at 1-24.

<sup>221</sup> There are certainly other examples of private parties being involved in state or federal environmental legal processes. For example, the Massachusetts' Toxic Use Reduction Act (TURA) empowers private parties to certify the Toxics Use Reduction Plans of "Large Quantity Toxics Users." These parties, called "Toxics Use Reduction Planners," must pass a uniform certification examination developed by the Massachusetts Department of Environmental Protection. Although these private parties have some decision-making authority, according to the state, the planning process is a "self-help" provision. This program is a "mandatory-voluntary" program which means that although Large Quantity Toxics Users are required to properly prepare and file a Toxics Use Reduction Plan, there are no mandatory standards or goals for the plans. See MASS. GEN. LAWS ch. 21I (1994 & Supp. 2000); Massachusetts Department of Environmental Protection, *Toxics Use Reduction Act Overview* (visited March 6, 2001) <<http://www.state.ma.us/dep/bwp/dhm/tura/turaover/htm>>. See also Bradley C. Karkkainen, *Information as Environmental Regulation: TRI and Performance Benchmarking, Precursor to a New Paradigm?*, 89 GEO. L.J. 257, 354 (2001). Also, although private parties are intimately involved in, among others, the creation of environmental impact statements under the National Environmental Policy Act (NEPA), and Habitat Conservation Plans under the Endangered Species Act (ESA), these documents are reviewed and approved by the applicable government agencies. Because, in the case of TURA, there are no real applicable standards, and nothing at stake for the user, and in the cases of NEPA and the ESA, the agencies maintain primary decision-making authority, these examples are not as instructive with respect to the privatization of decision-making authority in environmental law, as examples outside the field of environmental law.

<sup>222</sup> See Jack M. Sabatino, *Privatization and Punitives: Should Government Contractors Share the Sovereign's Immunities from Exemplary Damages?*, 58 OHIO ST. L.J. 175, 179 (1997). According to Sabatino, federal government privatization has occurred under Office and Management Circular A-76 which encourages federal agencies to use private contractors if doing so would cost at least ten percent less than using a government service. See Performance of Commercial Activities, 61 Fed. Reg. 14,338, 14,338-46 (1996) (reissuing and amending OMB Circular A-76). See also AL GORE, NATIONAL PERFORMANCE REVIEW, FROM RED TAPE TO RESULTS: CREATING A GOVERNMENT THAT WORKS BETTER AND COSTS LESS 56-59 (1993) (recommending that some federal government operations compete directly with private industry, or when they cannot compete, use private parties to perform the tasks in question).

<sup>223</sup> See *infra*, section II.A.1.

<sup>224</sup> See Sabatino, *supra* note 222, at 180.

<sup>225</sup> See Sabatino, *supra* note 222, at 181.

shift towards privatization and public/private partnerships as an efficient, cost-saving innovation.<sup>226</sup> This is partly because competition with private sources forces government entities to improve performance.<sup>227</sup> Despite these expectations of improved performance and efficiencies, Ohio's program has been called inefficient and even costly.<sup>228</sup>

Although some still laud the Ohio brownfields program's use of the private sector for its theoretical efficiency, its use of certified professionals may separate responsibility for assessing public risk one step too far from an accountable public servant.<sup>229</sup> In addition, this system could make it difficult for community activists to obtain full and timely disclosure regarding contamination at a site.<sup>230</sup> This is because when private individuals control

<sup>226</sup> See Patricia M. Wald, *Looking Forward to the Next Millennium: Social Previews to Legal Change*, 70 TEMP. L. REV. 1085 (1997) (describing recent privatizations of traditional government functions and voicing concern about them, despite their efficiency, due, in part, to liability issues.) See also Sabatino, *supra* note 222, at 181 n.18, citing, among others, CHARLES H. LOGAN, PRIVATE PRISONS: CONS AND PROS (1990); PRIVATIZATION COMMISSION REPORT, *supra* note 185.

<sup>227</sup> See Sabatino, *supra* note 222, at 182, citing arguments for school voucher programs; U.S. GOVERNMENT ACCOUNTING OFFICE, PUB. NO. GAO/HEHS-96-3, PRIVATE MANAGEMENT OF PUBLIC SCHOOLS: EARLY EXPERIENCES IN FOUR SCHOOL DISTRICTS 28 (1996); Dwight R. Lee, *Vouchers—The Key to Meaningful Reform*, in PRIVATIZATION AND ITS ALTERNATIVES, *supra* note 218, at 47-49. *But see* Craig D. Feiser, *Privatization and the Freedom of Information Act: An Analysis of Public Access to Private Entities Under Federal Law*, 52 FED. COMM. L.J. 21 (1999) (stating that although privatization of important government functions, such as safeguarding federal prisoners, nuclear energy and weapons operations, and privatizing state and municipally-run airports, may be economically beneficial, this trend poses a threat to public access to information under the Freedom of Information Act).

<sup>228</sup> According to the Plain Dealer (Cleveland), as of 1999, the Agency had not "seen a single Phase I report submitted the first time that was fully compliant," and that "[NFA letters] were coming in with so many flaws, violations and errors that they required many more hours of work than fees were structured to fund." Julie Carr Smyth, *EPA Tries to Rescue Disputed Program*, THE PLAIN DEALER (Cleveland), July 8, 2000, at B-1.

<sup>229</sup> See *Testimony Before the Ohio House Energy and Environment Subcommittee Re: S.B. 221* (Dec. 15, 1995) (Rick B. Van Landingham III, State Conservation Chair, and Jeff Skelding, State Program Coordinator, Ohio Chapter of the Sierra Club).

<sup>230</sup> According to Ms. Chris Trepal, Executive Director of the Earth Day Coalition: "When citizens cannot get information, study, challenge or petition, no one can responsibly carry out his or her civic duties. Uncontrolled or abandoned waste sites have a proportionally larger impact on minority and poor people in our community who are usually the unsuspecting victims of exposure to toxic, hazardous, or radioactive wastes. The lack of real meaningful public participation in decision making ensures that these unwilling victims will again be out of the loop." Electronic Mail Correspondence from Chris Trepal, Executive Director, Earth Day Coalition, to Jennifer Lukas Jackson (July 24, 2000) (on file with the author).

much of the brownfields cleanup process, there is little or no opportunity for public participation.<sup>231</sup> In Ohio, private professionals oversee cleanups and sign-off on their completion.<sup>232</sup> The Ohio EPA generally receives information about specific sites only when a volunteer participant or a hired certified professional calls the agency seeking technical assistance or other information.<sup>233</sup> Only after the private party submits a No Further Action letter to the Ohio EPA can the public obtain information about the applicant site, and to do so is quite difficult. For these reasons, even people devoted to encouraging brownfields redevelopment in Ohio lobbied against the use of certified professionals in the state's program.<sup>234</sup>

Another reason critics mistrust the certified professional provisions of Ohio's program is that the requirements for becoming a "certified professional" are quite weak.<sup>235</sup> Any person who has a bachelors degree in any of a number of specified sciences, has good moral character, eight years of relevant experience with three years in a supervisory position, and professional competence, may become a certified professional.<sup>236</sup> In addition, per-

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<sup>231</sup> For further discussion of public participation in state brownfields programs, see Kris Wernstedt and Robert Hersh, "Through a Lens Darkly"—*Superfund Spectacles on Public Participation at Brownfield Sites*, 9 RISK: HEALTH, SAFETY & ENVIRONMENT 153 (1998) (noting that brownfield development complicates participation processes due to equity concerns, reliance on private property controls to limit exposure to residual contamination, and the fragmented nature of local land use planning). See also Nancy Perkins Spyke, *Public Participation in Environmental Decision Making at the New Millenium: Structuring New Spheres of Public Influence*, 26 B.C. ENVTL. AFF. L. REV. 263 (1999) (noting that despite positive evolution of public participation in environmental decision-making, public participation has not been a priority in brownfields initiatives).

<sup>232</sup> See OHIO GOVERNOR'S REPORT, *supra* note 16, at 14.

<sup>233</sup> See OHIO GOVERNOR'S REPORT, *supra* note 16, at 14.

<sup>234</sup> Telephone Interview by Heather Tonsing with Virginia Aveni, Project Manager of the Cuyahoga County Planning Commission's Brownfields Working Group (July 10, 1996).

<sup>235</sup> See, however, the Ohio Governor's Report on the Voluntary Action Program, which characterizes the standards for certified professionals and certified laboratories as "stringent." OHIO GOVERNOR'S REPORT, *supra* note 16, at 16.

<sup>236</sup> OHIO ADMIN. CODE § 3745-300-05(B)(2) (2000).

Criteria for certification:

(2) The director will issue a certification upon a demonstration, to the director's satisfaction, that the applicant:

(a) Earned a minimum of a bachelor's degree from a recognized educational institution in one of the following areas: biology, chemistry, environmental sciences, geology, hydrogeology, toxicology, scientific subdisciplines of public health or hazardous waste management, appropriate areas of engineering, or in a curriculum determined to be



sons with an advanced degree or degrees in the specified disciplines can become certified with fewer years of experience.<sup>237</sup> The problem with these requirements is that hazardous substance and petroleum cleanups may be complicated. They can require more than a single professional in one of a number of loosely related fields. For example, although a professional engineer may be familiar with the technology for removing contaminants, he or she may not possess the knowledge or skills of hydrogeology required to ensure that groundwater is protected

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equivalent by the director. The charter or accreditation of the recognized educational institution must have been effective as of the date the applicant's degree(s) was granted;

- (b) Possesses eight years of relevant professional experience, three of which are supervisory or project management related;
- (c) Possesses the professional competence and knowledge to perform the tasks required of a certified professional. In order to make this determination, the director will consider the following:
  - (i) The proficiency of the applicant;
  - (ii) The duration of the applicant's relevant employment;
  - (iii) The previous performance of the applicant with regard to various investigative methods used, including but not limited to, whether such experience includes work at sites where subsurface investigations have occurred;
  - (iv) The previous performance of the applicant with regard to the various types of remedial systems designed and monitored;
  - (v) The performance of the applicant with regard to risk and exposure assessments;
  - (vi) The number of individuals and disciplines of other professionals supervised or coordinated by the applicant;
  - (vii) The nature of conclusions reached and recommendations and opinions presented by the applicant; and
  - (viii) Any other factors the director deems relevant;

This determination will be made by reviewing evidence including, but not limited to, references, agency comments, the application form and other sources the director deems appropriate; and

- (d) Possesses good moral character. Evidence of an inability to comply with the ethical responsibilities required of a certified professional with good moral character includes, but is not limited to, felonious acts and acts involving dishonesty, fraud, or deceit.
- (3) An applicant who has earned advanced degrees from recognized educational institutions in addition to those required to meet the minimum educational requirements may request that the director credit that additional education toward the requirements for relevant professional experience if the applicant can demonstrate, to the director's satisfaction, that the advanced degree(s) constitute relevant experience. Credit may be granted in accordance with the following:
- (a) One year credit for each relevant master's degree; or
  - (b) Two years credit for a relevant doctorate degree.
  - (c) A maximum of two years credit may be granted for such additional education.

<sup>237</sup> *Id.*

or remediated.<sup>238</sup> Similarly, a person with a master's degree in toxicology understands the effects of human exposure to contaminants, but may know little about contaminant removal technologies.<sup>239</sup> It is essential that the person or entity responsible for overseeing site cleanup have all of the necessary skills and knowledge, not just some of them. There is no provision within Ohio's VAP that requires a certified professional to contract with additional certified professionals, or other experts, to supplement his or her knowledge as required by the specific circumstances arising at a site.

One additional reason for questioning this privatized system is that the federal government, specifically EPA, is nervous about it. Evidence of EPA's anxiety lies in the fact that Ohio is the only state in EPA Region 5 without a Memorandum of Agreement (MOA) stating that Region 5 will defer to the state's judgment with respect to sites remediated under a state program.<sup>240</sup> In states with an MOA, EPA has agreed not to pursue owners of remediated sites when the state is satisfied with the cleanup, except in the most extreme circumstances.<sup>241</sup> This Article certainly

<sup>238</sup> See Testimony of Landingham and Skelding, *supra* note 229.

<sup>239</sup> See Testimony of Landingham and Skelding, *supra* note 229.

<sup>240</sup> See BROWNFIELDS LAW AND PRACTICE, *supra* note 7, at App. E-12.9 (Superfund Memorandum of Agreement Addendum No. 1 Between the Illinois Environmental Protection Agency and the United States Environmental Protection Agency, Region V); BROWNFIELDS LAW AND PRACTICE, *supra* note 7, at App. E-19 (Superfund Memorandum of Agreement Addendum (Between the Indiana Department of Environmental Management and the United States Environmental Protection Agency Region V); BROWNFIELDS LAW AND PRACTICE, *supra* note 7, at App. E-25 (Superfund Memorandum of Agreement Addendum I [Between the Michigan Department of Environmental Quality and the United States Environmental Protection Agency, Region V] Brownfields Redevelopment); BROWNFIELDS LAW AND PRACTICE, *supra* note 7, at App. E-27 (Superfund Memorandum of Agreement Addendum No. 1 Between the Minnesota Pollution Control Agency and the United States Environmental Protection Agency, Region V); BROWNFIELDS LAW AND PRACTICE, *supra* note 7, at App. E-52 (Brownfields Memorandum of Agreement (MOA) Between the Wisconsin Department of Natural Resources and the United States Environmental Protection Agency, Region V Concerning Brownfields Properties and Voluntary Clean Ups). See also *Brownfields Projects and Initiatives: State Voluntary Cleanup Programs—Memoranda of Agreement* (last visited Nov. 26, 2000) <<http://www.epa.gov/swerosps/bf/gdc.htm#vc>>.

<sup>241</sup> See BROWNFIELDS LAW & PRACTICE, *supra* note 7, at App. E-52 (Brownfields Memorandum of Agreement (MOA) Between the Wisconsin Department of Natural Resources and the U.S. Environmental Protection Agency, Region V, Concerning Brownfields Properties and Voluntary Clean Ups, signed by U.S. EPA on October 27, 1995).

Region V and Wisconsin Department of Natural Resources (WDNR) agree that unless exceptional circumstances exist—that is, the site poses an

does not argue that merely because EPA Region 5 believes that a program is problematic, it must be so. Rather, Region 5's concern is merely a further indication that Ohio's program raises concerns. Interestingly, Ohio currently is pursuing what amounts to another innovation in law, a dual-tracked voluntary cleanup program in which sites cleaned up under an alternative "MOA track"<sup>242</sup> would be eligible for certain federal protections under a not yet agreed upon MOA with Region 5.<sup>243</sup>

Although Ohio was an early proponent of using private parties for site remediation and oversight, Ohio is not the only state with an assessment and remediation program not directly overseen by

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imminent threat to public health or the environment or in an emergency situation--Region V will not plan and does not anticipate any federal action under the Superfund law in the following situations:

When an environmental assessment, a site investigation or both are conducted in accordance with WDNR guidance and the NR 700 rule series, and the WDNR issues a no action letter.

When an investigation is conducted in accordance with WDNR guidance and the NR 700 rule series, and the WDNR issues an off-site source letter.

When a property in Wisconsin has been investigated and remediated in accordance with the NR 700 rule series.

When a property has been investigated and cleaned up in accordance with the NR 700 rule series and has received a certificate of completion (per s. 144.765, Stats).

These operating principles do not apply to sites that have been listed on the National Priorities List, or to sites subject to an order or other enforcement action under Superfund law, or to sites imminently threatening public health or the environment.

BROWNFIELDS LAW & PRACTICE, *supra* note 7, at App. E-52.

<sup>242</sup> If this Agreement is acceptable to EPA, the MOA Track would be available to volunteer remediators who desire increased comfort with respect to federal liability, specifically to EPA Region 5. Participants who choose the MOA Track, rather than the "Classic VAP" track, will be required to follow existing procedures applicable to VAP sites, and to conduct several additional steps. According to Ohio EPA's MOA application, the MOA Track would require "more agency involvement, such as notice of entry into the program, approval of certain documents and work plans and greater public involvement." BROWNFIELDS LAW & PRACTICE, *supra* note 7, at App. E-52. MOA Track sites would also be subject to increased administrative review in exchange for comfort from federal liability under the MOA, in addition to the Ohio EPA-issued Covenant Not to Sue. BROWNFIELDS LAW & PRACTICE, *supra* note 7, at App. E-52.

<sup>243</sup> See Ohio EPA's Proposed Final Memorandum of Agreement Application to U.S. EPA Region 5. The application, a request by Ohio EPA to enter into an MOA with Region 5, explains how Ohio EPA's suggested "MOA Track" would comply with EPA's Six Baseline Criteria for Voluntary Action Programs. *Id.* (available at <<http://www.epa.state.oh.us/derr/vap/moa/0011701ohiomoa.pdf>> (last visited April 27, 2001)).

the state environmental protection agency.<sup>244</sup> As described below, in some other states the involvement of private parties, coupled with statutorily mandated state oversight by the state environmental agency, has produced what appear to be much better programs. In these states, with some of the problems raised by privatization reduced or eliminated, the benefits of such a system remain.

Like Ohio, Colorado's brownfields law requires participants to use a "qualified professional" to prepare a Voluntary Cleanup Plan, which includes an Environmental Site Assessment (ESA).<sup>245</sup> Unlike Ohio law, which requires that certified professionals be licensed by the state EPA, the qualified professional under Colorado law is merely "a person with education, training and experience in preparing environmental studies and assessments."<sup>246</sup> The ESA,<sup>247</sup> prepared by a qualified professional

<sup>244</sup> See generally BROWNFIELDS LAW AND PRACTICE, *supra* note 7.

<sup>245</sup> A voluntary cleanup plan includes: a) An Environmental Assessment of the property which describes the contamination and the risk currently posed by the contamination to the public health and the environment (see definition of and criteria for a complete environmental assessment); b) A proposal to remediate any contamination that poses an unacceptable risk to human health or the environment, taking into consideration the present and any differing proposed future use of the property and setting forth a timetable for implementation and for post-cleanup monitoring; c) A description of applicable state cleanup standards for soils, surface and ground water, and for constituents for which no state standard exists, and a description of proposed cleanup levels and any risk to human health or the environment posed by the current or proposed future use of the site. COLO. REV. STAT. ANN. § 25-16-304(2) (West 2000).

<sup>246</sup> COLO. REV. STAT. ANN. § 25-16-308(1) (West 1994). Colorado requires the environmental professionals to have a minimum of five years relevant experience and states that the volunteer must submit the environmental professional's documentation in the form of a statement of qualifications or resume when the Environmental Assessment is submitted. THE HAZARDOUS MATERIALS AND WASTE MANAGEMENT DIVISION, COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, VOLUNTARY CLEANUP ROADMAP: A HOW-TO GUIDE, Appendix 3 (1997).

<sup>247</sup> In Colorado, an Environmental Assessment must include:

- a) legal description and a map of the property;
- b) physical characteristics of the site and contiguous areas, including the location of any surface water bodies and groundwater aquifers;
- c) location of any wells located on the site or within a one-half mile radius and a description of the use of the wells;
- d) current and proposed use of onsite groundwater;
- e) operational history of the site (at least past 50 years) and the current use of contiguous areas;
- f) present and proposed use of the site;
- g) information concerning the nature and extent of any contamination at the site, including the impact from any release on contiguous properties;

hired by the program participant, is part of a package submitted to the state agency, which also includes a remediation plan proposal and remedial alternatives. If no remediation is necessary, a No Action Petition should be submitted instead of a remediation plan. Even if the participant is submitting a No Action Petition, that petition must still be accompanied by an ESA.<sup>248</sup>

In Colorado, the Voluntary Cleanup Plan must be approved by the state agency prior to cleanup.<sup>249</sup> Additionally, after cleanup the program participant must submit a certification of approval in order to qualify for protection from liability. According to some, the Colorado state agency's review of the Cleanup Plan or No Action petition is primarily a paper chase, although the Voluntary Cleanup and Redevelopment Act does authorize the agency to enter the property to evaluate a request for a release from liability.<sup>250</sup> The state agency must review the Voluntary Cleanup Plan or No Action Petition and issue a written determination within forty-five days, otherwise the plan is deemed approved.<sup>251</sup> If the agency denies a plan, it must provide specific reasons for that denial.<sup>252</sup> The approved plan must be initiated within twelve months and completed within twenty-four months after its approval.<sup>253</sup> Like in Ohio, the property owner in Colorado must provide the state agency with a certification from a qualified environmental professional indicating that the approved cleanup plan has been fully implemented.<sup>254</sup> In Colorado, like Ohio, the state relies on the private professional to insure that applicable cleanup standards have been met. How-

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- h) any sampling results or the data characterizing the soils, groundwater or surface water (prepared by an environmental professional with at least 5 years relevant experience and should include a minimum number of soil and groundwater samples using CDPHE's preferred analytical methods);
  - i) description of human and environmental exposure to the contaminants, based on the property's current and future proposed use.

COLO. REV. STAT. ANN. § 25-16-308(2) (West 2000). See generally HAZARDOUS MATERIALS AND WASTE MANAGEMENT DIVISION, CDPHE, VOLUNTARY CLEANUP ROADMAP: A HOW-TO GUIDE (1997) (available at <<http://www.cdphe.state.co.us/hm/vcradoc.pdf>>).

<sup>248</sup> COLO. REV. STAT. ANN. § 25-16-307(2)(a) (West 2000).

<sup>249</sup> BROWNFIELDS LAW AND PRACTICE, *supra* note 7, at § Co. 01[2][a] (citing COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, VOLUNTARY CLEANUP ROADMAP, App. 3 at 8).

<sup>250</sup> See COLO. REV. STAT. ANN. § 25-16-303(5) (West 2000).

<sup>251</sup> See COLO. REV. STAT. ANN. § 25-16-306(1)(a)-25-16-307(1).

<sup>252</sup> See COLO. REV. STAT. ANN. § 25-16-306(1)(c).

<sup>253</sup> See COLO. REV. STAT. ANN. § 25-16-306(4)(a).

<sup>254</sup> See COLO. REV. STAT. ANN. § 25-16-306(5)(a).

ever, unlike Ohio, in Colorado, the state must first approve the cleanup plan upon which the environmental professional will act. It also appears that in Colorado, the state, not the private professional, determines whether to issue a “No Action” letter.<sup>255</sup> Because the state is quite clearly making the decision regarding adequate completion of the cleanup, one problem with Ohio’s program is removed in Colorado.

Under Massachusetts’ Hazardous Waste Site Cleanup Professional program, private environmental consultants, called “Licensed Site Professionals” (LSPs) control much of the state’s mandatory cleanup efforts for lesser contaminated sites.<sup>256</sup> In fact, LSPs effectively control cleanup efforts at all sites not directly under the control of the state Department of Environmental Protection (DEP).<sup>257</sup> LSPs, who are hired by program participants, not by the state, must pass a licensing exam for which the state determines the necessary qualifications by statute and DEP regulation.<sup>258</sup> LSPs are authorized to give “opinions” at various stages of the cleanup.<sup>259</sup> An LSP opinion serves as DEP approval of the work completed.<sup>260</sup> LSPs decide whether a permit is required at a site, sign the permit, and determine whether cleanup was carried out satisfactorily under DEP regulations.<sup>261</sup> Aside from DEP audits of twenty percent of LSP supervised sites annually, LSP “opinions” are the final decision regarding LSP supervised sites.<sup>262</sup>

In Massachusetts, the state has sole discretion to enter into a brownfields Covenant Not to Sue with a current or prospective owner or operator of the more contaminated sites—that is, sites that do not qualify for LSP supervision. It may do so, however, only where three requirements are met:

<sup>255</sup> See Sweeney, *supra* note 204, at 137-38.

<sup>256</sup> See Eisen, *supra* note 9, at 1033. See also Peter K. Johnson, *Mr. Smith Goes to Washington: 1997 Superfund Amendments, Will it Solve the Liability Problem and How Will This Affect Massachusetts?*, 31 NEW ENG. L. REV. 1269, 1288-1289 (1997).

<sup>257</sup> See Terry J. Tondro, *Reclaiming Brownfields to Save Greenfields: Shifting the Environmental Risks of Acquiring and Revising Contaminated Land*, 27 CONN. L. REV. 789, 804 (1995).

<sup>258</sup> See Tondro, *supra* note 257, at 804; MASS. GEN. LAWS ANN. ch. 21A, § 19-20 (West 1998); MASS. REGS. CODE. tit. 309, §§ 1.00-8.00 (2000).

<sup>259</sup> See Tondro, *supra* note 257, at 804.

<sup>260</sup> See Tondro, *supra* note 257, at 804.

<sup>261</sup> See Tondro, *supra* note 257, at 804.

<sup>262</sup> See Tondro, *supra* note 257, at 804.

- (1) In order to enter into a Covenant Not to Sue, the Commonwealth must determine that: the proposed redevelopment or reuse of the property will contribute to the economic or physical revitalization of the community in which it is located, and provides one or more of the following public benefits: a) provides new, permanent jobs, or b) results in affordable housing benefits, or c) provides historic preservation, or d) creates or revitalizes open space, or e) will provide some other public benefit to the community as determined by the attorney general.<sup>263</sup>
- (2) A permanent solution or remedy operation status is achieved and maintained, or where the eligible person demonstrates that a permanent solution is not feasible, a temporary solution is achieved and maintained;<sup>264</sup> and
- (3) A development plan describing the proposed use or reuse of the site and the proposed public benefits is submitted in accordance with regulations promulgated under the Brownfields Act.<sup>265</sup>

Like in Ohio, the Massachusetts DEP exercises control over the LSPs through annual audits of approximately twenty percent of the sites.<sup>266</sup> The Massachusetts program, at least in terms of the role of LSPs, is similar to that in Ohio. Because an LSP opinion serves as DEP approval of completion, the program poses some of the same troubling problems as Ohio's program. However, Massachusetts departs from Ohio in one important aspect: LSPs in Massachusetts only have approval authority over the least contaminated sites, thus reducing the environmental threat caused by their mistakes.

In Connecticut, licensed environmental professionals (LEPs) must pass an examination and obtain a license from the state. Under the Connecticut Transfer of Hazardous Waste Establishment Act (Transfer Act), however, the Connecticut DEP hires environmental consultants without any statutory restrictions imposed on its choice.<sup>267</sup> Once licensed and hired by DEP, these

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<sup>263</sup> See Seth D. Jaffe, *Massachusetts Brownfields Legislation: A Description and Analysis*, 42 BOSTON B. J. 19 (1998); see also MASS. GEN. LAWS ANN. ch. 21E, § 3A (j)(3)(a)(i) (West 2000).

<sup>264</sup> MASS. GEN. LAWS ANN. ch. 21E, § 3A (j)(3)(a)(ii).

<sup>265</sup> MASS. GEN. LAWS ANN. ch. 21E, § 3A (j)(3)(a)(iii).

<sup>266</sup> See Tondro, *supra* note 257, at 804.

<sup>267</sup> See Tondro, *supra* note 257, at 806. See *supra* section IV.A. regarding Ohio's use of certified private environmental professionals in its brownfields program.

LEPs are authorized to ascertain the eligibility of specific parcels of land for voluntary cleanup and cleanup incentives. They may also determine the cleanup standards applicable to a site as well as the required level of cleanup.<sup>268</sup> Although these professionals have significant decision-making responsibility, because they are hired by the state itself, rather than the program participant, the state retains substantial control over their actions.

The Connecticut Transfer Act requires that “any time parties transfer ‘operations’ of an ‘establishment’ which involves hazardous waste, they must file a ‘negative declaration’ as to the environmental status of the site with the Connecticut Department of Environmental Protection (DEP).”<sup>269</sup> However, the DEP cannot block the transfer of a site and the statute merely serves “to alert the DEP to the location of contaminated land.”<sup>270</sup> This is a fairly unique notification procedure which, although it notifies the agency with respect to the location of contaminated land, does nothing to encourage its cleanup.

A major problem with the Transfer Act is that the DEP is significantly “backlogged.”<sup>271</sup> Consequently, “[t]he owner of a Transfer Act site has two options: to either wait for the DEP to approve a proposed clean-up, or to proceed without DEP approval and take the risk that the clean-up undertaken may have to be redone when the DEP finally completes its review.”<sup>272</sup> Thus, in 1994, the Connecticut legislature authorized the DEP to retain consultants for an expedited review process at the applicant’s expense. In contrast to the Ohio program, the Connecticut DEP hires the consultants without statutory restrictions on its choice.<sup>273</sup> Furthermore, the statute only authorizes consultants to conduct reviews in certain situations that may serve as impediments to expediency.<sup>274</sup>

Some other states employing some variation of a privatization model include Arizona, whose program is similar to Ohio’s,<sup>275</sup>

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<sup>268</sup> See Barton, *supra* note 220, at 15A.

<sup>269</sup> See Tondro, *supra* note 257, at 793.

<sup>270</sup> See Tondro, *supra* note 257, at 793.

<sup>271</sup> See Tondro, *supra* note 257, at 802.

<sup>272</sup> See Tondro, *supra* note 257, at 803.

<sup>273</sup> See Tondro, *supra* note 257, at 806. See *supra* section IV.A. regarding Ohio’s use of certified private environmental professionals in its brownfields program.

<sup>274</sup> See Tondro, *supra* note 257, at 806.

<sup>275</sup> See BROWNFIELDS LAW AND PRACTICE, *supra* note 7, at AZ chapter. See also ARIZ. REV. STAT. ANN. § 45-154 et. seq. (West 2000).



and Colorado, Delaware, Kansas, Maine and Missouri. In those states qualified, certified or licensed environmental professionals perform environmental assessments and prepare cleanup plans, but the state has ultimate approval authority over a site's cleanup.<sup>276</sup> Some states, like Maryland, Minnesota, Mississippi and Montana, allow environmental consultants and engineers to participate in assessments and cleanups with no certification or licensing requirements.<sup>277</sup> These states, however, do not allow the private professionals to make decisions regarding the satisfaction of cleanup requirements. Some states, like Massachusetts, allow licensed professionals to oversee and certify cleanups of less contaminated sites.<sup>278</sup> In Utah, although the state does not require voluntary cleanup participants to use certified or licensed professionals, some Utah statutes require certification of persons who perform certain tasks such as soil testing and underground storage tank installation.<sup>279</sup> All of these states' efforts to transfer tasks from the responsible government agency to private parties, whether or not the responsible agency licenses them, are forms of privatization or public/private partnership, and exhibit various degrees of problems and benefits.

### ***B. Lessons on Privatization from Other Areas of Government***

In addition to its recent entrée into environmental law, privatization has reached traditional government functions with broader public policy implications than, for example, the outsourcing of data processing operations, public transportation management, and waste removal. This Article focuses on areas outside the environmental area because, although there are lim-

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<sup>276</sup> See BROWNFIELDS LAW AND PRACTICE, *supra* note 7, at CO chapter. See also COLO. REV. STAT. § 25-16-308(1); BROWNFIELDS LAW AND PRACTICE, *supra* note 7, at DE chapter; DEL. CODE ANN. tit. 7, § 9108(a); BROWNFIELDS LAW AND PRACTICE, *supra* note 7, at MO-8, § MO.01[3][iii]; BROWNFIELDS LAW AND PRACTICE, *supra* note 7, at TX-18, § TX.05[7].

<sup>277</sup> See BROWNFIELDS LAW AND PRACTICE, *supra* note 7, at MD chapter, § MD.05[5]; BROWNFIELDS LAW AND PRACTICE, *supra* note 7, at MN-29, § MN.04[5]. See also MINN. R. 7105 (2000); BROWNFIELDS LAW AND PRACTICE, *supra* note 7, at MS-32, § MS.06[5][a]; BROWNFIELDS LAW AND PRACTICE, *supra* note 7, at MT-4, § MT.01[1].

<sup>278</sup> See BROWNFIELDS LAW AND PRACTICE, *supra* note 7, at MA-11, § MA.05[2]; see also MASS. GEN. LAWS ch. 21A (2000).

<sup>279</sup> See BROWNFIELDS LAW AND PRACTICE, *supra* note 7, at UT-14, § UT.05[4]; UTAH ADMIN. CODE 311-201-2(a) (2001).

ited uses of the private sector in environmental regulation,<sup>280</sup> other areas of government are far more sophisticated in this regard.

An example of privatization with broad public policy implications is privatization in the criminal justice system. Although their uses of privatization are different in important ways, privatization in corrections and in brownfields programs raise similar concerns. In both instances private entities have decision-making power over citizens. In addition to the more controversial area of privatized corrections, where private individuals make important decisions with respect to citizens' liberty, this Article briefly explores the use of private parties in the more mundane area of state vehicle safety inspections. Although there are certainly important distinctions, state authorized motor vehicle inspectors are similar to private environmental professionals in state brownfields programs because they apply numerically specific, state-mandated standards and regulations.

Whereas privatization in state brownfields programs is a new idea, privatization in these other areas of traditional government function has existed for quite a long time. Lessons learned from privatization in these other areas can inform states' uses of privatization in brownfield cleanup programs.

### *1. Privatization in Corrections: Outsourcing Agency Decision-Making Responsibility*

Governments have long outsourced basic prison services such as food preparation, medical care and educational services. A less common, but growing form of privatization in corrections is the use of privately run, for-profit, major correctional facilities.<sup>281</sup> When control of a correctional facility is in private hands, private parties make decisions regarding personal freedoms, such as the denial of privileges or placement in solitary confinement.<sup>282</sup> Although not concerning so fundamental an issue as personal free-

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<sup>280</sup> See *supra* note 221 and accompanying text.

<sup>281</sup> See Ira P. Robbins, *The Legal Dimensions of Private Incarceration*, 38 AM. U. L. REV. 531, 540-41 (1989). See also Brian B. Evans, *Private Prisons*, 36 EMORY L.J. 253, 254 (1987); David Yarden, *Prisons, Profit, and the Private Sector Solution*, 21 AM. J. CRIM. L. 325, 326 (1994).

<sup>282</sup> See Joel, *supra* note 218, at 59. See also Evans, *supra* note 281; Field, *supra* note 166; David Yarden, *Prisons, Profits and the Private Sector Solution*, 21 AM. J. CRIM. L. 325 (1994) (reviewing *PRIVATIZING CORRECTIONAL INSTITUTIONS* (Gary W. Bowman et al. eds., 1993)).

dom, state brownfields programs that use private professionals are similar, in a small way, to privatized correctional facilities because private parties are making decisions, effectively on behalf of the state, regarding cleanup sufficiency. Based on the decisions of private parties, some state agencies take the major step of absolving site owners of liability with respect to environmental contamination at the site.

Criticism of the use of private correctional facilities revolves around a fundamental debate over government's role in American society. The claim is that "[p]rison privatization represents the government's abdication of one of its most basic responsibilities to its people,"<sup>283</sup> that is, enforcement of criminal laws.<sup>284</sup> While not pertaining to anything so fundamental as the deprivation of personal liberty, a similar criticism applies to the use of private party decision-makers in some state brownfields programs. That is, it is the government's responsibility to enforce environmental laws, thereby protecting its citizens from environmental harm. It follows that allowing private individuals to determine when a contaminated site is clean enough to erase the owner's liability to the state is an abdication of agencies' responsibility to the public for enforcement of the environmental laws.

The obvious retort to that argument is that in using private parties to perform evaluative tasks traditionally performed by state agencies, as Ohio's program requires, the agency is merely carrying out its responsibilities by delegating tasks to private entities.<sup>285</sup> This method could actually be cost-efficient and not lead to sub-par cleanups because of the expertise and integrity of private professionals, and because the state EPA must audit a percentage of the work carried out by private entities.<sup>286</sup>

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<sup>283</sup> See Field, *supra* note 166, at 668.

<sup>284</sup> See PRIVATIZATION COMMISSION REPORT, *supra* note 185, at 148-149.

<sup>285</sup> See PRIVATIZATION COMMISSION REPORT, *supra* note 185, at 149.

<sup>286</sup> To date, Ohio EPA appears to have carried out its audit requirements. See Electronic mail from Mike Allen to Jennifer Lukas Jackson, *supra* note 216. Between 1996 and 1999, Ohio EPA audited twenty-seven sites from among the ninety NFA letters it received, or approximately thirty percent of the total. This information, however, is difficult to obtain. Although information regarding the numbers of NFA letters filed and Covenants Not to Sue issued is available on Ohio EPA's web site, the numbers of audits, which sites have been audited, and the percentages of sites audited from the total pool of NFA letters received is not available. Further, there is no information available about the adequacy of the audits or the success or failure of sites that have been through the audit process. Without this information, it is difficult to determine whether the use of certified environmental professionals has

Further, private prisons exist to make a profit. In fact, their business has grown at a rate of thirty-five percent annually.<sup>287</sup> Because of this drive for profit, some argue that the state should not allow a private entity to regulate a citizen's freedom because a private entity's motives are not pure. Because of a desire for profit, private entities may discourage alternatives to incarceration (i.e. probation, parole, and community-based corrections) in an effort to keep their prisons full and their profits flowing.<sup>288</sup> Just as the injection of a profit incentive into the corrections system fuels fears of improper motivation in the decisions of private parties, the injection of profit into the environmental assessments on which agencies rely leads to the same potential problem. An incentive to prolong cleanups might exist because the private parties are paid for their work, and because landowners cannot go elsewhere for a No Further Action letter without beginning the process anew with a different certified professional. However, the landowner who hires a certified professional could address this problem by structuring the contract under which the certified professional works to pay by the job, rather than the time spent.

Alternatively, private parties seeking to corner volume in the market for No Further Action letters may not be sufficiently diligent with respect to the quality of the cleanup, instead seeking to please their customers and issue quick NFA letters. The growth of the private prison industry has created an incentive for certain groups to lobby for more private prisons, more incarceration, and more crimes and punishment. Of course, with private parties making decisions regarding brownfield cleanups, one might expect similar lobbies to emerge in favor of more numerous and stringent environmental regulations. Either way, although private participation and profit are not necessarily inimical to the public interest, the profit incentive can cloud private parties'

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been effective in carrying out agency tasks, or whether it has led to too many inadequately remediated sites.

<sup>287</sup> See Larry Abramson, *Growth of Private Prisons, NPR's Larry Abramson Reports on the Growth of Private Prisons, which Promise to Save Money by Running Corrections Like a Business*, MORNING EDITION (May 28, 1998) (available at <<http://search.npr.org/cf/cmnm/cmnpsofm.cfm?SegID+25932>>). A leading private prison company, Community Corrections Corporation, reportedly made \$2.6 million in the first quarter of 1998; CRAIN'S N.Y. BUS., May 18, 1998, at 22.

<sup>288</sup> See Field, *supra* note 166, at 671.

judgment in carrying out what would otherwise be a government function.

Another problem that critics have raised with respect to the drive for profit is that private parties who run prison facilities may cut corners such that the quality of services declines, putting prisoners' health and safety at risk.<sup>289</sup> Similarly, in the case of private decision-makers in brownfields programs, certified professionals who cut corners may put the environmental condition of the site and the health of third parties at risk. With both environmental assessment and privatized corrections, this problem might be avoided through regulation with satisfactory monitoring and oversight provisions.<sup>290</sup> Whereas with prisons, the threat of civil rights lawsuits might help prevent "substandard levels" of prison services,<sup>291</sup> with environmental assessment, the threat of third party liability might encourage landowners to ensure proper cleanup.

Another potential problem with the privatization of prisons is that it involves the delegation of decision-making responsibility to politically unaccountable parties.<sup>292</sup> However, private prisons are at least somewhat accountable to the public because all government contracts require contractors to adhere to government standards.<sup>293</sup> Additionally, with respect to private prisons, most

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<sup>289</sup> See Field, *supra* note 166, at 663. Opponents argue that private facilities will hire fewer guards, resulting in increased danger to inmates. The non-unionized nature of a private facility will result in lower paid employees, and therefore, will lead to the hiring of lower "caliber" employees; a decrease in educational, medical and food services may also result.

<sup>290</sup> See Evans, *supra* note 281, at 281.

<sup>291</sup> See Evans, *supra* note 281, at 282. Even more troubling is the concern for prisoners' constitutional protections and the constitutionality of private prisons generally. The Oklahoma Supreme Court recently considered the constitutionality of private prisons, holding that the privatized county jail at issue was legal. See *Tulsa County Deputy Sheriff's Fraternal Order of Police v. Bd. Of County Commissioners of Tulsa County*, 995 P.2d 1124 (Okla. 2000). Further, there is debate in the literature regarding whether actions by private prison officials are "state actions." Harold J. Sullivan, *Privatization of Corrections: A Threat to Prisoners' Rights*, in *PRIVATIZING CORRECTIONAL INSTITUTIONS* 139 (1993). To date, however, the U.S. Supreme Court has heard only one case on private prisons, holding that their employees are not entitled to the same qualified immunity as would apply to government prison employees. *Id.* at 145; *Richardson v. McKnight*, 521 U.S. 399 (1997) (relying on *Wyatt v. Cole*, 504 U.S. 158 (1992), the Court reasoned that the purpose of immunity protection for government employees was to protect the government's ability to perform its traditional functions, and this purpose did not apply to private enterprises).

<sup>292</sup> See Field, *supra* note 166, at 651.

<sup>293</sup> See, e.g., OKLA. STAT. ANN. tit. 19 § 744 (West 1999), which authorizes private operation of county prisons provided that "service shall meet any standards pre-

contracts bind prison companies to the rules promulgated by the American Correctional Association, the field's primary professional association.<sup>294</sup>

With respect to privatization in corrections, the report of President Reagan's Commission on Privatization concluded: "[C]ontracting out the administration of jails, and prisons, at the federal, state, and local levels could lead to improved, more efficient operation."<sup>295</sup> Although the report acknowledges that issues of liability and accountability exist, it does not find them insurmountable obstacles to contracting out the administration of these facilities.<sup>296</sup> Specifically, the report acknowledges that policymaking and legislative or judicial functions cannot be contracted out.<sup>297</sup> It concludes, however, that because privately operated prisons remain bound by regulation and ultimate supervisory authority of the government, government does not, in contracting with private prison companies, abdicate its authority inappropriately.<sup>298</sup> Instead, government appropriately delegates some of its executive or administrative responsibilities.<sup>299</sup> Although certainly only the state has the right to incarcerate citizens, it is not the case that only the state can run a prison facility in a humane, fair, and efficient way.

Although the question of how well privatization has worked in corrections is a matter of substantial debate, there have been sev-

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scribed and established for county jails, including but not limited to standards concerning internal and perimeter security, discipline of inmates, employment of inmates, and proper food, clothing, housing, and medical care"; OKLA. STAT. ANN. tit. 34-105 (West 1999), requiring the same of private prisons in cities and municipalities. Additionally, OKLA. STAT. ANN. tit. 57 § 68 (West 1999) provides that "any state law governing jails shall apply to jail facilities operated by a private prison contractor"; OHIO REV. CODE ANN. § 9.06 (Anderson 1999) (governing contracts for private operation and management of correctional facilities) and OHIO REV. CODE ANN. § 9.07 (Anderson 1999) (governing entities authorized to operate correctional facility housing out-of-state prisoners and requirements for operation).

<sup>294</sup> PRIVATIZATION COMMISSION REPORT, *supra* note 185.

<sup>295</sup> PRIVATIZATION COMMISSION REPORT, *supra* note 185, at xviii.

<sup>296</sup> PRIVATIZATION COMMISSION REPORT, *supra* note 185, at xviii. *See also* Savas, *supra* note 184, at 897-99.

<sup>297</sup> PRIVATIZATION COMMISSION REPORT, *supra* note 185, at 149. *See also* U.S. OFFICE OF MANAGEMENT AND BUDGET, CIRCULAR A-120, GUIDELINES FOR THE USE OF ADVISORY AND ASSISTANCE SERVICES, (Jan. 1, 1988), *rescinded in* Recission of OMB Circular A-120, Guidelines for the use of Advisory and Assistance Services, 58 Fed. Reg. 63,593 (1993); Jonathan Boston, *Inherently Governmental Functions and the Limits to Contracting Out*, in *THE STATE UNDER CONTRACT* 78, 88-89 (Jonathan Boston ed., 1995).

<sup>298</sup> PRIVATIZATION COMMISSION REPORT, *supra* note 185, at 149.

<sup>299</sup> PRIVATIZATION COMMISSION REPORT, *supra* note 185, at 149.

eral recent attempts to enact state legislation to regulate or even ban privatization of prisons.<sup>300</sup> For example, on June 16, 1998, the California Senate killed a bill to ban private state prisons. The bill had proposed an amendment to California's constitution to stop privatization of any public safety service, including fire, police and corrections.<sup>301</sup>

That said, there are lessons we can learn from privatized corrections that apply to privatization elsewhere, even to the use of private parties to make important decisions in brownfields redevelopment programs. Just as inadequately regulated private prisons are unsafe without ample oversight, privatization of environmental cleanups may lead to dangers to human health and the environment.

In particular, there is a risk to the environment and human health when certified professionals are only required to be well qualified, as in Ohio's program, in some of the areas of expertise necessary to execute a cleanup of a particular site.<sup>302</sup> Because of their diversity of skills, environmental consulting firms, which have engineers, toxicologists, geologists, hydrogeologists and collective experience with numerous types of hazardous substance cleanups, are more appropriate than any individual to be "certified professionals."<sup>303</sup> Further, the state EPA could retain environmental consulting firms rather than requiring regulated parties to contract directly with private individuals who will then have an economic interest in the cleanup.<sup>304</sup>

The remaining benefit of using private parties to make decisions regarding the sufficiency of cleanup is the alleged expertise of private environmental professionals. In addition, this process reduces costs by reducing administrative burdens on agencies.<sup>305</sup>

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<sup>300</sup> The Ohio House of Representatives introduced HR842 (122nd Ohio Gen. Assembly, 1998) to eliminate private prisons, however, the bill died in Ohio Senate committee. The Missouri House of Representatives considered a bill forbidding privatization of prisons. Mo. H.B. 1857 (89th Gen. Assembly, 1998). This bill also died in committee. See *HB 1857* (visited Apr. 1, 2001) <<http://www.house.state.mo.us/bills98/bills98/HB1857.htm>>.

<sup>301</sup> See Andy Furillo, *The Effort to Block Private Prisons Dies in Senate*, THE SACRAMENTO BEE, June 17, 1998. See also Mike Lewis, *Bill Banning Private Prisons Fails*, THE FRESNO BEE, June 17, 1998, at B3.

<sup>302</sup> See discussion *supra* at notes 235-239 and accompanying text.

<sup>303</sup> See Testimony of Landingham and Skelding, *supra* note 229.

<sup>304</sup> See Testimony of Landingham and Skelding, *supra* note 229.

<sup>305</sup> See Michael C. Powell, *Controversial Elements of Brownfields Legislation*, 8 MD. J. CONTEMP. LEGAL ISSUES 1, 8 (1997).

Although it is too early with most state brownfields programs to judge them too harshly, what we learn from the criticisms of privatized corrections is that there are dangers involved in privatization, especially when the privatization allows private parties to make decisions on which government agencies rely or are effectively bound. Privatization may well produce the stated benefits of cost savings and expertise. It may also allow end results to be clouded or diminished, perhaps in a dangerous way, due to the inherent profit motivation. If brownfields programs capitalize on the benefit of privatization, but reduce the negative aspects of that innovation, states will have safe and efficient programs. Massachusetts, with sufficient agency oversight of private environmental consultants is a good example. Ohio, which abrogates considerable responsibility to private parties, is not.

## 2. *State Motor Vehicle Safety Inspections: Oversight in Public-Private Partnerships*

When a state requires that motor vehicle safety inspections be carried out by private parties, it is not the kind of abdication of decision-making authority one sees with private prisons. It does, however, present some useful parallels to the use of private parties in state brownfields programs, such as Ohio's VAP. In particular, states' uses of private parties in motor vehicle safety inspection programs illustrate how private parties can safely and effectively carry out the state's work, while under the specific oversight of state agencies. The motor vehicle safety inspection programs in Maryland and New York, now time-honored traditions, are useful examples with which to compare the use of private parties in state brownfields programs, like Ohio's VAP and others.

The State of Maryland requires that new owners of motor vehicles submit their vehicles to a safety inspection<sup>306</sup> by a licensed inspection station<sup>307</sup> when used vehicles are transferred.<sup>308</sup> When a person transfers a used vehicle, the transferor must ob-

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<sup>306</sup> "Vehicle" includes passenger, multipurpose, vanpool, truck, tractor, trailer, for-hire vehicles, and motorcycles; MD. CODE ANN., TRANS § 23-101(i) (1999), "vehicle" does not include any historic vehicle or any trailer which is a mobile home as defined by MD. CODE ANN., TRANS § 11-134. MD. CODE ANN., TRANS § 23-101(i)(3).

<sup>307</sup> MD CODE ANN., TRANS § 23-101(f). An inspection station is a facility that is licensed by the Automotive Safety Enforcement Division of the Department of State Police under this subtitle.



tain an inspection certificate<sup>309</sup> from a state-licensed inspection station.<sup>310</sup> An inspection certificate is a written certification by a licensed inspection station certifying that the vehicle meets or exceeds the applicable safety standards.<sup>311</sup> A state-registered individual who personally inspected the vehicle signs and dates the certificate on behalf of the inspection station.<sup>312</sup> The inspection station issues the inspection certificate and attaches it to the vehicle.<sup>313</sup> Maryland law requires an inspection certificate before the Motor Vehicle Administration may title or register the used vehicle.<sup>314</sup>

Although Maryland uses private automobile dealerships and repair shops to conduct these statutorily mandated safety inspections, the Maryland statute requires licensing both of the facilities and the mechanics that conduct the vehicle inspections. To obtain an Inspection Station license, the facility must apply to the Automotive Safety Enforcement Division of the Department of State Police (Division).<sup>315</sup> The Division inspects the applicant facility with respect to its ability to inspect for and correct vehicle safety issues, and, if the facility is qualified, the Department of State Police issues the facility an Inspection Station license.<sup>316</sup> The facility must renew its application annually.<sup>317</sup>

Additionally, a mechanic who intends to conduct inspections and issue inspection certificates and repair order certifications<sup>318</sup>

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<sup>308</sup> MD. CODE ANN., TRANS § 23-106(b)(2). However there are exemptions to the inspection requirement. *See generally* MD. CODE ANN., TRANS § 23-106(a). Some examples of exemptions include any transfer of a used vehicle between licensed dealers, transfers between spouses, transfers between a parent and child, or co-owners of the vehicle when a co-owner's name is being removed from the title, and transfers of vehicles between state agencies.

<sup>309</sup> MD. CODE ANN., TRANS § 23-101(e).

<sup>310</sup> MD. CODE ANN., TRANS § 23-106(b)(2).

<sup>311</sup> MD. CODE ANN., TRANS § 23-101(h).

<sup>312</sup> *Id.*

<sup>313</sup> MD. CODE ANN., TRANS § 23-106(b)(2).

<sup>314</sup> MD. CODE ANN., TRANS § 23-107(a)(1).

<sup>315</sup> MD. CODE ANN., TRANS § 23-103(a).

<sup>316</sup> MD. CODE ANN., TRANS § 23-103(a)(i) & (ii).

<sup>317</sup> *Id.*

<sup>318</sup> MD. CODE ANN., TRANS § 23-101(h). A repair order certification is a written certification by an inspection station or police department that certifies that:

as of its date, the equipment specified in a safety equipment repair order meets or exceeds the standards established under this subtitle; and is signed and dated on behalf of the inspection station by the registered individual who personally inspected the vehicle; or on behalf of the police department by the authorized police officer who personally inspected the vehicle.

must first submit an application and take an examination administered by the Division.<sup>319</sup> Based upon pre-determined standards, the Division determines whether the applicant is qualified, and then registers and licenses the mechanic to conduct vehicle inspections.<sup>320</sup>

Like Ohio's VAP, Maryland's motor vehicle safety inspection program provides for private individuals to carry out certain tasks that fall within the state's responsibility to protect public health and welfare. Both programs require the private actors to submit to an application process through the state agency. However, a critical distinction between the two programs is that the Maryland motor vehicle safety inspection program allows for a more significant opportunity for state oversight than is present in Ohio's VAP. First, in Maryland's vehicle safety inspection program, the individual mechanic who applies to the Division for a license must take an examination to determine whether his or her skills meet the regulatory requirements.<sup>321</sup>

The Ohio EPA, although it requires a lengthy written application, requires no examination prior to granting an individual status as a certified professional. Second, in Maryland, the Inspection Station, in addition to the individual mechanic, must apply to the Division for a license. There is no provision in Ohio's VAP requiring a license or certification for the firm or group in which the certified professional works, assuming that the certified professional is not working alone. Finally, while certified professionals must be proficient in any one of a number of areas of scientific expertise but need not be competent in all areas, vehicle safety inspectors must be competent in all areas of safety inspection, admittedly a narrower, less technical scope. Although an examination process itself certainly does not ensure competence, drivers' license and bar examinations would disprove that assumption, it does give the state an opportunity to exert control and authority over the process.

In addition, under the Maryland vehicle safety inspection program, prior to licensing the state agency inspects the applicant facility to determine whether it can properly inspect and repair vehicles. Although the Ohio VAP does require laboratories to be certified if their services are used by the certified professionals

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<sup>319</sup> MD. CODE ANN., TRANS § 23-103.1(a).

<sup>320</sup> MD. CODE ANN., TRANS § 23- 103.1(a) & (b).

<sup>321</sup> MD. CODE ANN., TRANS § 23-103.1(b).

in the course of VAP cleanup, this is distinguishable from the level of oversight available in Maryland's motor vehicle inspection program. This distinction exists because the inspection station where the licensed mechanic works must be the same facility where the inspection took place and where all required repairs have been completed.<sup>322</sup> Under the VAP, however, the certified laboratories that test samples collected at a cleanup site might work on only one piece of the cleanup at a site. There may be many other parts of the cleanup done solely by the certified professional, whom the law does not compel to use other certified professionals to supplement his or her work or that done by the certified laboratory.

Similar to Maryland's program, New York's motor vehicle inspection statute contains many of the same procedures and requirements for vehicle inspections at the time of transfer.<sup>323</sup> In New York, the Commissioner<sup>324</sup> licenses private individuals as certified motor vehicle safety inspectors.<sup>325</sup> Applicants must meet established standards of competency to receive a certificate.<sup>326</sup>

New York's motor vehicle inspection program is similar to Maryland's in important ways. In New York, the Commissioner investigates the facility to determine that it is properly equipped and has competent personnel to inspect vehicles, that inspections will be properly conducted, and that the applicant facility complies with applicable statutes and regulations.<sup>327</sup> Additionally, the state may suspend or revoke the facility's license with cause and notice to the licensee.<sup>328</sup>

Once a certified inspector inspects a vehicle, the official inspection station issues a certificate of inspection for that vehicle

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<sup>322</sup> Inspection certificates must be "signed and dated . . . on behalf of the inspection station by the registered individual who personally inspected the vehicle. . . ." MD. CODE ANN., TRANS § 23-10(e)(2).

<sup>323</sup> See generally N.Y. VEH. & TRAF. LAW § 301 (McKinney 2000). See especially N.Y. VEH. & TRAF. LAW § 301(c)(1)(a) (McKinney 1996), which requires, *inter alia*, a safety inspection of the brakes, steering mechanism, wheel alignment, light systems, and safety restraint systems, and an inspection of the vehicle identification number.

<sup>324</sup> Commissioner of the New York Department of Motor Vehicles, N.Y. VEH. & TRAF. LAW § 200 (McKinney 1996).

<sup>325</sup> N.Y. VEH. & TRAF. LAW § 304-a(a) (McKinney 1996).

<sup>326</sup> N.Y. VEH. & TRAF. LAW § 304-a(c) (McKinney 1996).

<sup>327</sup> N.Y. VEH. & TRAF. LAW § 303(a)(1) (McKinney 1996).

<sup>328</sup> N.Y. VEH. & TRAF. LAW § 303(e), (f) (McKinney 1996).

indicating that the mechanisms and other equipment of that vehicle are in proper and safe condition and comply with all applicable laws.<sup>329</sup> The Commissioner inspects all official inspection stations<sup>330</sup> and has the power to inspect any motor vehicle located on the premises of an official inspection station that has been issued a certificate of inspection within the previous fifteen days.<sup>331</sup> This oversight measure, which helps to ensure the quality and validity of the inspections, is not required by Maryland's vehicle inspection statute. Importantly, the qualitative oversight afforded by the New York statute's inspection requirement is notably absent from Ohio's brownfields program. Although Ohio's brownfields program does require that certified professionals renew their certification annually, the statute requires no on-site inspection of work quality or equipment other than the mandated audits of approximately twenty-five percent of sites that have already been issued a Covenant Not to Sue.

### 3. *What Brownfields Programs Can Learn from Privatization in Other Areas of Government*

Limited privatization has long been an accepted practice of the public sector. According to a federal government report: "Where similar functions are readily available in the private sector, and where services show [a] genuine likelihood of being improved by private providers, long-standing, bipartisan national policy supports transferring the functions to the private sector."<sup>332</sup> Although privatization exists and functions well in many areas of government service and responsibility, in other areas, like environmental law, use of private entities to perform traditional government functions is a recent innovation. The most important questions regarding privatization in environmental cleanup are what extent of decision-making authority the private party holds, and overall, whether the benefits of the program outweigh its risks.

Although privatization concepts are employed in governmental operations in numerous areas of government, to various degrees of success, we learn some lessons from those other areas of government operations which can inform the use of the private

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<sup>329</sup> N.Y. VEH. & TRAF. LAW § 304(a) (McKinney 1996).

<sup>330</sup> N.Y. VEH. & TRAF. LAW § 303(d)(1) (McKinney 1996).

<sup>331</sup> N.Y. VEH. & TRAF. LAW § 303(d)(2) (McKinney 1996).

<sup>332</sup> PRIVATIZATION COMMISSION REPORT, *supra* note 185, at 155.

sector in brownfields redevelopment programs. For example, from privatization of correctional operations we learn that there are dangers in allowing private parties to assume too much control of decision-making. From privatization in corrections we also learn that there are dangers involved in allowing profit incentives to infect the decision-making processes of private parties.

Because of the profit incentive that privatization injects into its cleanup and redevelopment process, privatization as practiced in the Ohio brownfields redevelopment model may go beyond a reasonable agency delegation of responsibility. Because Ohio's program has limited oversight and questionably effective audit provisions, it presents dangers similar to those posed, albeit in a manner more dangerous to human freedoms, by the use of private prisons. With respect to environmental cleanups, the dangers are to human health and the environment. Because the program effectively grants private parties authority to make decisions with respect to a landowner's rights and responsibilities, the state abdicates important decision-making authority to unaccountable private individuals.

Acknowledging that there are important differences in the privatization mechanisms at work, from privatization in state motor vehicle inspection programs we learn that with sufficient clarity of inspection standards, coupled with adequate state oversight and certification standards, private parties can carry out government tasks with efficiency. Perhaps, with increased government involvement and oversight, such as in New York's motor vehicle inspection programs, state brownfields programs can make good use of the environmental expertise of private professionals. This is done in some states where state agencies retain decision-making authority. Perhaps there can still be some cost savings. However, to relinquish decision-making authority to parties with a profit motive, in the absence of stringent regulatory controls, is an abdication of state governmental responsibility.

### III

#### **OTHER INNOVATIONS IN STATE BROWNFIELDS REDEVELOPMENT PROGRAMS**

Although this Article presents in-depth discussion of only two innovations in state brownfields programs, there certainly are others. The two innovations addressed by this Article can have

great positive effect on brownfields programs and the environment, although, as noted, they also present certain risks. This Part discusses a few additional innovations in state brownfields law, mostly to show that they exist, and that creativity in these programs goes beyond the innovations discussed above.

Colorado's brownfields program, for example, is noteworthy because "upon satisfactory completion of voluntary remedial activities, Colorado is under a non-discretionary duty to actively pursue an EPA determination that the property will not be subject to further federal enforcement action."<sup>333</sup> Many other state programs have reached agreements with the applicable EPA Region to have that Region accept the state's work and promise not to pursue the site. Few state programs, however, have agreed to seek a determination with respect to an individual site outside the blanket provisions of its particular agreement with the EPA Region. This is a significant innovation in law because it requires the state agency to stand by and advocate for the quality of its work. On April 11, 1996, the Colorado Department of Public Health and Environment, together with three other states, signed an agreement with the EPA solidifying this unique statutory provision.<sup>334</sup> "[I]f the health department has approved a cleanup plan, [the U.S.] EPA will permit the cleanup to proceed under state direction. The federal agency . . . [will] not take any future legal action against any new owners of sites as long as cleanups are completed as planned and the use of the property remains the same."<sup>335</sup>

Connecticut has a creative program in place called the Urban Sites Remediation Program in which the state takes ownership of a brownfield site and becomes the party responsible for cleaning it up.<sup>336</sup> Once the state finds a private party to reuse the property, the state Department of Economic Development buys the land and assumes responsibility. "The State recaptures at least some of its clean-up costs under the resale agreement."<sup>337</sup> However, while the program is novel, some argue that these cleanups

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<sup>333</sup> See COLO. REV. STAT. ANN. §25-16-307(2)(a)(I).

<sup>334</sup> *State Signs Brownfield Agreement with EPA*, DAILY ENV'T. REPORT, Apr. 30, 1996, at D28.

<sup>335</sup> *Id.*

<sup>336</sup> See Tondro, *supra* note 257, at 810.

<sup>337</sup> Tondro, *supra* note 257, at 810.

and purchases “will never be substantial enough to significantly reduce the number of Brownfields” in the state.<sup>338</sup>

Like many other states, Massachusetts offers volunteer remediators a Covenant Not To Sue. However, in Massachusetts, the Covenant becomes effective before the remediation has begun. The Covenant is available only to persons not considered “potentially responsible parties” (PRPs) and to those who volunteer to clean up the site. The Covenant’s scope is broad as it protects owners and lenders against liability even for contamination discovered after the Covenant was signed.<sup>339</sup> Furthermore, protection extends even if “the established safe level for a contaminant is reduced so that what was considered a safe level at the time the clean-up occurred is subsequently no longer considered to be safe.”<sup>340</sup> Not surprisingly however, Massachusetts imposes “Activity and Use Limitations,” a form of restrictive covenant, on properties cleaned to less stringent standards.<sup>341</sup>

Under Indiana’s Voluntary Cleanup Program, volunteer remediators submit investigation and voluntary remediation work plans to the state for review and approval.<sup>342</sup> Prior to submitting work plans to the state for review and approval, volunteers must enter into a “voluntary remediation agreement . . . [which] sets the terms and conditions for the evaluation and implementation of the work plan.”<sup>343</sup> The agreement must contain a dispute resolution mechanism such as arbitration or adjudication.<sup>344</sup> Finally, the work plan is subject to a public hearing and comment.<sup>345</sup> When the volunteer completes the cleanup according to the work plan, the state issues a “Certificate of Comple-

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<sup>338</sup> Tondro, *supra* note 257, at 811.

<sup>339</sup> John F. Shea, *Hazardous Waste Cleanup Law*, MASSACHUSETTS ENVIRONMENTAL LAW, MASSACHUSETTS CONTINUING LEGAL EDUCATION, 464 PLI (Real) 135, 227 (1999).

<sup>340</sup> Tondro, *supra* note 257, at 809.

<sup>341</sup> Tondro, *supra* note 257, at 799.

<sup>342</sup> See Sweeney, *supra* note 204, at 142 (citing IND. CODE ANN. § 13-7-8.9-9 (West 1994)).

<sup>343</sup> See Sweeney, *supra* note 204, at 143 (citing IND. CODE ANN. § 13-7-8.9-13(a)(West 1994)).

<sup>344</sup> See Sweeney, *supra* note 204, at 143 (citing IND. CODE ANN. § 13-7-8.9-13(a)(2) (West 1994)).

<sup>345</sup> See Sweeney, *supra* note 204, at 143-44.

tion.”<sup>346</sup> The Certificate of Completion is “a condition precedent to the issuance of a Covenant Not to Sue.”<sup>347</sup>

Notably, the Indiana program does not contain a statutory protection for lenders. Additionally, the Covenant Not to Sue “extends neither to future liability for property previously remediated under a voluntary work plan, nor to contamination not known at the time the Certificate of Completion was issued.”<sup>348</sup>

The Pennsylvania program contains a system of variable standards, similar to many other states. However, Pennsylvania goes beyond what other states allow in terms of the consequences of selecting a cleanup standard.<sup>349</sup> In some states’ voluntary programs, volunteers can choose among various types of standards: background standards, generic numeric standards, or site-specific, risk-based standards tied to the intended future use of the land. In those states, if a remediator chooses a site-specific cleanup standard the remediator does not receive a release from liability for future cleanup that would be necessary for a higher use of the land.<sup>350</sup> Other states separate the issue of Covenants Not To Sue and releases from liability from determinations regarding cleanup standards.<sup>351</sup> Pennsylvania, on the other hand, releases owners from liability for cleanups for restricted use regardless whether there is an actual proposal for reuse for a restricted purpose.<sup>352</sup> Pennsylvania also makes restricted cleanups available for undeveloped lands.<sup>353</sup>

Critics of Pennsylvania’s program fear that it will lead to development of contaminated land that was not already developed, frustrating the urban renewal purpose of the law.<sup>354</sup> They also fear it will render large tracts of land unusable in the future for higher uses such as housing.<sup>355</sup>

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<sup>346</sup> Sweeney, *supra* note 204, at 144 (citing IND. CODE ANN. § 13-7-8, 9-17 (West 1994)).

<sup>347</sup> See Sweeney, *supra* note 204, at 143.

<sup>348</sup> See Sweeney, *supra* note 204, at 144-45.

<sup>349</sup> See Denworth, *supra* note 18, at 30.

<sup>350</sup> This is true, for example, in Texas and Massachusetts. See Denworth, *supra* note 18, at 30.

<sup>351</sup> This is true with respect to Michigan’s program. See Denworth, *supra* note 18, at 30.

<sup>352</sup> See Denworth, *supra* note 18, at 30.

<sup>353</sup> See Denworth, *supra* note 18, at 30.

<sup>354</sup> See Denworth, *supra* note 18, at 30.

<sup>355</sup> See Denworth, *supra* note 18, at 30.



Thus, states are using legislative innovation to encourage brownfields redevelopment by reducing the environmental barriers to liability. They are using private professionals to carry out portions of the state's job, and tying cleanup standards to the intended future use of the land. States are also using many creative variations of these ideas in their efforts to encourage redevelopment.<sup>356</sup>

## CONCLUSION

Although state legislators and administrators have been innovative in their use of law and administrative rules to encourage the cleanup and reuse of contaminated urban land, state brownfields programs have not been as effective as many hoped they would be. Innovations in brownfields redevelopment programs include, among others, the use of cleanup standards determined according to the intended future use of the land, and the use of private parties, not only to carry out investigation and cleanup at brownfields sites, but more importantly, to certify the cleanup for liability protection from the state. The first innovative approach presents some difficulties, primarily because the use of risk-based standards mandates the use of institutional controls that cannot provide eternal control of land use. Only with adequate, predictable, control of future land uses can risk-based standards provide sufficient protection against human exposure to contaminants that remain on brownfields land. Also, risk-based cleanup standards leave a trail of externalized costs. Specifically, they impose costs on groundwater resources, future generations of landowners and land users, and neighboring landowners and land users. Despite these costs and dangers,

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<sup>356</sup> Brownfields redevelopment, formerly a site-specific problem, has newly been viewed as an area-wide problem. Scholars have suggested that area-wide planning would better serve the cause of redevelopment, but that a statutory or administrative framework is needed to achieve this. Although a few states, such as Michigan and Florida, have begun to plan on an area-wide basis, others are beginning to follow suit. Area-wide planning would (1) create a process for defining and delineating areas affected by multiple brownfields, (2) aggregate and organize all available incentives for addressing the brownfields within each area, (3) solicit, develop, and integrate input on a remediation plan for the area from owners of the brownfields within the area, as well as from persons interested in developing the brownfields in that area, (4) provide support, incentives, and assistance for remediation and redevelopment of the brownfields in the area. See D. Evan van Hook, *Area-Wide Brownfields Planning, Remediation, and Development*, 11 *FORDHAM ENVTL. L.J.* 743, 752-53 (2000).

risk-based cleanup standards have reduced the cleanup costs associated with some sites thereby helping to encourage their remediation, albeit partial remediation. If states can work to reduce the adverse effects caused by the externalized costs of risk-based cleanups, and address the many other barriers to brownfields redevelopment that these programs do not address, risk-based cleanup standards can be a useful piece of a solution to this complicated problem.

The second innovation, the increased use of private parties in state brownfields programs, presents problems only if not coupled with enhanced oversight. When the state delegates to private parties the task of determining when a site is sufficiently clean for the state to provide liability protection to the landowner, one should be concerned that the state is abdicating important authority. However, as indicated in other areas of public service, such systems can work, and even enhance efficiency when coupled with adequate state oversight.

As we seek to establish viable, effective, and efficient state brownfields redevelopment programs, these innovations in law illustrate promising approaches, but present some concerns in their methods. Perhaps we can learn from the weaknesses presented in other areas of government work to establish long-term enforcement mechanisms for the institutional controls that must accompany risk-based cleanup standards and to require adequate state oversight when private professionals are involved in the brownfields cleanup certification process.