The Use of Institutional Controls in Superfund and Similar State Laws

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ARTICLE

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INTRODUCTION

Congressional efforts to revise and reauthorize Superfund have revived long-standing debates concerning the role of institutional controls in the remediation and reuse of contaminated sites. Institutional controls are legal constraints which limit human activities at, or access to, real property. Examples of institutional controls include use restrictions and requirements of notices in deeds or leases, notices in property transfer documents, building permits, easements, well-drilling prohibitions, and zoning ordinances. Superfund and similar state laws employ institutional controls to

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2. The term "institutional controls," though often used, is seldom defined, except by way of examples. For a codified definition of "institutional controls," see N.J. STAT. ANN. § 58:10B-1 (West Supp. 1995). California uses the term "land use controls" and restricts examples to instruments recorded in the chain-of-title documents. CAL. HEALTH & SAFETY CODE § 25396(1) (West Supp. 1995). The text of CERCLA does not specifically mention the term "institutional controls," but 40 C.F.R. § 300.430(a)(1)(iii)(D) (1994) refers to the possible use of "institutional controls such as water use and deed restrictions to supplement engineering controls . . . ."

restrict use at properties that have experienced the release\(^4\) of hazardous substances,\(^5\) and that have residual on-site contamination.

The controversy about using institutional controls at Superfund sites centers on two fundamental questions. First, should institutional controls be used only as a last resort when cleanup is impossible, or should they be used more broadly to maximize reuse of contaminated property? Second, how can institutional controls be enforced in the short term and, perhaps, even indefinitely?

The impetus to use institutional controls results, in part, from the high cost and lengthy process of cleaning up polluted sites. The business community has been reluctant to become involved with contaminated and even formerly contaminated sites. Properties sit abandoned, producing neither job opportunities nor tax revenues for their communities. Many of these sites, particularly in urban areas, affect the poor and minorities, creating questions of "environmental justice."\(^6\) Ironically, because these sites were originally developed for their access to business and transportation services, they are often in commercially desirable locations. For many years, industry has shied away from redeveloping these contaminated areas, commonly called "brownfields,"\(^7\) preferring to use undeveloped land, which is usually far removed from old industrial sites and which has never been used for industrial purposes.\(^8\)

This Article explores the potential use of institutional controls as

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4. 42 U.S.C. § 9601(22) defines "release" as including "any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment ...." Release also includes burial of drums and storage containers, even if the substances inside do not leak. Id.

5. "Hazardous substance" is defined in 42 U.S.C. § 9601(14) to include the hundreds of substances listed in various environmental laws and regulations. "[W]hen released into the environment[, these substances] may present substantial danger to the public health or welfare or the environment ...." Id. § 9602(a).


a means of encouraging voluntary remediation of contaminated sites. Part I provides an introduction to CERCLA, with particular emphasis on the factors that deter reclamation of contaminated property. Part II discusses the federal approach to the use of institutional controls at Superfund sites, which, while gaining increasing acceptance, has historically been disfavored. Part III examines the traditional legal obstacles which could cause institutional controls to be ineffective, and the movement away from these principles. Part IV analyzes CERCLA section 120(h), which governs the transfer of contaminated real property owned by the federal government, and which may foreshadow a shift in the focus of Superfund cleanup. Part V discusses the innovative approaches in New Jersey's Superfund law, the Industrial Site Recovery Act, and its predecessor, the Environmental Cleanup Responsibility Act. Part VI analyzes the Superfund laws of seven states that have recently enacted statutes that encourage remediation through the use of institutional controls. Part VII evaluates recent congressional attempts to use institutional controls in the revision and reauthorization of Superfund. This Article concludes that the use of institutional controls are necessary for the effective remediation of contaminated sites, and that they are the next logical step in dealing with the problems created by hazardous waste left on real property.

I. SUPERFUND AND THE PRODUCTIVE REUSE OF PROPERTY

During the 1970s, the public became aware of pollutants affecting land, water, and air. Well-publicized incidents, like the contamination of Love Canal, New York,9 revealed the need to clean up sites contaminated with dangerous pollution. One of Congress'
responses to these environmental concerns was to enact the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, commonly known as CERCLA or Superfund.

The idea of treating contaminated property was a new concept, not only to the general public and federal, state, and local governments, but also to the legal, business, and financial communities. Over time, these sectors of society have learned more about pollution and treatment and how to assess the impact of environmental laws, including Superfund.

Over the years, a recurring criticism of CERCLA has been that the law does not foster the productive reuse of property. Besides the prohibitive cost of Superfund cleanup, three factors in particular deter reclamation of contaminated property: (1) CERCLA’s limitations on remedy selection; (2) the business community’s apprehension about perpetual liability, including post-cleanup liability; and (3) uncertainties about the enforceability of environmental restrictions. Use of institutional controls at Superfund sites is intrinsically linked to these three considerations.

A. Remedy Selection

Under CERCLA, remedial actions must be “protective of human health and the environment,” be “cost effective,” and use “permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable.” While there can be no disagreement over CERCLA’s goal of safeguarding people and nature, there is debate regarding the appropriate approach to hazardous waste cleanup. Often, differences arise over the question of what constitutes sufficient remediation of a contaminated site, or, more simply, “How clean is clean?”

11. See generally, Bartsch & Munson, supra note 8 (citing fear of CERCLA liability regardless of fault as major deterrent to new investment in real property).
14. CLEAN SITES, INC., IMPROVING REMEDY SELECTION: AN EXPLICIT AND
One perspective is that every polluted site should be remediated to a level safe for unrestricted use, including residential occupancy. Isolation or containment of contaminants, rather than destruction or removal of them, just defers problems and costs. The opposing view is that a site's remedy should be tied to the property's proposed disposition. Under this approach, a site destined for residential use would be required to meet strict residential standards, with no harmful levels of contamination remaining at the location. A site destined for industrial use, however, would be subject to less rigorous cleanup standards, allowing some hazardous substances to remain on site. Physical containment mechanisms, such as caps or fences, would prevent access to these dangerous substances. Use of the property would be restricted by institutional controls, such as deed covenants. The theory underlying the latter approach is that controlled use of a less-than-pristine site may be as safe as unrestricted use of a pristine site. Proponents of this position argue that the cost savings would encourage cleanups. There is also the possibility that better and cheaper technology will be developed in the future to treat deferred cleanups.

16. Id.
17. See CLEAN SITES, INC., supra note 14, at v-vi, viii, 13, 15, 17, 24-25, 40-41.
19. EPA's 'Flexibility' on Ground Water May Not Meet Concerns of Industry, GROUND WATER MONITOR, June 16, 1994, available in WESTLAW, GRWM Database.
B. Perpetual Liability

Superfund’s broadly defined basis for liability\(^2\) deters business and industry from involvement with sites known to contain pollution.\(^2\) Even after a site has been treated for contamination, however, it may remain an ostracized piece of real estate. Potential owners and lenders may fear that they will be held liable if additional contamination is subsequently discovered, or if more stringent future cleanup standards were to be applied retroactively.\(^2\)

CERCLA itself provides little guidance to assuage such concerns. There is an “innocent landowner” defense, but this provision is applicable only in limited situations.\(^2\) Also, for many years, the Environmental Protection Agency (“EPA”) would only enter into covenants not to sue prospective purchasers if: (1) the purchaser participated in the remediation; (2) the cleanup or payment for cleanup would not otherwise have been available; and (3) an enforcement action was being considered for the facility in question.\(^2\) In May of 1995, the EPA issued a new directive on this topic, expanding opportunities for prospective purchasers to enter into covenants not to sue.\(^2\) Such agreements are now possible in

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28. Memorandum from Steven A. Herman, Assistant Administrator, Office of
two situations: when the Agency receives substantial benefit, because the purchaser conducts or provides funds for cleanup, or when the Agency receives a lesser benefit, but there is a concurrent, substantial benefit to the community in the form of redevelopment of the site. Covenants not to sue may be considered for sites where EPA action has occurred, is underway, or is anticipated.

C. Enforcement of Institutional Controls

The inherent dangers in allowing contaminants to remain on-site require that land-use restrictions to manage such pollution be unquestionably effective. But instances when institutional controls might fail to achieve their objectives come readily to mind. For example, planning commissions do not routinely examine covenants in deeds during comprehensive planning or zoning and could, thus, inadvertently rezone environmentally restricted land for residential use. Similarly, local building officials ordinarily do not consult real property transfer instruments when issuing construction permits and could unintentionally approve actions that would disturb toxic soil. Zoning restrictions based on environmental concerns are subject to revision by subsequent boards. Also, requirements that owners provide disclosure notices about contamination to lessees, purchasers, or lenders can serve as an alert about the pollution, but do not assure proper use of the site.

From a legal viewpoint, there is another obstacle to using institutional controls. While restrictions in deeds may seem like a straightforward means of establishing environmental restrictions, such an approach poses problems because of traditional property

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29. Id. at 5.
30. Id. at 4.
31. Guimond Weighs In on Maywood Cleanup, SUPERFUND WEEK, Jan. 28, 1994 (stating that deed restrictions at radiological sites in New Jersey, where zoning laws are not strict, have been known to fail), available in WESTLAW, SPFU Database.
law on servitudes. The courts have not favored enforcement of deed restrictions against parties who are not signatories to the original deed.\textsuperscript{32}

\section*{II. The Role of Institutional Controls In The National Contingency Plan}

The text of CERCLA does not contain the term "institutional controls."\textsuperscript{33} CERCLA regulations, however, do use this term in connection with remediation procedures under the National Contingency Plan ("NCP").\textsuperscript{34} The regulations state:

\begin{quote}
EPA expects to use a combination of methods, as appropriate, to achieve protection of human health and the environment. In appropriate site situations, treatment of the principal threats posed by a site, with priority placed on treating waste that is liquid, highly toxic or highly mobile, will be combined with engineering controls (such as containment) and institutional controls, as appropriate, for treatment residuals and untreated waste.\textsuperscript{35}
\end{quote}

The regulations also state that institutional controls, "such as water use and deed restrictions," may be used throughout the remediation process "and, where necessary, as a component of the completed remedy."\textsuperscript{36}

When determining the appropriate remedy for a site, the lead agency must consider "a range of alternatives."\textsuperscript{37} This continuum

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\textsuperscript{32}. See infra notes 83-116 and accompanying text.

\textsuperscript{33}. While the term "institutional controls" does not appear in CERCLA, there are two sections which refer to examples of such controls. Under 42 U.S.C. § 9620(h), which deals exclusively with the transfer of federal facilities, deeds and certain other documents must include information about the type and treatment of hazardous substances at sites. See infra text accompanying notes 114-129.

There is also a reference to "land contracts, deeds or other instruments transferring title or possession" in 42 U.S.C. § 9601(35)(A), which defines "contractual relationship." However, this listing of examples of institutional controls is mentioned in connection with a liability issue, the "innocent landowner defense," 42 U.S.C. § 9607(b)(3), and not with the use of property remediation and reuse.

\textsuperscript{34}. CERCLA refers to the NCP at 42 U.S.C. § 9605. NCP regulations are codified at 40 C.F.R. § 300 (1994).

\textsuperscript{35}. 40 C.F.R. § 300.430(a)(1)(iii)(C) (emphasis added).

\textsuperscript{36}. Id. § 300.430(a)(1)(iii)(D).

\textsuperscript{37}. Id. § 300.430(e)(3)(i).
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should include, at one end, "an alternative that removes or destroys... contaminants to the maximum extent feasible, eliminating or minimizing, to the degree possible, the need for long-term management." The other end of the spectrum should consist of:

[one or more alternatives that involve little or no treatment, but provide protection of human health and the environment primarily by preventing or controlling exposure to hazardous substances... through engineering controls, for example, containment, and, as necessary, institutional controls to protect human health and the environment and to assure continued effectiveness of the response action.]

A. Emphasis On Treatment

While the regulations refer to institutional controls as an integral part of the remediation process, such controls are considered less desirable than methods which actively treat the waste.

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.

If residual hazardous substances remain on site after remediation, the federal government must review the site no less than every five years and arrange for corrective actions if necessary.

The legislative history of the 1990 regulations provides some insight to the Congress' restrained attitude toward using institutional controls. The Conference Report for the 1986 Superfund Amendments explains that: "Remedial actions involving permanent treatment are preferred over those not involving such treatment... The President... must select remedial actions that utilize permanent solutions and alternative treatment technologies to the maximum extent practicable."

38. Id.
39. Id. § 300.430(e)(3)(ii) (emphasis added).
40. Id. § 300.430(a)(1)(iii)(D).
41. Id. § 300.430(f)(4)(i) to (4)(ii).
42. H.R. CONF. REP. NO. 962, 99th Cong., 2d Sess. 245-46 (1986), reprinted...
When regulations were promulgated in 1990, the EPA reported the arguments of those who had urged greater use of institutional controls.

These commentors wanted the rule to allow institutional controls to be used as a key component of a remedy whenever they provide similar protection to treatment or other active remedies at much lower cost. The commentors suggested that such controls may be the only cost-effective, practicable remedy at small, isolated, and stable sites, and that such controls would be viable at many federal facilities.\textsuperscript{43}

The EPA rejected these suggestions because "CERCLA section 121 states Congress' preference for treatment and permanent remedies, as opposed to simple prevention of exposure through legal controls."\textsuperscript{44}

Various legal challenges to the NCP portion of the 1990 regulations were consolidated and adjudicated in 1993.\textsuperscript{45} Among other issues, the petitioners objected to EPA authorizing institutional controls "as a sole remedy at Superfund sites."\textsuperscript{46} They feared that EPA would use "cost considerations to select a cleanup remedy that may not comply with the minimum human health and environmental protectiveness requirements of CERCLA and to select a remedy in which there is no treatment or removal of contaminants."\textsuperscript{47}

The court reviewed statements in the Federal Register published at the time the regulations were promulgated\textsuperscript{48} and commented that "any remedy relying on institutional controls must meet the threshold requirement of protectiveness."\textsuperscript{49} In general, however, the court found that a decision on the issue would be premature and would be "better resolved in the context of a specific application ...."\textsuperscript{50}

\textsuperscript{43} National Oil and Hazardous Substances Pollution Contingency Plan, 55 Fed. Reg. 8666, 8706 (1990).
\textsuperscript{44} Id.
\textsuperscript{46} Id. at 1536.
\textsuperscript{47} Id. (citation omitted).
\textsuperscript{48} See 55 Fed. Reg. 8666, 8702.
\textsuperscript{49} 997 F.2d at 1537.
\textsuperscript{50} Id.
In *Ohio v. United States Environmental Protection Agency*,\(^{51}\) state governments and environmentalists pointed out a conflict in Superfund, which still exists.\(^{52}\) Superfund aims for total, permanent cleanup, but must deal with the practical considerations that limit that goal, a dilemma closely tied to the issue of using institutional controls. Debate on this subject continues as CERCLA reauthorization approaches.

**B. State Responsibility For Institutional Controls**

Land-use regulation, which is managed by institutional controls, has historically been the responsibility of state and local governments.\(^{53}\) CERCLA regulations reflect the federal government’s deference to the states in this area. Before Superfund monies are used to finance a cleanup, the state where the facility is located “must assure that any institutional controls implemented as part of the remedial action at a site are in place, reliable, and will remain in place [as necessary].”\(^{54}\) In fact, whenever operation and maintenance are implemented as part of a site’s remedy plan, with the exception of the restoration of ground or surface water, the State must assume responsibility for the operation and maintenance, “including, where appropriate, requirements for maintaining institutional controls . . . .”\(^{55}\) Similarly, if EPA decides that real property must be acquired to perform a remediation the State “must agree to acquire and hold the necessary property interest . . . to ensure the reliability of institutional controls restricting the use of that property.”\(^{56}\)

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51. 997 F.2d 1520.
52. Id.
54. 40 C.F.R. § 300.510(c)(1) (1994). In the Federal Register preamble for the publication of this regulation, EPA acknowledged that institutional controls have been among those powers reserved to the states by commenting “that EPA may not have the authority to implement institutional controls at a site.” 55 Fed. Reg. 8666, 8706 (1990).
55. 40 C.F.R. § 300.435(f).
56. Id. § 300.515.
C. Examples Of Institutional Controls Under Superfund

Despite the controversy about the use of institutional controls, EPA employs these restrictive mechanisms as part of the remediation process at many Superfund sites. Information about institutional controls is desultory. "[In] most records of decision, reference to institutional controls consists of little more than the statement "and institutional controls.""57 Fortunately, other documents provide some indication of the types of institutional controls being implemented. An informal survey of these documents indicates that EPA often requires that water and land restrictions be recorded in deed notices or deed covenants, sometimes in conjunction with zoning restrictions. EPA occasionally requires environmental access easements as well. For example, a portion of the remedy for an improperly closed landfill in Wisconsin was the installment of "deed restrictions [to prevent] . . . new releases from the site by building on or excavating soil . . . ."58 At a site in Yakima, Washington, further use of a particular building was prohibited.59

In an unusually descriptive Record of Decision ("ROD") involving an electroplating facility in Miami, Florida, the remedy consisted, in part, of a reinforced concrete pad and institutional controls to "ensure the effectiveness of the cap."60 Such controls included fencing, signs, monitoring and "[r]ecording of deed restrictions to control future uses incompatible with the remedy."61

Sometimes zoning action is part of a site remediation. The ROD for the Miami electroplating facility also stated that "[z]oning restrictions for future land use already exist and deed restrictions

61. Id.
controlling soil excavation and the construction of buildings would be recorded.”62 Zoning regulations “to prohibit development” in a mine tailings depositary were deemed necessary in South Dakota.63

The list of sites being deleted from the National Priorities List (“NPL”), which appears in the Federal Register, provides fairly descriptive information about institutional controls at those sites. A site in Plymouth, Massachusetts is subject to deed restrictions prohibiting “[t]he site property [from] . . . be[ing] used for residential, school, hotel, motel, community and/or recreational purposes unless a study conducted by a qualified engineering or environmental consulting firm . . . indicates to EPA and the Commonwealth of Massachusetts that there is no public health threat . . . .”64 A Florida site being considered for deletion from the NPL had a “Conservation Easement . . . filed with the County . . . [which] allows EPA or the State to enforce deed restrictions on the Site property.”65

III. LEGAL OBSTACLES TO PROPERTY USE RESTRICTIONS

The most frequently employed institutional controls under CERCLA are use restrictions, easements, and deed notices.66 Although these institutional controls have been implemented at many Superfund facilities, whether such controls can be enforced as long as necessary to protect human health and the environment, perhaps indefinitely, is still questionable. To appreciate the legal obstacles to using institutional controls in the Superfund framework, it is necessary to understand the history of land-use restrictions and the ambiguities attached to the enforcement of servitudes.67

62. Id.
66. See supra text accompanying notes 57-65 and infra text accompanying notes 114-129.
67. A “servitude” is a “charge or burden resting upon one estate for the benefit or advantage of another . . . .” BLACK’S LAW DICTIONARY 1370 (6th ed. 1990). “‘[S]ervitude’ . . . has relation to the burden or the estate burdened, while
A. History Of Easements And Deed Restrictions

In the Superfund context, environmental access easements allow the government to enter property to monitor use restrictions which prevent exposure to residual pollution.\textsuperscript{68} Restrictive covenants are the provisions attached to the deed which restrict use of the property, for example, by forbidding soil disturbance, requiring containment caps or slurry walls, or prohibiting water use or well drilling.\textsuperscript{69} As the following discussion illustrates, the common law has treated easements quite differently than covenants.

1. Access Easements

Historically, courts have been reluctant to favor long term encumbrances on land.\textsuperscript{70} Easements, however, have encountered much less judicial resistance than deed restrictions and are quite common.\textsuperscript{71} An easement can be defined "as the right to a limited use or enjoyment of another's land . . . ."\textsuperscript{72} The classic example of an easement is the right of way across one piece of property, the servient tenement,\textsuperscript{73} to allow ingress and egress to another landlocked piece of property, the dominant tenement.\textsuperscript{74} Such an arrangement is called an "appurtenant easement" because of the easement's relationship to the dominant tenement.\textsuperscript{75} Besides the appurtenant easement, there exists an easement "in gross."\textsuperscript{76} This type of easement "does not belong to any person by

\textsuperscript{69} Often state Superfund laws call for deed "notices" rather than covenants. \textit{See}, e.g., N.J. Stat. Ann. § 58:10B-13a(2) (West 1992 & 1995 Supp.). For practical purposes, these are the same since both are property use restrictions integrated into the local land recordation system.
\textsuperscript{71} \textit{Id.} at 1263-64.
\textsuperscript{72} \textit{John M. Cartwright, Glossary of Real Estate Law} 298 (1972).
\textsuperscript{73} \textit{See Restatement (First) of Property} § 455 (1944).
\textsuperscript{74} \textit{See id.} § 456.
\textsuperscript{75} \textit{See id.} § 453.
\textsuperscript{76} \textit{See id.} § 454.
virtue of ownership of estate in other land but is mere personal interest in or right to use land of another . . . .” 77 Utility line easements or conduits for gas, water, and oil are examples of easements in gross.

There are many positive easements which give “someone other than the title owner the right to do something regarding the land.” 78 Examples of positive easements are the right to travel across another’s property, hunting or fishing rights, or subsurface rights to coal or other minerals. Similar easements exist in Superfund. When the federal government transfers property under CERCLA section 120(h), the deed must contain an access easement to assure the government any necessary entry to conduct future remediation. 79

Access easements to search for contamination or to monitor compliance with environmental restrictions have not been tested in the courts. To the extent such things can be predicted, easements permitting the government to enter private property to inspect the status of contained pollution and to make necessary corrections seem compatible with common law.

2. Restrictive Covenants in Deeds

To be enforceable, deed covenants which restrict property use must comply with a complicated set of legal rules which have evolved over the centuries. 80 In order for such encumbrances to be enforceable against successors-in-title, they had to be drafted to “run with the land.” 81 The law of running covenants has been described as “the most complex and archaic body of American property law remaining in the twentieth century.” 82 Over the years, courts have developed four technical prerequisites to create a “running covenant at law,” which is also known as a “real covenant.”

78. KENNETH P. DAVIS, LAND USE 79 (1976).
80. See French, supra note 70, at 1269-70 nn.42-43.
82. French, supra note 70, at 1261.
First, the covenant must be enforceable between the covenanting parties and satisfy the Statute of Frauds.\textsuperscript{83} Second, the covenanting parties must intend to bind successors.\textsuperscript{84} Use of the word "assigns" or "successors" is considered persuasive of an intent to bind successors, although not required.\textsuperscript{85} Third, there must be "privity of estate."\textsuperscript{86} There are two forms of privity: "horizontal privity" and "vertical privity." Horizontal privity exists where there is "a relationship between the original parties, covenantor and covenantee ... ."\textsuperscript{87} Vertical privity pertains "to the relationship between the covenanting parties and their assignees."\textsuperscript{88}

The types of environmental covenants written into deeds to restrict land and water use would probably comply with the three prerequisites just described. However, these environmental covenants would not comply with the fourth requirement, that the covenant must "touch and concern" the land.\textsuperscript{89} A deed covenant touches and concerns the land if it calls "for the doing of a physical thing to land."\textsuperscript{90} Similarly, covenants "to refrain from doing a physical thing to land, such as covenants not to plow the soil, not to build a structure . . . "\textsuperscript{91} also fit into this category. It would seem that a deed covenant prohibiting soil disturbance or use of a well would fall neatly into this framework. In reality, this is not the case because "[i]f [either] the benefit or burden of the covenant does not touch or concern the land, then it does not run with the land."\textsuperscript{92}

When the owner of contaminated property puts a restrictive covenant into the deed to comply with governmental requirements, the

\textsuperscript{83} See Restatement (First) of Property § 522 (1944).
\textsuperscript{84} Id. § 531.
\textsuperscript{85} See Roger A. Cunningham et al., The Law of Property 475 (1984).
\textsuperscript{86} See Restatement (First) of Property §§ 534-35 (1944).
\textsuperscript{87} Cunningham, supra note 85, at 477-78 (footnote omitted).
\textsuperscript{89} Restatement (First) of Property § 537 (1944).
\textsuperscript{90} Cunningham, supra note 85, at 471.
\textsuperscript{91} Id.
burden of the covenant falls on the land of the property owner. The benefit which accrues to the government, however, is not connected to government property; it exists "in gross." Therefore, the covenant does not run with the land and is not enforceable against successors-in-title. Most courts and the Restatement (First) of Property take the position that the benefit of a real covenant, for purposes of the touch-and-concern requirement, may not be in gross. The minority rule is that the burden of a real covenant may run even if the benefit is in gross.

Because plaintiffs experienced difficulty in getting the law courts to uphold real covenants at law, they sought redress in the equity courts. Covenants that run in equity are called equitable servitudes. The elements of an equitable servitude are somewhat different from those of a real covenant. Equitable servitudes do not require privity of estate, and they require that the burdened owner must have actual or constructive notice of the encumbrance on the property. Equitable servitudes, however, must still meet the same requirements of form, intent, and "touch and concern" as real covenants. Consequently, environmental deed restrictions would encounter the same obstacles in equity as they would in law.

A deed restriction which serves as an institutional control at a contaminated site is a relatively new creation in the realm of property and real estate law. Such a restriction would appear to be enforceable between the government and the signatory property owner as the original parties to the contract. It would not, however, necessarily be enforceable against successive owners. The issues of "touch and concern" and "benefit in gross," as discussed above, could interfere with future enforcement of the covenant.

Courts have not allowed these technicalities to dictate absolutely

94. See RESTATEMENT (FIRST) OF PROPERTY (SERVITUDES) § 454 (1944).
96. CUNNINGHAM, supra note 85, at 484.
97. Id. at 485.
98. See id. at 485-94.
99. See BOYER, supra note 81, at 320.
the outcome of such cases. For example, many modern courts allow neighborhood associations to enforce restrictive covenants, even when the associations own no property.\textsuperscript{100} The courts have developed a theory of "implied reciprocal servitude" or "implied reciprocal negative easements" between the homeowners' individual properties to explain these decisions, although there is considerable confusion about the rationale involved.\textsuperscript{101}

\textbf{B. Modern Trends}

Proposed revisions for the Restatement (Third) of Property\textsuperscript{102} would introduce a radically different perspective. The revisions are predicated on the premise that "servitudes are useful devices that people should be able to use without artificial constraints."\textsuperscript{103} The draft Restatement treats easements, profits, and covenants collectively as servitudes.\textsuperscript{104}

A Restatement revision currently under consideration would eliminate "the rhetoric of touch and concern,"\textsuperscript{105} a major obstacle to environmental deed restrictions. Proposed section 2.6(b) would state that "[t]he benefit of a servitude may be held personally, in gross, or as an appurtenance to an estate or other interest in land."\textsuperscript{106} Thus, the revision would remove the need for the benefit of the covenant to be tied to a land interest.

The Reporter's Note states that "[g]overnmental bodies should be able to enforce servitudes imposed for their benefit even though they own no specific land to be benefited by performance of the covenant."\textsuperscript{107} Conservation and historic preservation servitudes are already often held in gross.\textsuperscript{108} The draft Restatement offers an illustration in which a servitude was sanctioned when the land owner

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\textsuperscript{100} See, e.g., *Neponsit Prop. Owners' Ass'n, Inc.*, 15 N.E.2d 793.
\textsuperscript{101} See *Cunningham*, supra note 85, at 498-504.
\textsuperscript{102} RESTATEMENT (THIRD) OF PROPERTY (SERVITUDES) (Tentative Draft No. 1, 1989).
\textsuperscript{103} Id. at xix.
\textsuperscript{104} Id. at xxiii.
\textsuperscript{105} French, supra note 92, at 940.
\textsuperscript{106} RESTATEMENT (THIRD) OF PROPERTY (SERVITUDES) § 2.6(b) (Tentative Draft No. 1, 1989).
\textsuperscript{107} Id. § 2.6 reporter's note, at 70.
\textsuperscript{108} Id. at 71.
\end{flushleft}
agreed with a conservation organization to limit land use to agricultural and conservation purposes. This is not far removed from an owner's agreement to neither disturb soil nor dislocate a cap over contamination.

There is no case history on the subject of governmental use of Superfund-type restrictive covenants. However, one early case, *Middlefield v. Church Mills Knitting Co.*, \(^{109}\) bears some relevance. A road through the town of Middlefield crossed over a bridge that was maintained by the town. In order to build a dam which would flood the bridge, a local miller agreed with the town to build a new bridge and maintain it. A successor-in-interest to the miller refused to repair the bridge. The town did the necessary maintenance, but sought to collect damages from the new owner, claiming that the agreement between the miller and the town was still in effect because it ran with the land, or more specifically in this case, ran with the bridge. The Massachusetts Supreme Judicial Court ultimately allowed the agreement to stand, even though it was "in gross." \(^{111}\) One modern commentator has stated that *Middlefield* recognizes the "unique role of government in holding and enforcing servitudes in gross created for the benefit of the public . . . ." \(^{112}\)

The extent to which the proposed changes on servitudes will be included in the *Restatement (Third) of Property* and to which states will adopt such recommendations is speculative. These proposed changes, however, reflect the thinking of property law specialists that there is a need for "increased use of benefits in gross, particularly for governmental and conservation purposes . . . ." \(^{113}\)

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109. *Id.* at 64.
110. 35 N.E. 780 (Mass. 1894).
111. *See id.* at 782.
113. *Restatement (Third) of Property (Servitudes)* § 4.6 cmt. at 66 (Tentative Draft No. 4., 1994).
IV. CERCLA SECTION 120(H), PROPERTY TRANSFERRED BY FEDERAL AGENCIES

A. 1986 SARA Amendments

In 1986, Congress passed the Superfund Amendments and Reauthorization Act ("SARA"),\textsuperscript{114} which added section 120 to CERCLA.\textsuperscript{115} Under section 120, the federal government has the same responsibility for environmental restoration on federally owned sites that non-governmental entities have on privately held sites. Section 120(h) deals with the transfer of federally owned real property "on which any hazardous substance was stored for one year or more, known to have been released, or disposed of . . . ."\textsuperscript{116} Section 120(h) refers to three different types of institutional controls: notices in sales or transfer contracts, deed notices, and deed covenants.

Regarding sales or transfer contracts, section 120(h) states that

\textit{any contract for the sale or other transfer [of such property must contain] notice of the type and quantity of such hazardous substance and notice of the time at which such storage, release, or disposal took place, to the extent such information is available on the basis of a complete search of agency files.} \textsuperscript{117}

Section 120(h) also requires that:

\begin{itemize}
  \item each \textit{deed} entered into for the transfer of such property by the United States to any other person or entity shall contain—
  \begin{itemize}
    \item (A) to the extent such information is available on the basis of a complete search of agency files—
    \begin{itemize}
      \item (i) a \textit{notice} of the type and quantity of such hazardous substances,
      \item (ii) \textit{notice} of the time at which such storage, release, or disposal took place, and
      \item (iii) a \textit{description} of the remedial action taken, if
  \end{itemize}
  \end{itemize}
\end{itemize}

\textsuperscript{115} Section 120 is codified at 42 U.S.C. § 9620 (1988).
\textsuperscript{117} \textit{Id.} § 9620(h)(1) (emphases added).
any . . . 118

In addition, the SARA amendments require a covenant within the deed which warrants that:

(i) all remedial action necessary to protect human health and the environment with respect to any such substance remaining on the property has been taken before the date of such transfer, and

(ii) any additional remedial action found to be necessary after the date of such transfer shall be conducted by the United States. 119

CERCLA, as a whole, is concerned with identifying and cleaning up contaminated properties. Only section 120(h), however, addresses the critical link between the contaminated site and the institutional controls which bind that property to the legal and commercial framework in which all real estate exists.

B. 1992 CERFA Amendments

In the late 1980's and early 1990's, as a result of the end of the Cold War and budget constraints, the federal government decided to close hundreds of federal facilities, including military sites. 120 Rapid turnover of the real estate to new job-producing, tax-enhancing businesses was necessary to mitigate the local economic impact caused by the closings. 121 The vacated facilities have valuable assets, such as runways, ports, office space, warehouses, and housing, as well as undeveloped areas suited for open space, parks, or wildlife refuges. 122

118. Id. § 9620(h)(3)(A)(i)-(iii) (emphases added).
119. Id. § 9620(h)(3)(B)(i)-(ii).
122. See generally id. (redevelopment efforts are considered crucial to softening the economic blow to the communities where the bases are located); David C. Morrison, Batting Cleanup, 24 Nat'l J. 2492 (1992); Art Pine, Lingering Death
Most of these federal facilities require environmental remediation. Congress and the public became aware that the lengthy CERCLA remediation process and confusion about future liability for cleanup was delaying transfer and development of the property. On October 19, 1992, Congress enacted the Community Environmental Response Facilitation Act ("CERFA") to expedite the transfer of these federal facilities.

CERFA made three major changes to CERCLA section 120(h). First, it permits parcelization, that is, the agency responsible for a site can identify and transfer uncontaminated portions of a facility. EPA must concur that the parcel is clean if the facility is on the National Priorities List ("NPL") and the state must concur if the installation is not on the NPL.

Second, the amendments addressed concern about potential liability for future owners if additional contamination were to be subsequently discovered on the parcels. CERFA requires that the deed for the transfer of an uncontaminated parcel must contain a covenant stating that the United States will conduct such future response or corrective action on the parcel sites. To assure that the government can carry out potential future remediation, CERFA also requires an access easement clause to be included as a covenant in the transfer deeds for clean parcels.

CERFA also addressed the situation which arises when a site is safe for limited use, but requires some ongoing treatment of residual waste. Section 120(h)(3)(B)(i) requires a covenant in transfer deeds which declares that "all remedial action necessary to protect human health and the environment... has been taken before the date of such transfer." Yet some remedies, like treatment of con-

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126. Id. § 9620(h)(4)(B).

127. Id. § 9620(h)(4)(D)(i).

128. Id. § 9620(h)(4)(D)(ii).
taminated ground water, can take decades. The new amendments clarify that the necessary level of remedial action is met and transfer may occur

if the construction and installation of an approved remedial design has been completed, and the remedy has been demonstrated to the Administrator to be operating properly and successfully. The carrying out of long-term pumping and treating, or operation and maintenance, after the remedy has been demonstrated to the Administrator to be operating properly and successfully does not preclude the transfer of the property.\(^{129}\)

C. Combining Environmental and Economic Objectives

Section 120(h) reflects a redirection in CERCLA, albeit only for federal facilities. Congress had to find a way to hasten clean up at federal sites and to make such sites marketable. Consequently, Congress proceeded to revise those aspects of CERCLA that would interfere with the transfer and redevelopment of these facilities.

The SARA and CERFA amendments relating to federal facilities reflect a change in congressional thinking about CERCLA. By these legislative changes, Congress acknowledged that fears of future liability must be addressed in order to foster redevelopment of Superfund sites, that hazardous substances might be safely managed over time even while the site is in use, and that clean parcels might be severed from a site as a whole. The wording of the amendment itself, shows that the Congress further recognized the usefulness of institutional controls, specifically, deed covenants on future remediation and access easements, to effectuate transfers of the properties.

While section 120(h) continues to adhere to Superfund's objective of cleaning up hazardous waste, it also reflects Congress's concern about expediting remediation and fostering redevelopment of Superfund sites. CERCLA section 120(h) provided an indication of the Superfund reauthorization and revision that would follow.

\(^{129}\) Id. § 9620(h)(3).
V. NEW JERSEY'S INDUSTRIAL SITE RECOVERY ACT (ISRA): A PARADIGM FOR TYING REMEDIATION TO FUTURE LAND USE

A. ECRA, Predecessor to ISRA

In 1983, New Jersey enacted the Environmental Cleanup Responsibility Act ("ECRA"). This was the first state law to require governmental oversight and approval of environmental cleanups as a precondition to closure, sale, or transfer of industrial establishments. Over time, it became apparent that ECRA’s stringent requirements were discouraging, rather than assisting, the transfer of property and growth of business.

In the early 1990s, in an effort to encourage economic development, New Jersey’s Department of Environmental Protection ("DEP") developed proposed regulations for new cleanup standards for ECRA sites. The most significant aspect of these proposed

131. N.J. STAT. ANN. § 13:1K-7 (West Supp. 1995). "Industrial establishment' means any place of business engaged in operations which involve the generation, manufacture, refining, transportation, treatment, storage, handling, or disposal of hazardous substances or [hazardous] wastes on-site, above or below ground, having a Standard Industrial Classification [SIC] number [within specified groupings as defined by the U.S. Off. of Mgmt. & Budget]." Id. § 13-1K-8; see also G & S Investors Frelinghuysen Ave., Inc. v. Aristocrat Leather Prods., Inc., 607 A.2d 682 (N.J. Super. Ct. App. Div. 1992) (holding that the mere storage of heating oil subjects businesses with relevant SIC classifications to ISRA requirements).


regulations was a "two-tiered approach,"\textsuperscript{134} that tied standards for soil cleanup with those for future land use.

If a site were improved to meet the more rigorous of the two sets of standards, the property would be entitled to unrestricted future use, including residential use.\textsuperscript{135} Property remedied to a non-residential set of standards would be restricted to non-residential use.\textsuperscript{136} In the latter instance, "institutional controls [would] be applied to condition future site use consistent with the level of cleanup achieved."\textsuperscript{137} Although these regulations were never formally adopted, the author believes they have attracted a considerable amount of attention and have greatly influenced thinking about possible revisions to Superfund and similar state laws.

**B. ISRA: A New Focus For Property Reclamation**

Governor Florio signed an amended ECRA on June 16, 1993, renaming ECRA the Industrial Site Recovery Act ("ISRA").\textsuperscript{138} ISRA attempts to balance environmental protection and economic development. The Legislature's preface to the amended law lists the reasons New Jersey was compelled to revise ECRA. It is a summary of the revisionist thinking about contamination cleanup developing in other states and at the national level.

[A]t the time of [ECRA's] passage, the extent of the state's industrial contamination and the cost and complexity of remediations were not well understood; ... in the intervening years, there has been a significant advance in the body of knowledge concerning how to remediate contaminated sites effectively and how to manage the remediation efficiently ... the regulated and financial community is now more familiar with the liabilities involving contaminated property and with the necessity to discover and remediate that contamination; and ... it is in the interest of the environment and the state's economic health to promote certainty in the regulatory process by incorporating that knowledge to create a more efficient regulatory structure and to allow greater privat-

\textsuperscript{134} 24 N.J. Reg. 373, 376.
\textsuperscript{135} Id. at 376, 393.
\textsuperscript{136} Id. at 376, 397-400.
\textsuperscript{137} Id. at 376, 398, 400.
ization of that process where it is possible to do so without incurring unnecessary risks to the public health or the environment.\textsuperscript{139}

ISRA calls for remediation standards based on considerations of a site’s “location, the surroundings, the intended use of the property, the potential exposure to the discharge, and the surrounding ambient conditions, whether naturally occurring or man-made.”\textsuperscript{140} Thus, ISRA continued the two-tiered approach of residential and non-residential standards\textsuperscript{141} that DEP had proposed in 1992, but which had not been formally adopted.\textsuperscript{142} Non-residential standards can be applied only when “access to the site [is] restricted in a manner compatible with the allowable use of that property.”\textsuperscript{143} Non-residential standards are dependent on the use of engineering controls which restrict access\textsuperscript{144} and institutional controls which define allowable land use.\textsuperscript{145}

ISRA states a preference for permanent remedies.\textsuperscript{146} The law, however, permits residual contamination at levels above “soil remediation standards for residential use or non-residential use if the implementation of institutional or engineering controls at that site will result in the protection of public health, safety and the environment.”\textsuperscript{147}

Different remediation standards may be applied on different portions of a property. Parts of a site where “a person may come into contact with soil” must be cleaned to residential standards, while other parts may be cleaned to non-residential standards, provided that “engineering and institutional controls can be implemented and

\begin{itemize}
\item \textsuperscript{139} 1993 N.J. Laws 139 § 2.
\item \textsuperscript{140} N.J. STAT. ANN. § 58:10B-12a.
\item \textsuperscript{141} Id. § 58:10B-12c(1).
\item \textsuperscript{142} Id. 24 N.J. Reg. 373.
\item \textsuperscript{143} N.J. STAT. ANN. § 58:10B-12c(1).
\item \textsuperscript{144} ISRA’s definition of engineering controls includes “caps, covers, dikes, trenches, leachate collection systems, signs, fences and access controls.” Id. § 58:10B-1.
\item \textsuperscript{145} ISRA provides that “institutional controls may include, without limitation, structure, land, and natural resource use restrictions, well restriction areas, and deed notices.” Id.
\item \textsuperscript{146} Id. § 58:10B-12g(1).
\item \textsuperscript{147} Id. § 58:10B-12g(2).
\end{itemize}
Remedy selection must consider the pragmatic factors of natural background levels, implementation within a reasonable time frame, and cost. Regarding cost, DEP is currently developing regulations which will “provide a cost-based preference for the use of permanent remedies.” However, the regulations will allow the owner/operator of a contaminated site to demonstrate that “the cost of all available permanent remedies is unreasonable.”

The New Jersey Legislature rejected deed covenants as the proper mechanism to restrict use at sites with residual contamination—perhaps to avoid potential enforcement problems. Instead, for properties cleaned to non-residential standards and subject to engineering and institutional controls, ISRA requires that a notice about the environmental status of the property be registered in local land records. Such records must describe existing contaminants, physical on-site controls, and the limitations necessary to maintain those controls.

DEP has designed a “Declaration of Environmental Restrictions,” which has not yet been officially adopted. Two clauses of this Declaration merit particular attention. The first attempts to avoid adverse impact on property marketability. It states that the Declaration serves solely as a notice of restrictions, and does not “create any interest in real estate in favor of [the State, or] . . . a
lien or encumbrance against the Property . . .”¹⁵⁹

The second noteworthy clause maintains the enforceability of the environmental restrictions beyond the parties signatory to the Declaration. It states that the use restrictions are “binding upon Owner and upon Owner’s successors and assigns, and the Department, its agents, contractors, and employees, and to any other person performing remediation under the direction of the Department.”¹⁶⁰ The owner further agrees to assure that “all leases, grants, and other written transfers of interest” in the property shall “contain a provision expressly requiring all holders thereof to take the property subject to the use restriction and not to violate any of the conditions of this Declaration of Environmental Restrictions.”¹⁶¹

New purchasers are protected if DEP adopts more stringent remediation standards in the future. The then existing owner or operator, or the remediator, is not automatically liable for the cost of additional remediation. Only “a person who is liable to clean up and remove [the] contamination . . . shall be liable for any additional remediation costs” to achieve compliance with the applied standards.¹⁶² Such liability does not attach “unless the difference between the new remediation standard and the level or concentration of a contaminant at the property differs by an order of magnitude.”¹⁶³ If a party responsible for remediation elects to use engineering or institutional controls, that party is liable for additional remediation if the controls are determined to be inadequate.¹⁶⁴ Failure by a responsible party to “maintain the engineering or institutional controls as required by the department” will subject the party at fault to various penalties and actions.¹⁶⁵

By offering concessions for potential future liability, New Jersey seeks to attract prospective purchasers to reuse contaminated properties. The state also offers financial incentives to voluntary remediators by making loans and grants available to help finance

¹⁵⁹. Id. at 1.
¹⁶⁰. Id. at 3.
¹⁶¹. Id.
¹⁶². N.J. STAT. ANN. § 58:10B-13e.
¹⁶³. Id.
¹⁶⁴. Id. § 58:10B-13f.
¹⁶⁵. Id. § 58:10B-13d.
response actions.\textsuperscript{166}

New Jersey’s ISRA reflects a shift away from the “full-cleanup, permanent treatment, at any cost” mentality of the earlier days of Superfund-type laws. While liability attaches indefinitely to the responsible polluters, new purchasers, operators or remediators are not subject to such liability, even if the State subsequently enacts more rigorous standards. ISRA attempts to balance environmental concerns with economic considerations, and settles for less rigorous cleanup as long as exposure is kept to safe levels. The pillars supporting ISRA’s new approach are differentiation of cleanup standards based on analysis of exposure risks, coordination of remedy selection with anticipated land use, and reliance on institutional controls to manage contained pollution.

VI. NEW STATE LAWS EMPHASIZING USE RESTRICTIONS

In general, State Superfund laws emulate CERCLA and emphasize the goal of fully eradicating contamination. They use institutional controls primarily as warning notices about the existence of pollution, not to aid in the reuse of property. Several states, however, have enacted laws which encourage productive, although restricted, utilization of property that retains controlled contamination.\textsuperscript{167}

These programs are not identical, but do share certain significant characteristics. They all provide some level of relief from strict liability after cleanup has been accomplished. Covenants not to sue remediators, prospective purchasers, and successors-in-interest help relieve fear of perpetual liability. Furthermore, these states extend additional incentives to perform cleanup activities, ranging from expediting the bureaucratic process to offering loans and grants to conduct the response action and tax abatements following remediation.\textsuperscript{168}

All seven states discussed below provide for expanded remedy

\textsuperscript{166} Id. \textsection\textsection 58:10B-5 to -6.


\textsuperscript{168} See generally Howard & Solliday, supra note 26.
selection beyond the traditional Superfund preference for treatment. They allow containment strategies when projected exposure levels are deemed to be safe. Consequently, these states all require consideration of future property use in making determinations about remedy selection. Institutional controls, usually in the form of deed restrictions or notices, play an important role in the remediation and reuse of contaminated sites. All of these states use local chain-of-title records to manage use restrictions. Each has enacted statutory provisions to overcome common law obstacles to enforcement of property use restrictions.

Following are analyses of such programs in Minnesota, Michigan, Indiana, Connecticut, Ohio, California, and Pennsylvania. Each of these states has recently enacted legislation which promotes contamination cleanup and which relies on the use of institutional controls in the remediation process.

A. Minnesota

In the late 1980s, Minnesota initiated one of the earliest state programs to foster voluntary remediation and restoration of "brownfields," although that term had not yet been coined. Minnesota is unique because it offers essentially full release from future liability to persons who are not responsible for the contamination at a site but who voluntarily undertake and complete response actions at the site. This protection extends to the owner of the site, provided the owner is not responsible for the pollution, as well as to persons who provide financing for the cleanup or who acquire and develop the site, and to successors or assigns of all these persons who have protection from liability. A person who bears responsibility for the release of a hazardous substance re-
mains subject to liability indefinitely. However, if that responsible person voluntarily undertakes and completes an approved response action at a site, freedom from potential liability is conferred upon future site owners, persons who finance the cleanup or redevelopment of the site, and successors in interest to those persons qualifying for exemption from liability.\textsuperscript{172}

In May of 1995, the EPA and the Minnesota Pollution Control Agency signed a Memorandum of Agreement, stating that voluntary remediators who comply with the State’s program will not be subject to Federal Superfund liability. Such liability will attach, however, if the EPA were to find that the site posed a threat tantamount to an emergency situation.\textsuperscript{173} In keeping with its emphasis on reuse of sites, Minnesota’s law defines remedial action broadly. Remediation includes not only “cleanup of released hazardous substances \ldots [and] on-site treatment or incineration,” but also “storage, confinement[,] \ldots perimeter protection[,] \ldots provision of alternative water supplies, and any monitoring and maintenance reasonably required \ldots \textsuperscript{174}”

Despite early efforts to encourage cleanups, Minnesota was not among the initial states to tie remedial standards to anticipated land disposition. It was not until 1995 that the Minnesota legislature amended its laws concerning selection of remediation standards. Now, when “determining the appropriate standards to be achieved by response actions,” the State “shall consider the planned use of the property where the release or threatened release is located.”\textsuperscript{175} This revision will undoubtedly increase the use of containment strategies at restricted-use properties.

Under the voluntary program, when the State and a remediator reach an agreement on the appropriate response actions for a site,

\begin{footnotes}
\item[172] Id. § 115B.175.6a.
\item[173] Memorandum of Agreement (on file with the U.S. EPA, Regional Office, Chicago, Ill.). EPA entered into a similar agreement with officials from Illinois prior to entering into the Minnesota compact. Id. See also Minnesota’s Superfund Shield: An Innovative Minnesota Program Entices Developers to Clean Up Polluted Urban Land, PLANNING, June 1995, at 24, available in LEXIS, Envirn Library, Curnws File.
\item[174] MINN. STAT. ANN. § 115B.02.16(a).
\item[175] 1995 Minn. Sess. Law Serv. 168 § 3 (to be codified at MINN. STAT. ANN. § 115B.17 subd. 2a), available in LEXIS, Envirn Library, Legis File.
\end{footnotes}
the owner of the property must sign an agreement indicating willingness to comply with property use restrictions. A statutory provision indicates that this agreement must bind the owner’s “successors and assigns.” The owner must record this agreement, or a state-approved memorandum summarizing the agreement “with the county recorder or registrar of titles of the county where the property is located.”

B. Michigan

In the last two years, Michigan has overhauled its environmental protection laws, including its Environmental Response Act, and consolidated them into one code section. Recent revisions to the law incorporate many of the pro-business trends observable in other State Superfund laws. For example, Michigan has adopted procedures to assign proportional liability to responsible parties in place of strict liability. The State also may issue covenants not to sue prospective purchasers who agree to redevelop “vacant manufacturing or abandoned industrial site[s].” Such a covenant must, however, provide an environmental easement, that is “an irrevocable right of entry” so that the State or its agents may perform any necessary response activity or monitor compliance. When the state or local government is exempt from the definitions of owner and operator under the State Superfund law, the exempt status may be transferred “to a subsequent purchaser of the facility or a person that obtains control of the facility through a lease or other

176. MINN. STAT. ANN. § 115B.175.2(a)(3).
177. Id. § 115B.175.2(c).
178. Id.
180. MICH. COMP. LAWS ANN. § 324.20129.
181. Id. § 324.20133(1).
182. Id. § 324.20133(4).
183. See id. § 324.20101(s)(ii) (dealing with situations in which the state or local government involuntarily acquires ownership or operation of contaminated facilities through situations such as “bankruptcy, tax delinquency, abandonment[,] . . . seizure, receivership or forfeiture”).
instrument.”\textsuperscript{184} The new owner must be willing to “develop the facility pursuant to an economic development plan approved by the governing body of the local unit of government in which the facility is located.”\textsuperscript{185} If proceeds from the sale of the property or other sources of cleanup funds are insufficient to cover remediation costs, “the state or local unit of government shall propose deed restrictions on future uses of the facility and any institutional controls necessary to assure the protection of public health and safety.”\textsuperscript{186} Following the property transfer, “[a]ny required deed restrictions on future uses of the facility [must be] recorded with the register of deeds for the county in which the facility is located.”\textsuperscript{187}

In June, 1995, Michigan added several significant environmental provisions, revising how the State will handle responses to the release of hazardous substances.\textsuperscript{188} Henceforth, the State will tie cleanup criteria and remedial action to a range of land use options, namely residential, commercial, recreational, and industrial.\textsuperscript{189} Local zoning must be compatible with the proposed remediation level.\textsuperscript{190} Different levels of cleanup may be applied at discrete portions of the facility.\textsuperscript{191}

When cleanup criteria are less stringent than residential standards, local land records must contain two types of documentation. First, the owner or remediator must record “a notice of approved environmental remediation” in the county register of deeds where the facility is situated, within three weeks after the State approves the cleanup plan.\textsuperscript{192} Second, use restrictions that involve containment of hazardous substances must be recorded in a restrictive covenant, which must also be registered with local land records.\textsuperscript{193} Both the

\begin{itemize}
  \item[184.] Id. § 324.20134a(1).
  \item[185.] Id. § 324.20134a(1)(c).
  \item[186.] Id. § 324.20134a(1)(d).
  \item[187.] Id. § 324.20134a(3)(c).
  \item[189.] Id.
  \item[190.] Id. § 20120a(6).
  \item[191.] Id. § 20120a(7).
  \item[192.] Id. § 20120b(2).
  \item[193.] Id. § 20120b(4).
\end{itemize}
deed notice and covenants are binding on successors-in-interest and run with the land. If the owner of a site intends to convey any interest in land about to be remediated or subject to post-remedial use restrictions, the owner must provide notice to the State. The State must retain an access easement to monitor compliance with use restrictions on remediated sites. When the State deems restrictive covenants to be unnecessary or impractical it may use other options. The legislation offers the example of using “an ordinance that prohibits use of groundwater or an aquifer” in place of a restrictive covenant. In such a case, the local government could not alter the ordinance unless the State were notified at least 30 days prior to such modification.

C. Indiana

In 1992, Indiana was among the first states to encourage voluntary cleanup of old, industrial areas. The Indiana law was developed to encourage rejuvenation of inner-city sites, although it is not limited to that goal. Sites subject to pending state or federal enforcement actions are not eligible to participate in this voluntary program. For those sites accepted into the program, “remediation” is defined to include “cleanup or removal” as well as containment; that is, “[a]ctions consistent with a permanent remedy taken instead of or in addition to removal actions . . . so that the hazardous substances or petroleum do not migrate.”

194. Id. § 20120b(2), (4).
195. Id. § 20120b(4)(c).
196. Id. § 20120b(4)(d).
197. Id. § 20120b(5).
198. Id.
201. IND. CODE ANN. § 13-7-8.9-10.
202. See id. §§ 13-7-8.9-7 to -8, -12 (application and acceptance procedures for Indiana's voluntary remediation program).
203. Id. § 13-7-8.9-5(3).
204. Id. § 13-7-8.9-5(2).
Prior to state approval of an applicant's proposed response action, the members of the local community have the opportunity to review and comment on the work plan and may request a public hearing. Once a remediation plan is underway, if a dispute arises between the State and the voluntary remediator, it is settled by arbitration, adjudication, or other dispute resolution procedures.

After the workplan is successfully completed, the State issues the remediator a "certificate of completion," a copy of which is attached to the recorded deed for the property. The Governor also signs a "covenant not to sue" the remediator for liability related to the releases that were the subject of the approved and completed work plan, although liability still attaches to any releases "unknown" at the time of the cleanup. This covenant also bars any claims, public or private, arising from the release of those contaminants addressed in the voluntary remediation. The terms of the covenant also apply to successors-in-interest in the property. The covenant does not, however, absolve the remediator from liability under federal law.

D. Connecticut

Connecticut initiated its Urban Sites Remediation Action Program in 1992 to encourage cleanup and redevelopment of "brownfields." To be eligible, properties must meet three criteria: they must be located in "distressed municipalities;" the State must own the property or have approval over redevelopment plans; and, either, the State can not determine who is responsible for the contamination, or the responsible party has not taken appropriate remedial action. One ambitious provision in the program, al-

205. Id. § 13-7-8.9-15(b)(2).
206. Id. § 13-7-8.9-13(a)(2).
207. Id. § 13-7-8.9-17.
208. Id. § 13-7-8.9-18.
209. Id.
210. Id. §§ 13-7-8.9-18(b)(2)(A) to (B).
211. Id. §§ 13-7-8.9-18(a), -24. See also O'Reilly, supra note 200, at 58-59 (discussing why federal action is unlikely).
212. CONN. GEN. STAT. ANN. § 22a-133m(a)-(g) (West Supp. 1995).
213. Id. § 22a-133m(a).
214. Id. § 22a-133m(b).
though not implemented to date, allows the State to acquire ownership of contaminated property, to accept liability for remediation costing up to fifteen million dollars, and then to sell or lease the property for redevelopment.\textsuperscript{215}

In 1995, Connecticut expanded its remedy selection process for all hazardous substance cleanups, both voluntary and mandatory. The State still prefers "cleanup methods that are permanent, if feasible."\textsuperscript{216} But now the State will "provide for standards of remediation less stringent than those required for residential land use for polluted properties which . . . were historically industrial or commercial property . . . , provided an environmental use restriction is executed for any such property."\textsuperscript{217} Non-residential standards may not be applied to properties already subject to "an order, consent order or stipulated judgment."\textsuperscript{218}

One provision sets up new procedures for voluntary remediations.\textsuperscript{219} Another allows the Commissioner of Environmental Protection to enter into covenants not to sue persons who are not responsible for the contamination on a particular site, or on any other properties, and who redevelop the site.\textsuperscript{220} If the State brings a civil action against potentially responsible parties ("PRPs") for the contamination at a site, those PRPs may not, in turn, bring civil suits for contributions against those persons who were the subjects of covenants not to sue.\textsuperscript{221}

Formerly, when the State required use restrictions at sites with residual contamination, the owner was required to file an environmental use restriction in a registry maintained by the Commissioner of Environmental Protection.\textsuperscript{222} The 1995 Amendments now re-

\textsuperscript{215} \textit{Id.} § 22a-133m(e).
\textsuperscript{217} \textit{Id.} § 10 (to be codified at \textsc{Conn. Gen. Stat.} § 22a-133k(a)).
\textsuperscript{218} \textit{Id.}
\textsuperscript{219} \textit{Id.} § 2.
\textsuperscript{221} \textit{Id.} § 10 (to be codified at \textsc{Conn. Gen. Stat.} § 22a-133m(d)).
quire the owner to "execute and record an environmental use restriction ... on the land records of the municipality in which such land is located."\textsuperscript{223} Such a restriction may be recorded only if all parties with interests in the property subordinate their interests to the environmental restriction.\textsuperscript{224} Therefore, this restriction is expected to survive mortgage foreclosure, lien, or similar encumbrances.\textsuperscript{225}

The statute indicates that "[a]n environmental use restriction shall run with the land, shall bind the owner of the land and his successors and assigns, and shall be enforceable notwithstanding lack of privity of estate or contract or benefit to particular land."\textsuperscript{226} This language is specifically designed to withstand judicial challenges under traditional property law.\textsuperscript{227} To abate any concerns about enforcing use restrictions, the Connecticut law provides that, if a court finds "for any reason that an environmental use restriction is void or without effect," the owner must abate the pollution to levels acceptable for residential or recreational uses.\textsuperscript{228}

\section*{E. Ohio}

Effective September 28, 1994, Ohio began a Voluntary Cleanup Program for property contaminated by hazardous substances and petroleum.\textsuperscript{229} The program appears to be directed at sites with minimal to medium levels of contamination, that have not been scheduled for cleanup. Heavily polluted properties already earmarked for remediation under federal or state environmental laws are excluded from participation.\textsuperscript{230} The law is an attempt to stimulate business activity by addressing the dilemma of "brownfields." A Property Revitalization Board serves as a clearinghouse to foster economic and financial incentives for persons undertaking voluntary

\begin{footnotesize}
\textsuperscript{223} 1995 Conn. Acts 190 (Reg. Sess.) § 12(a) (to be codified at CONN. GEN. STAT. § 22a-133o(a), available in LEXIS, Envirn Library, Code File.).
\textsuperscript{224} Id. § 12(b) (to be codified at CONN. GEN. STAT. § 22a-133k(o)(b)).
\textsuperscript{225} Id. § 12(e) (to be codified at CONN. GEN. STAT. § 22a-133k(o)(e)).
\textsuperscript{226} Id. § 12(b) (to be codified at CONN. GEN. STAT. § 22a-133(o)(b)).
\textsuperscript{227} See supra text accompanying notes 66-113.
\textsuperscript{228} CONN. GEN. STAT. ANN. § 22a-133r (West Supp. 1995).
\textsuperscript{229} OHIO REV. CODE ANN. §§ 3746.35, .99 (Anderson 1995).
\textsuperscript{230} See id. § 3746.02.
\end{footnotesize}
cleanups. To promote cleanups, Ohio exempts participating owners from any increase in real estate taxes for ten years after the voluntary cleanup. Under certain circumstances, counties and municipalities may enter incentive agreements with business enterprises who, by remediating a site, create or preserve employment opportunities at the site or enhance the local economic climate. Incentives can include reduced personal property taxes, lowered assessments, or reduced costs for services.

Voluntary remediators, who bear no responsibility for polluting a facility, may pursue civil actions to recover proportional shares of cleanup costs from owners, operators, and other parties responsible for the contamination. Voluntary remediators who contributed to the pollution may pursue civil suits only against other contributing parties. The new law allows containment as a remediation strategy and supports the use of both engineering and institutional controls. For example, “remedy” is defined as:

actions that are taken at a property to treat, remove, transport for treatment or disposal, dispose of, contain, or control hazardous substances or petroleum, are protective of public health and safety and the environment, and are consistent with a permanent remedy, including, without limitation, excavation, treatment, off-site disposal, the use of engineering or institutional controls or measures . . . and implementation of an operation and maintenance agreement [to monitor engineering controls].

Section 3746.05 indicates that institutional controls, engineering controls or treatment may be selected to remedy a site as long as the established standards for that site are attained and maintained.

The law calls for “separate generic numerical clean-up standards based upon the intended use of the properties after completion of voluntary actions, including industrial, commercial and residential uses . . .” “Property-specific” risk assessment procedures may

231. Id. § 3746.08.
232. Id. §§ 5709.87(B)-(C).
233. Id. §§ 5709.88(B)-(D).
234. Id. §§ 5709.88(D)(1)-(3).
235. Id. § 3746.23(B).
236. Id.
237. Id. § 3746.01(N).
238. Id. § 3746.04(B)(1).
be used as possible alternatives to numerical standards and will identify the amount of contamination that can safely be left on-site. Among other factors, the risk assessment procedures must consider scientific data, exposure levels, use of institutional and engineering controls, climatic influences, surrounding land use, and "[d]iffering levels of remediation that may be required when an existing land use is continued compared to when a different land use follows the remediation." If a "certified professional" indicates that a property has been cleaned to prescribed levels, the State will issue a covenant not to sue, which generally removes the threat of future civil liability for the voluntary remediator, except for nature resource damage or failure of engineering controls. If a property subject to institutional controls is put to a non-complying use, the covenant not to sue is voided.

This Voluntary Cleanup Program relies heavily on the chain-of-title records at the county level. Covenants not to sue, "no further action" letters, and any restrictions on the use of property must be "filed in the office of the county recorder of the county in which the property is located by the person to whom the covenant not to sue was issued and shall be recorded in the same manner as a deed to the property." These letters, covenants, and restrictions, as well as operation and maintenance agreements for engineering controls, must "be entered as a memorial on the page of the register where the title of the owner is registered." To preempt traditional property law challenges to land use restrictions, Ohio’s statute provides that "no further action letter[s], covenant[s] not to sue, and use restrictions, if any, shall run with the property" and may be transferred to successors-in-interest.

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239. Id. § 3746.04(B)(2)(a).
240. Id. §§ 3746.04(B)(2)(b)(1)-(b)(iv).
241. Id. § 3746.01(E).
242. Id. §§ 3746.12(A)-(A)(2)(c).
243. Id. § 3746.05.
244. Id. § 3746.14(A).
245. Id. § 3746.14(B).
246. Id. § 3746.14(A).
247. Id. § 3746.14(C).
F. California

With the passage of the Expedited Remedial Action Reform Act of 1994, California established "a pilot program to determine if expedited procedures for carrying out response actions at response action sites are appropriate and protective of human health and the environment." The project will include up to thirty sites, although only ten of those sites may have "orphan share[s]," sites where a portion of the liability for cleanup costs is attributable to persons "who are insolvent or [who] cannot be identified or located."

Parties responsible for site cleanup recommend their respective sites for inclusion in this program to a Site Designation Committee in the California Environmental Protection Agency. To be eligible, a site must require significant remediation and may not be on the National Priority List or owned or operated by the federal government. Furthermore, there must be funds available in the Expedited Site Remediation Trust Fund to cover orphan shares, unless other responsible parties agree to bear that cost.

Once a site has been designated for remediation, the State contacts the city or county in which the site is located to learn the "planned use of the site, including the current and future zoning . . . ." The State presumes that the local government's planned use designation is the appropriate use for the site, although the State may rebut that presumption with substantial evidence. After the site is selected, the State enters into an enforceable agreement with one or more responsible parties who agree to take the necessary remedial actions and who agree to pay the State's on-

249. Id. § 25396.5(a).
250. Id. § 25396.5(b).
251. Id. § 25396(m).
252. Id. § 25396.5(b). See id. § 25261 for a description of the Committee's membership and responsibilities.
253. Id. § 25396.6(b).
254. Id. § 25396.6(c)(1).
255. Id. § 25399.1(a).
256. Id. § 25396.6(c)(2).
257. Id. § 25398(d)(1).
258. Id.
going response costs.\textsuperscript{259} The Department of Toxic Substances Control and the responsible parties sign covenants not to sue each other, conditioned on compliance with the terms in the enforceable agreement.\textsuperscript{260} Eventually, the State apportions liability among all of the responsible parties, and adjustments are made accordingly.\textsuperscript{261} A site owner may request permission to sell or lease parcels of the site that do not require remediation.\textsuperscript{262} Net proceeds from such parcels are to be held in trust. These funds are to be used to cover remediation on contaminated portions of the site if adequate funds are not otherwise available.\textsuperscript{263}

Remedies selected for a site must "[p]rovide long-term reliability at reasonable cost."\textsuperscript{264} Response actions include traditional methods of removal and reduction by treatment of hazardous substances.\textsuperscript{265} Also appropriate are "[p]roven and effective engineering controls and appropriate land use controls to eliminate or mitigate risk at a site when utilized for its planned use."\textsuperscript{266} Treatment and removal of contaminants, rather than control, must be applied to those "discrete areas within a site" that have high concentrations of contamination, highly mobile contaminants, or contaminants "for which containment cannot prevent significant risk . . . ."\textsuperscript{267} Even in such serious situations, however, engineering and land-use controls may be used in conjunction with treatment and removal, as long as there is no "significant risk of harm from exposure."\textsuperscript{268} With the exception of those portions of a site harboring particularly dangerous pollution, the law provides that there will be "no special preference to one or more available types of response action, including engineering and land use controls, treatment, removal, or other methods of protection . . . ."\textsuperscript{269} The remediation strategy for

\textsuperscript{259} Id. §§ 25398.2(b)(1)(A)-(1)(B).
\textsuperscript{260} Id. §§ 25398.2(b)(1)(C), (c).
\textsuperscript{261} Id. § 25398.2(b)(1)(B).
\textsuperscript{262} Id. §§ 25398.5(a)(1)(A)-(a)(1)(F).
\textsuperscript{263} Id. § 25398.5(a)(2).
\textsuperscript{264} Id. § 25398.5(a)(2).
\textsuperscript{265} Id. §§ 25398.6(a)(2).
\textsuperscript{266} Id. § 25398.6(b)(2), (b)(3).
\textsuperscript{267} Id. § 25398.6(b)(1).
\textsuperscript{268} Id. § 25398.6(d).
\textsuperscript{269} Id. § 25398.6(e).
a site must be based “on the individual merits of each option, or combination of options, reasonably available in light of site-specific conditions.”

Disputes between the State and PRPs may be resolved by an arbitration panel. The statute sets out the required composition of such a panel. It must be comprised of three private sector mediators with expertise in arbitration and with other relevant experience and qualifications.

California’s pilot project relies on institutional controls, managed through local chain-of-title records. Code section 25398.7(a) provides that “[a] remedial action plan may utilize land use controls to limit or restrict land use where appropriate. All land use controls shall be recorded by the site owner in the county in which the site is located.” The statute describes “land use controls” as:

recorded instruments restricting the present and future uses of the site, including, but not limited to, recorded easements, covenants, restrictions or servitudes, or any combination thereof, as appropriate. Land use controls shall run with the land from the date of recording, shall bind all of the owners of the land, and their heirs, successors, and assignees, and the agents, employees, and lessees of the owners, heirs, successors, and assignees, and shall be enforceable by the department . . . .

Violation of the land use controls are subject to a civil penalty of up to $25,000 per day.

G. Pennsylvania

The Pennsylvania General Assembly enacted a three-bill legislative package in May of 1995 to encourage voluntary clean-ups and redevelopment of contaminated industrial sites. Pennsylvania

270. Id.
271. Id. §§ 25398.10 to .13.
272. Id. § 25356.2(c). One arbitrator is selected by the state, the second by the PRP, and the third by the first two arbitrators. Id. § 25356.2(d).
273. Id. § 25396(f).
274. Id. § 25398.7(b).
nna now offers low-interest loans and grants for up to 75 percent of the cost of environmental assessments and clean-up to voluntary remediators who did not cause the contamination.\textsuperscript{276} Once voluntary remediators have completed their response actions and have received state approval, they are neither subject to further liability nor subject to civil actions by responsible parties or citizen suits.\textsuperscript{277} Liability for voluntary remediators may be reopened, however, if, for example:

new information confirms the existence of an area of previously unknown contamination . . . [or] the level of risk is increased . . . due to substantial changes in exposure conditions, such as in a change in land use from nonresidential to a residential use, . . . [or] the remedy relied in whole or in part upon institutional or engineering controls . . . [and] treatment, removal or destruction has become technically and economically feasible on that part.\textsuperscript{278}

For industrial sites without a financially viable PRP and sites in designated enterprise zones,\textsuperscript{279} the State may enter into agreements with a person who redevelops the fallow site. That person's liability will be limited only to the "remediation of any immediate, direct or imminent threats . . . , such as drummed waste, which would prevent the property from being occupied for its intended purpose."\textsuperscript{280} In passing the new legislation, the General Assembly declared that "[c]leanup plans should be based on the actual risk that contamination on the site may pose . . . , not on cleanup polices requiring every site in this Commonwealth to be returned to a pristine condition."\textsuperscript{281} Remediators may choose from several

\textsuperscript{277} Id. § 501(a). There are some instances in which liability may be reopened, such as a finding of fraudulent compliance with standards, discovery of new information on previously unknown contamination, changes in exposure conditions (switching from non-residential to residential use), or when treatment has become technically and economically feasible for residual, contained contamination. Id. § 505.
\textsuperscript{278} Id. §§ 505(2), (4), (5)(II)-(III).
\textsuperscript{279} Id. § 305(a).
\textsuperscript{280} Id. § 502(b)(1).
\textsuperscript{281} Id. § 102(6).
cleanup options, none of which is preferred over the others. Cleanup can be done to background (pre-contamination) levels, to statewide health standards, to site-specific standards based on the intended use of the site, or to any combination of these three standards. Institutional controls alone, such as fencing and future land use restrictions, may not be used to attain either the background standard or the state-wide health standard. In both of these instances, however, institutional controls may be used if background or state-wide health standards are attempted, but cannot be achieved.

A decision to use site-specific soil and groundwater cleanup standards must consider exposure factors based on current and planned future land use, as well as "the effectiveness of institutional or legal controls placed on the future use of the land." When site-specific standards are applied, response actions consisting "solely of fences, warning signs or future land use restrictions" are permitted only if such measures would suffice as remediation for the site at the time contamination is discovered. This provision attempts to prevent a remediator from opting for a non-treatment response simply by "lowering" the future use of a site, for example, rezoning from residential to industrial.

If residual pollution remains after a facility has been cleaned to site-specific standards, the State issues an order for use restrictions. This order must be filed with the local recorder of deeds to allow its disclosure "in the ordinary course of a title search." In addition, present and future holders of an interest in the property have disclosure responsibilities whenever they convey interest in the site. The grantor of the interest must ensure that there is a "deed acknowledgement," which is a statement of environmental information about past hazardous substance releases, in the deed’s

282. Id. §§ 301(a)-(b).
283. Id. § 302(b)(4).
284. Id. § 303(e)(3).
285. Id. §§ 302(b)(4), 303(e)(3).
286. Id. § 304(f)(1).
287. Id. § 304(i).
288. Id. § 304(m).
Pennsylvania's new law does not limit restricted use cleanups to previously developed lands. According to one critic, "this law could have the reverse effect of what was intended—taking away any special incentive for the reuse of existing industrial lands, and also potentially restricting the use of thousands of acres of as yet undeveloped lands for future generations."  

VII. FEDERAL SUPERFUND REAUTHORIZATION AND REVISION  

A. Intensified Controversy Prior to Reauthorization  

As the Superfund reauthorization approached, the law's remedy selection process and limited use of institutional controls received increasing attention. In 1992, the Congressional Budget Office reported that about $2.6 billion could be saved over five years by replacing CERCLA's "present statutory preference for permanent treatment technologies [with] an emphasis on institutional controls ... and containment methods." Soon after this report, Congressman John Santorum (R-Pa.) sponsored a bill to amend CERCLA section 121(a) to give a preference to the use of institutional controls (such as deed and access restrictions, monitoring, and provision of alternate water supplies), containment methods (including caps, slurry walls, and surface water diversion), and other interim measures, rather than permanent treatment technologies, if such interim measures are sufficient to protect the public health, welfare, and the environment.

In September of 1993, Representative Thomas J. Ridge (R-Pa.) introduced a bill calling for differentiation of cleanup standards

290. Id. §§ 6018.405(B), 6020.512(B).  
based on projected property use and deed restrictions to enforce safe use of the property. Representative Fred Upton (R-Mich.) proposed legislation to encourage voluntary cleanup through site-related standards and use of engineering and institutional controls. An add-on provision to a crime bill sponsored by Representative Michael A. Andrews (D-Tex.) also called for amending CERCLA to give preference to the use of institutional controls.

The momentum for CERCLA revisions continued as the Senate and House Subcommittees heard extensive testimony on Superfund. Representatives from environmental organizations, business, industry, banking, government, and academia participated in the National Commission on Superfund. The Commission's 1993 report called for major reformation of CERCLA, especially in the areas of local participation, liability, cleanup standards, and remedy selection.

B. Superfund Reform in the 103d Congress

In February of 1994, the Clinton Administration presented its proposal for the Superfund Reform Act of 1994, which was issued in bill form by the House of Representatives, with a companion bill in the Senate. For several months afterwards, Congress appeared to be moving toward compromise legislation which would retain retroactive liability for major polluters, but which would significantly alter the existing law in order to expedite cleanups.

In the fall of 1994, Superfund activities ground to a halt in the House of Representatives, in part, over the issue of wage levels for

persons employed at Superfund sites.\textsuperscript{301} Republicans in both Houses became increasingly reluctant to act on a Superfund revision initiated by the Democrats, especially since a "Republican" Superfund seemed possible the next year, when the Republicans would dominate both Houses of Congress. Though none of the bills before the 103d Congress were enacted, the contents of the bills indicate that Congress was receptive to many of the revisions that had been included in State Superfund laws.\textsuperscript{302}

1. Liability

The issue of retroactive liability remained a point of contention in the 103d Congress.\textsuperscript{303} While none of the bills proposed abandoning retroactive liability, all would have relieved liability concerns for many PRPs. "\textit{De micromis}" PRPs would have been exempted from liability\textsuperscript{304} while expedited settlements would be available for "\textit{de minimis}" contributors of pollution at a site.\textsuperscript{305} All of the


\textsuperscript{302} See, e.g., 140 CONG. REC. 14,221 (1994) (statement by Sen. Lautenberg (D-N.J.), commenting on successful voluntary cleanups in New Jersey similar to proposed Superfund reform before Congress).

\textsuperscript{303} See S. Rep. No. 349, 103d Cong., 2d Sess. 40 (1994) (acknowledging charges of "unfairness" in CERCLA’s retroactive liability system, but citing court support of the constitutionality of such a system); id. at 138 ("Minority Views" stating that "retroactive liability, in principle, is wrong"); see also H.R. Rep. No. 582, 103d Cong., 2d Sess., pt. 2, at 256 (1994) ("Additional Views" by 21 members of the House Committee on Public Works and Transportation, stating that "[i]t is inequitable to hold companies, individuals and units of local government liable for activities which were entirely legal at the time undertaken").

\textsuperscript{304} S. 1834 § 403; H.R. 3800 § 403; H.R. 4916 § 403. "\textit{De micromis}" parties include residential owners, operators and lessees, small businesses, and small non-profit organizations that contributed to municipal waste, parties who contributed less than 55 gallons of liquid or 100 pounds of solid hazardous substances to a facility, and persons who acquired the contaminated property through inheritance or by bequest. S. 1834 § 403; H.R. 3800 § 403; H.R. 4916 § 403.

\textsuperscript{305} S. 1834 § 409; H.R. 3800 § 409; H.R. 4916 § 412. "\textit{De minimis}" parties are those whose contributions consisted of one percent or less of the total contamination and which contamination was not significantly more toxic than pollution from other PRPs. S. 1834 § 409; H.R. 3800 § 409; H.R. 4916 § 412.
bills expanded opportunities for the government to use covenants not to sue in pre-litigation settlements. All of the bills also clarified the liability of lenders relative to contaminated properties.

Another major revision would have been the creation of a new “fair share” allocation process, including use of a neutral arbitrator to allocate liability levels. In a significant break with past law, the federal government would have been able to reimburse PRPs for paying “orphan shares,” those parts of the remediation attributable to insolvent or defunct PRPs.

2. Containment and Remedy Selection

Despite strenuous objections from some environmentalists, all versions of the Superfund Reform bills would have modified the current law’s preference for treating, rather than containing contamination. The bills stated that, as long as human health and the environment were protected, remediation could be accomplished by: (1) treatment; (2) containment or other engineering controls; (3) a combination of treatment and containment; or (4) other, unspecified methods. Treatment would be preferred, however, for “Hot Spots,” those portions of a site with highly concentrated, exceptionally mobile, or non-containable pollution.

Congress adopted the idea of different levels of cleanup matched to “reasonably anticipated future uses of land at a facility,” rather than axiomatic cleanup to unconstrained use levels. However, Congress never reached a consensus on cleanup standards for ground water. Congress was unable to agree on the basis for deter-

306. S. 1834 § 408; H.R. 3800 § 408; H.R. 4916 § 411.
308. S. 1834 § 409; H.R. 3800 § 412; H.R. 4916 § 413.
309. S. 1834 § 409; H.R. 3800 § 412; H.R. 4916 § 413.
310. S. 1834 § 409; H.R. 3800 § 412; H.R. 4916 § 413.
311. See, e.g., Pope, supra note 15, at 14 (regarding the Clinton Administration’s approach to Superfund reform, Mr. Pope says that “[a] facility will be cleaned up with no more than its next purpose in mind . . . . The Administration proposal is, purely and simply, an unconscionable effort to transfer the costs and risks from the present to future generations.”).
mining when water had to be restored to levels acceptable for drinking.\footnote{315}

3. Institutional Controls

All of the Superfund bills envisioned an increased role for institutional controls in remediation and reuse of contaminated sites. Unlike the existing CERCLA, the bills made frequent reference to "institutional controls." Consideration of land disposition would begin early in the Superfund process by having Community Work Groups whose "primary purpose . . . [would be] to recommend the future land use at a site and any institutional controls required to ensure that land use remains in effect."\footnote{316} Senate Bill 1834 stated that any response action which allows a hazardous substance to remain at the site in levels above that set for unrestricted land use must provide for "adequate institutional control."\footnote{317} The Senate Committee Report identified allowable institutional controls as "land and resources use and deed restrictions, well drilling prohibitions, building permits, well use advisories and deed notices."\footnote{318}

4. Enforcement of Institutional Controls

The Report of the Senate Committee on Environment and Public Works indicates that the decision to make development of institutional controls mandatory in CERCLA may have been, in part, to help provide for future enforcement of those controls. The commentary states that "[b]y making the development of institutional controls a mandatory duty, the bill allows the use of citizen suit authority under CERCLA."\footnote{319}

Both House bills offered a different approach for enforcing institutional controls. They proposed incorporating use restrictions at a
site into federal hazardous substance easements. The President would have to acquire hazardous substance easements at fair market value, and the expense would be considered a recoverable Superfund response cost. The easements would be "enforceable in perpetuity" against all current holders-in-interest or successors-in-interest, regardless of whether those interests were recorded. Such easements would be assignable, undergo a public notice procedure to give interested parties the opportunity to comment, and be subject to termination if release terms were met. If use restrictions were violated, the violator would be subject to CERCLA enforcement actions and to citizen suits under CERCLA section 310.

The Committee members viewed the easement as the mechanism necessary to "provide EPA with the flexibility to authorize a containment remedy, where appropriate, while assuring protection of human health and the environment." This remark appears to be an oblique reference to the willingness of courts to enforce easements under traditional property law. When these easements were acquired, the federal government would "record a notice of property use restriction in the public land records for the jurisdiction in which the affected property is located," although absence of such a filing would not negate the obligation for compliance. Filing would have to conform with state law.

**C. EPA Administrative Reforms on Land-Use Restrictions**

Despite Congress's failure to pass the Superfund Reform Act of 1994, the EPA began initiating administrative reforms based on concepts which had received support in the 103d Congress. In late

321. H.R. 3800 § 506; H.R. 4916 § 506.
322. H.R. 3800 § 506; H.R. 4916 § 506.
323. H.R. 3800 § 506; H.R. 4916 § 506.
324. H.R. 3800 § 506; H.R. 4916 § 506.
325. H.R. 3800 § 506; H.R. 4916 § 506.
326. H.R. 3800 § 506; H.R. 4916 § 506.
328. See supra notes 68-79 and accompanying text.
329. H.R. 3800 § 506.
330. Id.
May of 1995, EPA issued a directive entitled “Land Use in the CERCLA Remedy Selection Process,” and announced that it was “the first in a series of steps that EPA would like to take in addressing land use at CERCLA sites.”

This directive recognizes that future use is an important factor in establishing the level of remediation selected for a site. The document differentiates between the more rigorous level of protection appropriate for residential sites compared with industrial sites. It provides a synopsis of the agency’s policy: “EPA expects to treat principal threats, to use engineering controls such as containment for low-level threats, [and] to use institutional controls to supplement engineering controls.”

In determining whether to select a containment remedy, EPA must consider if there is a capable enforcing agent, described as an “authority to implement the institutional control, and the appropriate entity’s resolve and ability to implement the institutional control.” Examples of acceptable institutional controls are “deed restrictions and deed notices, and adoption of land use controls by a local government.” EPA will conduct reviews at least every five years to monitor sites subject to restrictions.

Since this EPA directive has just been released, it would be speculation to anticipate exactly what impact it will have on actual operations. The issuance of the directive, however, is in itself an indication that the federal government, like a number of the states, is now leaning towards a greater acceptance of institutional controls in the remediation and reuse of contaminated sites than in the past.

332. Id. at 3.
333. Id. at 8.
334. Id. at 7.
335. Id. at 9-10.
336. Id. at 10.
337. Id.
VIII. CONCLUSION

In the early 1980s, public concern about pollution resulted in the enactment of CERCLA and State Superfund laws, which sought immediate and permanent cleanup of contamination. Experience has revealed that there is far more contamination than originally imagined and that cleanup is often a long and expensive process. Oftentimes, the laws designed to effectuate cleanup have engendered litigation and inaction, instead of remediation. Abandoned, polluted sites are not uncommon and have taken a toll on our society. Their presence is in itself a risk to humans and to nature. In addition, there have been negative economic repercussions as the business and banking communities avoid association with these contaminated facilities. Communities near such sites have become moribund.

Federal and state governments are now exploring alternative methods of dealing with contaminated property, seeking a paradigm that will both satisfy environmental concerns and provide for economic rejuvenation. This reorientation became evident in New Jersey's precedent-setting legislation in the late 1980s. The pattern continues, as seen in recent state laws encouraging voluntary remediation and brownfields cleanups. At the federal level, it is visible in CERCLA section 120(h), which deals with transfer of federal properties. It was manifest in proposed revisions to Superfund during the 1994 reauthorization efforts, and it is present in EPA's 1995 Superfund administrative reforms.

There appear to be several essential elements to this evolving, revised model of Superfund. First, responsibility for liability is tempered, particularly by offering closure to the threat of perpetual liability. New liability strategies include apportioning "fair shares" among responsible parties, offering financial and other incentives to remediators who volunteer response actions or who settle liability disputes, issuing covenants not to sue prospective purchasers and financiers who redevelop property, and exempting minor contributors to the pollution. As this Article goes to press, the 104th Congress has not yet engaged in dialogue on specific bills to reauthorize Superfund. The issue of liability is certain to be at the heart of the upcoming congressional debate, as it involves complex issues of public health, the environment, economic growth, and, the most contentious issue, determining who should pay for cleanup—business or the public at large.
A second essential element for the unfolding, revised Superfund framework is a new approach to remedy selection. Superfund's original objective was, in reality, cleanup to pre-contamination levels at every site. The new approach bases cleanup standards on health and environmental risks attached to the disposition of a site, usually differentiating between residential and non-residential uses. Containment is considered a viable remedy when it prevents unsafe exposure, especially in instances of prohibitive cost or technically infeasible cleanup.

Third, when containment is employed and residual pollution remains at a facility, use restrictions (institutional controls) are put into place to restrict access to or activity at the property. At the state level, the trend is to require that institutional controls, in the form of deed restrictions or notices, be registered in local land records. In addition, the states statutorily affirm that such restrictions are binding on successors or assigns and "run with the land." Without the latter provision, the use restrictions might be challenged under common law for lack of privity and for being of "in gross" benefit to the government.

The federal government also appears to favor the use of local chain-of-title recordation of institutional controls. With the passage of CERCLA section 120(h) dealing with the transfer of federal lands, Congress acknowledged the need to use institutional controls, such as deed notices, covenants, and easements, to foster redevelopment of land. Of course, using these institutional controls in the context of section 120(h), where the federal government assumes responsibility for future liability, is quite different than enforcing such restrictions at privately owned sites. The federal government has been inhibited from using institutional controls because land regulation has traditionally been the prerogative of state and local government. Also, federally imposed use restrictions, like those required by the states, would encounter the common law courts' reluctance to uphold long term encumbrances on the land.

To overcome fears about enforcing institutional controls, one option explored by the 103d Congress was to have CERCLA mandate development of institutional controls as part of the remediation process. This would enable the public to pursue citizen suits to enforce the restrictions. Another option is for the federal government to require hazardous substance easements. The courts tend to
uphold easements regardless of privity issues or the easement being “in gross.” Consequently, the federal government would have a relatively high level of confidence in relying on easements to monitor and enforce compliance with use restrictions.

Increased participation by local governments and communities to determine future land use for contaminated sites and to help select the remediation for such sites, including institutional controls, would remove conflicts about federalism. Also, if there were greater delegation of Superfund authority to the states, there would be less risk of conflict over land use issues. Public awareness about contamination has evolved in the years since Superfund was enacted. American society accepts that contamination will exist, that it must be managed, and that information on contamination must be readily available for such management to be effective. Consequently, institutional controls will play an increasing and important role as state governments and the federal government attempt to reconcile competing environmental, economic, and social concerns.