Institutional Controls: The Converging Worlds of Real Estate and Environmental Law and the Role of the Uniform Environmental Covenant Act

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I. INTRODUCTION

The recent enactment of the Small Business Liability Relief and Brownfields Revitalization Act (the "Brownfields Amendments" or the "Act")¹ has highlighted the critical role of institutional controls² in the cleanup of brownfields and other environmentally impaired sites.³ This role is evident in several important sections of the Act: § 221 (the "contiguous landowner" defense),⁴ § 222 (the "bona fide prospective"

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¹ Small Business Liability Relief and Brownfields Revitalization Act of 2001, Pub. L. No. 107-118, 115 Stat. 2356 (2002) (amending 42 U.S.C. § 9601 (2000)).

² Institutional controls is used in this Article to mean "legal or physical restrictions or limitations on the use of, or access to, a site or facility to eliminate or minimize potential exposures to chemicals of concern or to prevent activities that could interfere with the effectiveness of a response action." ASTM Standard Guide for Use of Activity and Use Limitations, Including Engineering and Institutional Controls, E 2091-00 [hereinafter ASTM Standard Guide or ASTM E 2091-00]. Institutional controls are also referred to as Activity and Use Limitations ("AULs"), Land Use Controls ("LUCs"), or Environmental Covenants or Servitudes. The United States Environmental Protection Agency ("EPA") uses a more narrow definition of institutional controls, namely, "non-engineered instruments such as administrative and/or legal controls that minimize the potential for human exposure to contamination by limiting land or resource use." EPA, Institutional Controls: A SITE MANAGER'S GUIDE TO IDENTIFYING, EVALUATING AND SELECTING INSTITUTIONAL CONTROLS AT SUPERFUND AND RCRA CORRECTIVE ACTION CLEANUPS 2 (2000).

³ Brownfields are defined in the Brownfields Amendments as "real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant." Small Business Liability Relief and Brownfields Revitalization Act § 211(a) (amending 42 U.S.C. § 9601(39)(A) (2000)).

⁴ Id. § 221 (amending 42 U.S.C. § 9607 (q)(1) (2000)).

purchaser" defense),⁵ and § 223 (the "innocent landowner" defense).⁶ Each of these sections provides that a party will have a defense to the strict, joint and several liability scheme of the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA" or "Superfund") if that party can establish that it "is in compliance with any land use restrictions established or relied on in connection with the response action at a vessel or facility" and that it did not "impede the effectiveness or integrity of any institutional control employed at the vessel or facility in connection with a response action." In addition, the Brownfields Amendments amended §§ 128(b) and (c) of CERCLA to provide that sites being remediated pursuant to a state response program may rely on institutional controls as part of the remedy, and to require those states to maintain registries of brownfields sites describing, *inter alia*, those that rely on institutional controls because they have not been cleaned up to an "unrestricted use" level.⁹

Institutional controls have been used for years, but scant attention has been paid to whether they have worked as intended.¹⁰ An increasing

⁵ *Id.* § 222 (amending 42 U.S.C. § 9601(40) (2000)).

⁶ Id. § 223 (amending 42 U.S.C. § 9601(35) (2000)).

⁷ *Id.* § 222 (amending 42 U.S.C. § 9601(40)(F) (2000)).

⁸ A "state response program" under § 128 is a state voluntary cleanup program that includes (i) a timely survey and inventory of brownfields sites in the state, (ii) oversight and enforcement authorities that are adequate to ensure that a response action will be protective of human health and the environment and will be conducted in accordance with Federal and state law, and will be completed if the person conducting the response action fails to perform, (iii) mechanisms and resources for ensuring adequate public participation, and (iv) mechanisms for approving the cleanup plan and verifying when the response action is complete. Alternatively, a state that has entered into a memorandum of agreement with the EPA will be considered to have a qualifying "state response program." *Id.* § 128(a) (to be codified at 42 U.S.C. § 9628).

⁹ *Id*.

See, e.g., ENVIL. L. INST., AN ANALYSIS OF STATE SUPERFUND PROGRAMS: 50-STATE STUDY, 2001 UPDATE (2002) (reporting on a study of the long-term stewardship efforts of each state and concluding that many states are not equipped to successfully implement such efforts); ASS'N OF STATE & TERRITORIAL SOLID WASTE MGMT. OFFICIALS, 2002 VOLUNTARY CLEANUP SYMPOSIUM (2002); ENVIRONMENTAL LAW INSTITUTE, THE ROLE OF LOCAL GOVERNMENTS IN LONG-TERM STEWARDSHIP AT DOE FACILITIES (2001) (describing how the Department of Energy plans to rely on local governments to implement elements of its long-term stewardship plans designed to protect the public from remaining risks at three of its contaminated facilities), *available at* http://www.elistore.org/Data/products/d10.10.pdf (last visited Feb. 21, 2003) (on file with the Connecticut Law Review); ENVTL. L. INST., PROTECTING PUBLIC HEALTH AT SUPERFUND SITES: CAN INSTITUTIONAL CONTROLS MEET THE CHALLENGE? (1999) (describing the increased use of institutional controls at Superfund sites despite the lack of analysis on the effectiveness of the controls and presenting the results of a case study at four sites where institutional controls were used to prevent exposure to residual hazardous substances), http://www.elistore.org/Data/products/d10.01.pdf (last visited Feb. 21, 2003) (on file with the Connecticut Law Review); INT'L CITY/COUNTY MGMT. ASS'N, BEYOND FENCES: BROWNFIELDS AND THE CHALLENGE OF LAND USE CONTROLS (2000); NAT'L RES. COUNCIL, LONG-TERM INSTITUTIONAL MANAGEMENT OF U.S. DEPARTMENT OF ENERGY LEGACY WASTE SITES (2000) (examining the effectiveness of measures—including institutional controls—that the Department of Energy will rely on for long-term stewardship of hazardous waste sites that cannot be cleaned up sufficiently to allow

number of studies have been issued over the past several years highlighting the deficiencies in prior implementation and use of institutional controls. These deficiencies generally fall into one or more of the following categories: implementation, enforcement, notice, or long-term stewardship. All of the pieces need to be able to work together: There must be mechanisms for easily establishing the institutional control; there must be mechanisms for enforcing the control; interested parties must have the ability to obtain notice of the existence of the institutional control; and mechanisms must be established to ensure that the institutional control will be maintained as long as it is needed.

As a result of the recent studies, the Environmental Protection Agency ("EPA"), the Department of Defense ("DOD"), the Department of Energy ("DOE"), and various state environmental agencies have issued guidance and regulations to improve past practices. A leading standards setting organization, ASTM International (formerly, the American Society for Testing and Materials) ("ASTM"), has also issued a comprehensive guidance document—the Standard Guide for Use of Activity and Use Limitations, Including Institutional and Engineering Controls (E 2091-00) ("ASTM E 2091" or the "Standard Guide")—to explain the relationship between institutional controls and risk-based corrective action and the process for evaluating which institutional control (or series of controls) is most effective in eliminating a potentially complete exposure pathway. ¹¹

One of the major obstacles to establishing reliable institutional controls has been the lack of federal or state laws that would facilitate the implementation of these controls. After convening a study group to determine whether a model state law would be helpful, the National Conference of Commissioners on Uniform State Laws ("NCCUSL") issued a report, acknowledging that a uniform model state law on environmental covenants could eliminate some of the common law impediments that have hampered efforts to establish enforceable and reliable institutional controls.¹² This effort has benefited from the input of real estate and environmental practitioners who are experts in this field.

Improving stakeholders' confidence in the reliability and enforceability of institutional controls is critical to the long-term success of efforts to

unrestricted use), available at http://www.nop.edu/openbook/0309071860/html/r1.html (last visited Feb. 21, 2003) (on file with the Connecticut Law Review); Carl Bauer & Katherine N. Probst, LONG-TERM STEWARDSHIP OF CONTAMINATED SITES: TRUST FUNDS AS MECHANISMS FOR FINANCING AND OVERSIGHT (2000) (examining the effectiveness of various trust fund mechanisms that have been used for financing and oversight of long-term stewardship activities at both private and federal contaminated sites), available at http://www.rff.org/disc_papers/PDF_files/0054.pdf (last visited Feb. 21, 2003) (on file with the Connecticut Law Review).

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¹¹ ASTM Standard Guide, *supra* note 2, at 1.

¹² NAT'L CONFERENCE OF COMMISSIONERS ON UNIFORM STATE LAWS, FINAL REPORT OF THE JOINT EDITORIAL BOARD ON REAL PROPERTY ACTS TO THE SCOPE AND PROGRAM COMMITTEE (2001), available at http://www.law.upenn.edu/bll/ulc/ulc frame.htm.

bring brownfield sites back into productive reuse. Brownfields are sites where expansion, redevelopment, or reuse of the site is complicated by the presence or potential presence of a hazardous substance, pollutant or contaminant. Various sources have estimated that there are somewhere between 400,000 and 1,000,000 brownfield sites in the United States. A diverse group of stakeholders, including federal, state and local regulators, potentially responsible parties, developers, lenders, and the community all have a strong interest in bringing these sites back into productive use. Improving stakeholders' confidence in the long-term reliability and enforceability of institutional controls is critical to accomplishing this goal.

The brownfields movement officially began in the mid 1990s when EPA promulgated its Brownfields Agenda and started providing grants to cities to encourage the redevelopment and reuse of abandoned or underutilized sites. The brownfields movement was, in part, a response to efforts by various states to create their own cleanup programs for less contaminated sites. These less contaminated sites tended to slip through the cracks because they were not hazardous enough to merit Federal Superfund attention, yet dirty enough to be stigmatized by potential environmental liabilities. Because of the specter of "strict, joint and several liability" under CERCLA, developers and their banks were unwilling to invest in these potentially contaminated sites. In turn, this fear had the unintended consequence of driving businesses and jobs away from the nation's urban core.¹⁵ Recognizing that this unintended consequence was occurring, and hoping to counteract these liability concerns, the nation's governors and mayors began to promote the adoption of state voluntary cleanup or brownfields programs ("VCPs"). 16 These state programs have successfully facilitated the redevelopment and reuse of

 $^{^{13}}$ Small Business Liability Relief and Brownfields Revitalization Act $\$ 211(a) (amending 42 U.S.C. $\$ 9601(39)(A) (2000)).

^{14 147} CONG. REC. S3886 (daily ed. Apr. 25, 2001) (statement of Sen. Smith estimating that there are 400,000 to 500,000 brownfield sites); 147 CONG. REC. S3904 (daily ed. Apr. 25, 2001) (statement of Sen. Reid estimating that there are 300,000 brownfield sites); U.S. GEN. ACCT. OFFICE, COMMUNITY DEVELOPMENT: REUSE OF URBAN INDUSTRIAL SITES, 3 (1995), available at http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=gao&docid=f:rc95172.pdf (last visited Feb. 21, 2003) (on file with the Connecticut Law Review); NAT'L ASS'N OF DEV. ORG. RES. FOUND., RECLAIMING RURAL AMERICA'S BROWNFIELDS 4 (1999) [hereinafter RECLAIMING BROWNFIELDS]; see also EPA, Press Release, EPA Newsroom: President Signs Legislation to Clean Environment and Create Jobs (reporting that the EPA estimates that there are between 500,000 and 1,000,000 brownfield sites), available at http://www.epa.gov/epahome/headline_011102.htm (last visited Feb. 21, 2003) (on file with the Connecticut Law Review).

¹⁵ 147 CONG. REC. S3889 (daily ed. Apr. 25, 2001) (letter to Sen. Smith from the National Association of Realtors); 147 CONG. REC. S3892 (daily ed. Apr. 25, 2001) (statement of Sen. Boxer); 147 CONG. REC. S3894 (daily ed. Apr. 25, 2001) (statement of Sen. Levin).

¹⁶ U.S. Conference of Mayors (1995); see U.S. GEN. ACCT. OFFICE, COMMUNITY DEVELOPMENT: REUSE OF URBAN INDUSTRIAL SITES, supra note 14, at 3; see also ENVIL. L. INST., AN ANALYSIS OF STATE SUPERFUND PROGRAMS: 50-STATE STUDY, 2001 UPDATE, supra note 10.

environmentally impaired properties by:

- establishing clearer cleanup requirements;
- providing some limitations on liability;
- creating financial incentives for redevelopment;
- streamlining the governmental review process; and
- providing clear documentation when sufficient cleanup has been conducted.

Most of the states have utilized institutional controls as one component of their VCP program. The states have generally incorporated risk-based cleanup principles into their VCPs, thereby allowing residual contamination to remain in place as long as those chemicals do not present an unacceptable risk to human health or the environment. 17 Risk-based assessment methods examine the sources of contamination, the pathways of exposure (e.g., soil, surface water, ground water, and air), and human or ecological receptors (e.g., office workers, construction workers, residents, children, waterways, and endangered species) to develop an appropriate remedial action plan ("RAP"). The RAP should examine whether any institutional controls are needed to eliminate or minimize potential exposures to residual contamination on the site. The RAP should also evaluate whether institutional controls are needed to prevent activities that might otherwise interfere with the effectiveness of the response action, 18 thus ensuring maintenance of a condition of "acceptable risk" or "no significant risk" to human health and the environment. 19 Many states have used No Further Action letters or Certificates of Completion to let the parties who are conducting the cleanup know that they have successfully completed the VCP process.²⁰

Because viable institutional controls raise issues relating to both real estate and environmental law, the proper implementation of institutional

¹⁷ The cleanup goal is generally to achieve a "No Significant Risk" or "No Substantial Hazard" level, which will vary depending upon the types of uses and activities that are expected to occur on site. See ASTM Standard Guide, *supra* note 2, at § 5.3.2.1. Risk assessment plays a critical role in the remedial investigation/feasibility study process in determining whether reasonably anticipated future uses and activities will be consistent with this "No Significant Risk" goal.

¹⁸ See id. § 4.1.6.

¹⁹ See id. §§ 3.1.2, 4.1.6.

²⁰ See generally Charles Bartsch et al., BROWNFIELDS "STATE OF THE STATES": AN END-OF-SESSION REVIEW OF INITIATIVES AND PROGRAM IMPACTS IN THE 50 STATES (4th ed., 2001) (reporting on the efforts of state public officials to implement brownfield cleanup and redevelopment programs), available at http://www.nemw.org/brown_stateof.pdf (last visited Feb. 21, 2003) (on file with the Connecticut Law Review).

controls requires the cooperation and understanding of both real estate and environmental practitioners. Real estate practitioners need to understand and be willing to incorporate assumptions about risk and potential exposure into legally-binding instruments, so that future users of these sites are not inadvertently harmed by residual contamination. Environmental practitioners need to understand fundamental principles of real property, including what can and cannot be recorded in the land records, and whether common law principles may undermine the protections they are trying to achieve from a cleanup perspective.

Further guidance is likely to be developed as more and more practitioners have experience with the practical realities of blending real estate and environmental issues in order to facilitate the redevelopment and reuse of brownfields and other environmentally impaired sites.

II. DEFINING INSTITUTIONAL CONTROLS AND THEIR ROLE IN THE BROWNFIELDS MOVEMENT

Institutional controls, also sometimes referred to as Land Use Controls ("LUCs")²¹ or Activity and Use Limitations ("AULs"),²² are:

legal or physical restrictions or limitations on the use of, or access to, a site or facility to eliminate or minimize potential exposures to chemicals of concern, or to prevent activities that could interfere with the effectiveness of a response action, to ensure maintenance of a condition of 'acceptable risk' or 'no significant risk' to human health and the environment.²³

²¹ The Department of Defense defines Land Use Controls as "any physical, legal, and/or administrative mechanism that restricts the use of, or limits access to, real property to prevent exposure to contaminants above permissible levels. LUCs are employed to protect the integrity of the engineering remedy (if present) and human health and the environment after transfer of property." DEP'T OF DEF., GUIDANCE ON LAND USE CONTROLS ASSOCIATED WITH ENVIRONMENTAL RESTORATION ACTIVITIES FOR PROPERTY PLANNED FOR TRANSFER OUT OF FEDERAL CONTROL 1, available at http://www.denix.osd.mil/denix/Public/Library/Cleanup/luc_policyguidance.pdf (last visited Feb. 21, 2003) (on file with the Connecticut Law Review).

²² The terminology AUL is used in both the ASTM Standard Guide and the Massachusetts "mini-Superfund" cleanup program. *See* ASTM Standard Guide, *supra* note 2, at § 3.1.2. The Massachusetts Contingency Plan provides for three different types of institutional controls: A Grant of Environmental Restriction, a Notice of Activity and Use Limitation, or an Environmental Restriction imposed by the state. *See*, *e.g.*, MASS. REGS. CODE tit. 310, § 40.1070 (2001).

²³ ASTM Standard Guide, *supra* note 2, at § 3.1.2. The ASTM definition, which uses the Massachusetts terminology of Activity and Use Limitations, includes both legal (i.e., institutional) and physical (i.e., engineering) controls within its definition because both are important to the ultimate success of the remediation project. Other definitions, including both the EPA and California definitions for institutional controls, do not include physical controls within their definitions. Other organizations, such as ICMA and DOD, use the terminology Land Use Controls, or LUCs, instead.

A. Types of Institutional Controls

The term institutional controls generally encompasses five different types of controls: proprietary controls, state and local government controls, statutory enforcement tools, informational devices, and engineering or access controls. Each of these tools offers different strengths and weaknesses. The relative strengths and weaknesses of each type of control are described in EPA's Fact Sheet entitled *Institutional Controls: A Site Manager's Guide to Identifying, Evaluating and Selecting Institutional Controls at Superfund and RCRA Corrective Action Cleanups*.²⁴

1. Proprietary Controls

Proprietary controls are based upon the common law in each state and involve traditional property law. The method for creating and enforcing proprietary controls may vary depending upon the property law of each state. ²⁵ Proprietary controls must be created using certain legal formalities, such as a writing, an intention by the original parties to place the restriction upon the land, horizontal and vertical privity of estate, and the requirement that the restriction "touch and concern" the land. ²⁶ Some states refer to proprietary controls as "deed restrictions" (e.g., restrictive covenants, equitable servitudes, and easements), but this phrase is not a legal term of art. ²⁷ These controls raise unique enforcement issues because third parties (including Federal and state environmental protection agencies) typically do not have a direct right to enforce these controls.

2. State and Local Government Controls

The second category of institutional controls is governmental controls (state and local), including zoning and variances, building permits, well drilling prohibitions, and water and well use advisories. ²⁸ Governmental controls may be enforced by a governmental agency in a court action when there has been a violation of the control or when the agency can establish that there is an "imminent and substantial endangerment."²⁹

²⁴ EPA, INSTITUTIONAL CONTROLS: A SITE MANAGER'S GUIDE TO IDENTIFYING, EVALUATING AND SELECTING INSTITUTIONAL CONTROLS AT SUPERFUND AND RCRA CORRECTIVE ACTION CLEANUPS 12-27 (2000) [hereinafter EPA SITE MANAGER'S GUIDE].

²⁵ ASTM Standard Guide, *supra* note 2, at, § 3.1.36; EPA SITE MANAGER'S GUIDE, *supra* note 24, at 16-19 (providing the limitations on proprietary controls for brownfield remediation).

²⁶ EPA SITE MANAGER'S GUIDE, *supra* note 24, at 16-19.

²⁷ *Id*. at 2.

²⁸ ASTM Standard Guide, *supra* note 2, at §6.3; EPA SITE MANAGER'S GUIDE, *supra* note 24, at 12-15.

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29</sup> For example, § 106 of the CERCLA allows an enforcement action for "imminent and substantial endangerment to public health, welfare, or the environment." 42 U.S.C. § 9606(a) (2000). The Resource Conservation and Recovery Act allows for corrective action for unpermitted facilities with "interim status," 42 U.S.C. § 6928(h) (2000), or "imminent and substantial endangerment," *id.* §

[Vol. 35:1255

3. Statutory Enforcement Tools

The third category of controls is statutory enforcement tools. Statutory enforcement tools include orders used by federal and state regulatory programs, consent decrees that may specify activities prohibited at a particular property, and permits that specify permitted and prohibited activities and uses on a property.³⁰

4. Informational Devices

The fourth category of controls is informational devices, such as the deed notice.³¹ Informational devices are designed to ensure that, before concluding a real estate transaction, the parties are made aware of the environmental conditions on the property (chemical releases, restrictions on use, access, and development). 32 Generally accepted types of notice that qualify as informational devices include record notice (in land records), direct or actual notice, and notice to a government authority, registry act requirements (requiring states to maintain a database of sites relying on institutional controls), and transfer act requirements.³³ Some states have other notice requirements as part of their VCP.³⁴

5. Engineering and Access Controls

Engineering and access controls are another type of institutional control. In most cleanups involving brownfields sites, some amount of contamination is left behind. As a result, the site frequently must be paved or capped, or a slurry wall constructed, or a ground water treatment system operated, or a portion of the site fenced, in order to sever potentially complete exposure pathways. These mechanisms are frequently referred to

^{6973.} See also ARK. CODE ANN. § 8-7-1104 (Michie Supp. 2001) (stating that "[s]election of a remedial action shall include consideration of . . . [w]hen an imminent and substantial endangerment" is posed).

³⁰ ASTM Standard Guide, *supra* note 2, at § 6.4; EPA SITE MANAGER'S GUIDE, *supra* note 24,

at 21-23. 31 ASTM Standard Guide, supra note 2, at § 6.5; EPA SITE MANAGER'S GUIDE, supra note 24,

³² This may be sufficient for allowing the government to enforce institutional controls against subsequent purchasers in a few states. See MASS. REGS. CODE tit. 310, § 40.1071 (2001) (allowing the Department of Environmental Protection to enforce the terms of an Activity and Use Limitation with notice of only the AUL).

³³ ASTM Standard Guide, *supra* note 2, at § 6.5.

³⁴ See, e.g., IOWA CODE ANN. §§ 455B.426-455B.432 (West 1997); N.Y. ENVTL. CONSERV. LAW §§ 27-1303, 27-1305, 27-1307 (McKinney Supp. 2003); OR. REV. STAT. ANN. § 465.215 (2001). New York requires a list of all properties used for hazardous substance disposal, or those with any restriction on use or transfer. N.Y. ENVTL. CONSERV. LAW §§ 27-1303 (McKinney Supp. 2003).

as engineering controls. The engineering controls usually need to be inspected and maintained by someone, and these affirmative obligations are frequently incorporated into the legal instrument that describes the restrictions and affirmative obligations that apply to the site. Access agreements are also generally needed by both the regulatory agency, the potentially responsible party, and any other entity assuming responsibility for inspecting or maintaining the engineering controls over time.

III. ROLE OF THE 2002 BROWNFIELDS AMENDMENTS

The Brownfields Amendments established a number of incentives to promote the reuse and development of brownfields sites and provided various types of liability relief. The Brownfields Amendments were introduced as H.R. 2869, which was a combination of two earlier bills, H.R. 1831, the "Small Business Liability Protection Act" (which became Title I of P.L. 107-118), and S. 350, the "Brownfields Revitalization and Environmental Restoration Act of 2001" (which became Title II).³⁵ Title I established two types of liability exemptions (for *de micromis*³⁶ disposal and municipal solid waste³⁷) and codified EPA's policy on settlements where there is a limited ability to pay.³⁸

³⁵ 147 CONG. REC. H10,900 (daily ed. Dec. 19, 2001) (statements of Reps. Pallone and Duncan); Walter E. Mugdan, *The Small Business Liability Relief and Brownfields Revitalization Act*, 26 A.L.I.-A.B.A. Bus. L. Course Materials J. 4, 6 (2002).

³⁷ The Municipal Solid Waste exemption applies to business entities, averaging not more than 100 full-time individuals or the equivalent during the prior three tax years and qualifying as a "small business concern" (within the meaning given that term in 15 U.S.C. § 631), owners, operators, and lessees of residential property, and non-profit organizations that generate household waste, or the equivalent amount. 42 U.S.C. § 9607(p). The Brownfields Amendments include a definition of "municipal solid waste," including examples and exclusions. *See id.*

³⁸ A potentially responsible party ("PRP") that can demonstrate an inability or a limited ability to pay response costs may enter an expedited settlement to resolve CERCLA liability. 42 U.S.C. §9622(g). Although a party with a limited ability to pay may be permitted a reduced settlement amount, there are additional conditions regarding waiver, failure to comply and providing information and access, which have some antecedents in EPA policy. See id. § 9622(b) (detailing the various agreements between the government and responsible parties regarding limiting liability); see also Mugdan, supra note 35, at 85; EPA, Policy for Municipality and Municipal Solid Waste CERCLA

³⁶ The *de micromis* exemption applies to generators or transporters of hazardous substances who arranged for the disposal, treatment, or transport of less than 110 gallons of liquid materials or 200 pounds of solid materials before Apr. 1, 2001, unless the party could or did significantly contribute to the cost of the response action, failed to comply with an information request or subpoena, impeded the performance of a response action or has been convicted of a criminal violation for the conduct. 42 U.S.C. § 9607(o) (2002). This addition to CERCLA codifies the kinds of settlements that EPA has been granting for many years to very small volume or low toxicity waste contributors under EPA's *de micromis* settlement policy. *See generally id.*; Mugdan, *supra* note 35, at 83. *See also* EPA, *General Policy on Superfund Ability to Pay Determinations* (providing a report on what are appropriate abilities for paying settlements in Superfund cases), *at* http://www.epa.gov/Compliance/resources/policies/cleanup/superfund/genpol-atdept-mem.pdf (last visited Feb. 21, 2003) (on file with the Connecticut Law Review).

Title II contains three subtitles: Subtitle A covers funding.³⁹ Subtitle B includes three liability exemptions⁴⁰ (contiguous property owners, bona fide prospective purchasers, and innocent landowners), and Subtitle C discusses state response programs and additions to the National Priorities List.41

The Brownfields Amendments altered the definition of "brownfield" slightly. When the term first came into usage in the early 1990's, EPA defined "brownfields" as "abandoned, idled or under-used industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination."42 The Brownfields Amendments offered the following definition instead: "real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant."43

Nine types of facilities are excluded from the definition of brownfield, including facilities that are:

- The subject of a planned or ongoing removal action;⁴⁴
- listed on, or proposed for listing on, the National Priorities List;45
- the subject of a unilateral administrative order, a court order, an administrative order on consent, or judicial consent decree;46
- subject to a permit that has been issued by the United States or an authorized State under the Solid Waste Disposal Act, the Federal Water Pollution Control Act, the Toxic Substances Control Act, or the Safe Drinking Water

NPL1998. Settlements Co-Disposal Sites Feb 5, at at http://www.epa.gov/Compliance/resources/policies/cleanup/superfund/munic-solwst-mem.pdf (last visited Feb. 21, 2003) (on file with the Connecticut Law Review).

³⁹ See The Small Business Liability Relief and Brownfields Revitalization Act § 201 (amending 42 U.S.C. § 9601(39)(A) (2000)).

The Small Business Liability Relief and Brownfields Revitalization Act § 201 (amending 42 U.S.C. \S 9607 (2000)).
⁴¹ The Small Business Liability Relief and Brownfields Revitalization Act \S 201 (amending 42

BROWNFIELDS, supra note 14, at 4.

⁴³ 42 U.S.C. § 9601(39)(A) (2000).

⁴⁴ Id. § 9601(39)(B)(i).

⁴⁵ *Id.* § 9601(39)(B)(ii).

⁴⁶ *Id.* § 9601(39)(B)(iii).

2003] INSTITUTIONAL CONTROLS 12

Act;47

- subject to corrective action under § 3004(u) or 3008(h) of the Solid Waste Disposal Act and to which a corrective action permit or order has been issued or modified to require the implementation of corrective measures;⁴⁸
- a land disposal unit with respect to which a closure notification under subtitle C of the Solid Waste Disposal Act has been submitted, and closure requirements have been specified in a closure plan or permit;⁴⁹
- subject to the jurisdiction, custody, or control of a department, agency, or instrumentality of the United States, except for land held in trust by the United States for an Indian tribe:⁵⁰
- a portion of a facility at which there has been a release of polychlorinated biphenyls, and that is subject to remediation under the Toxic Substances Control Act:⁵¹ or
- a portion of a facility, for which portion, assistance for response activity has been obtained under subtitle I of the Solid Waste Disposal Act from the Leaking Underground Storage Tank Trust Fund established under § 9508 of the Internal Revenue Code of 1986.⁵²

A brownfield site may nonetheless include areas that meet these criteria under the "site-by-site determination" exception.⁵³ Financial incentives are also available for sites that are contaminated by a controlled substance,⁵⁴ by petroleum or a petroleum product,⁵⁵ and are determined to be low risk with no viable responsible party liable for cleanup,⁵⁶ or are mine scarred land.⁵⁷ The inclusion of petroleum and mine scarred land was

⁴⁷ *Id.* § 9601(39)(B)(iv) (citing 42 U.S.C. § 6901 (2000); 33 U.S.C. § 1321 (2000); 15 U.S.C. § 2601 (2000); 42 U.S.C. § 300f (2000)).

⁴⁸ 42 U.S.C. § 9601(39)(B)(v)(2000) (citing 42 U.S.C. §§ 6924(u), 6928(h) (2000)).

⁴⁹ *Id.* § 9601(39)(B)(vi) (citing 42 U.S.C. § 6921).

⁵⁰ Id. § 9601(39)(B)(vii) (citing 15 U.S.C. § 2601 (2000)).

⁵¹ *Id.* § 9601(39)(B)(viii) (citing 42 U.S.C. § 6991).

⁵² *Id.* § 9601(39)(B)(ix).

⁵³ *Id.* § 9601(39)(C).

¹⁴¹ § 9601(39)(D)(ii)(I) (defining "controlled substance") (citing 21 U.S.C. § 802 (2000)).

⁵⁵ *Id.* § 9601 (39)(D)(ii)(II)(aa).

⁵⁶ *Id.* § 9601(39)(D)(ii)(II)(bb)(AA)-(BB).

⁵⁷ *Id.* § 9601(39)(D)(ii)(III).

discussed during the floor debate.⁵⁸ Expanding the law to include these previously excluded sites was intended to allow the cleanup of less hazardous sites than those eligible for inclusion on the National Priorities List under Superfund.⁵⁹

IV. THE ASTM GUIDANCE DOCUMENT

Recognizing that risk-based corrective action is not likely to succeed unless all parties have confidence in the viability and reliability of institutional controls, the ASTM authorized efforts beginning in 1997 to develop a Standard Guide regarding institutional controls. The active members of the drafting committee included representatives of the EPA, DOD, NRC, DOE, several states (particularly Oregon, Wisconsin, Massachusetts, and Virginia), industry, environmental attorneys, and consultants. These efforts culminated with approval of the Standard Guide on the Use of Activity and Use Limitations, Including Institutional and Engineering Controls ("ASTM E 2091" or the "Standard Guide"), in April of 2000.

While not binding, ASTM E 2091 describes the existing types of institutional controls and provides a framework for analyzing which tools are most appropriate in a given cleanup situation. It also outlines a process for implementing these controls during the environmental cleanup process. ASTM E 2091 emphasizes the importance of evaluating the feasibility and appropriateness of potentially applicable institutional controls at many different points during the risk-based corrective action process. It also states that institutional controls should be considered to be an integral part of the remedial action process and should be documented in the Record of Decision or similar document governing the cleanup. The Standard Guide cautions that institutional controls will likely be necessary as long as residual contamination is present above levels that are unsafe for unrestricted use.

ASTM E 2091 describes eight overall objectives to be achieved by institutional controls:

To eliminate potential pathways of exposure to residual contamination.

⁵⁸ See, e.g., 147 CONG. REC. S3893 (daily ed. Apr. 25, 2001) (statement of Sen. Bond), 147 CONG. REC. S3904 (daily ed. Apr. 25, 2001) (statement of Sen. Inhofe), 147 CONG. REC. H10902 (dailey ed. Dec. 19, 2001) (statement of Mr. Dooley), 147 CONG. REC. H10903 (daily ed. Dec. 19, 2001) (statements of Sen. Miller and Sen. Cantor).

⁵⁹ 147 CONG. REC. S3891 (daily ed. Apr. 25, 2001) (statement of Sen. Boxer); *see also* SENATE COMM. ON ENV'T & PUBLIC WORKS, 107TH CONG., REPORT ON BROWNFIELDS REVITALIZATION & ENVIRONMENTAL RESTORATION ACT OF 2001 (Mar. 12, 2001) (submitted by Mr. Smith).

- To identify exposure assumptions that should form the basis for each institutional control.
- To provide notice of the existence of the institutional control to interested parties, such as lenders, prospective purchasers, utilities, and the like.
- To identify the performance objectives and goals of each institutional control.
- To identify the activities and uses which are permissible on the site.
- To describe the activities and uses which should not occur in the future on the site (absent additional cleanup).
- To specify long-term performance standards.
- To specify long-term stewardship objectives and who will be responsible for conducting and paying for those activities.

The Standard Guide provides diagrams explaining how this framework for analysis should work in actual practice. For example, if the property owner is dealing with a contaminated site that has metals and volatile organic compounds ("VOCs") in the soils, and semi-volatile organic compounds ("semi-VOCs") in the ground water, the property owner would need to examine (1) each chemical of concern, (2) each potentially complete exposure pathway, and (3) each potential receptor, to determine which institutional controls (or series of institutional controls) would need to be put in place to prevent unacceptable exposures to the residual contaminants. The owner would begin by examining the metals in the soils and determining the potential pathways of exposure (inhalation, dermal exposure, or ingestion) and the potential receptors (construction workers, office workers, residential users, or children in day care). The property owner would then need to determine which tools were potentially available in that jurisdiction to "cut off" those exposures pathways. Could a municipal ordinance be imposed to prohibit excavation without a city permit? Could a permit or order be issued that would prohibit all excavation unless the applicant obtains prior environmental agency approval? Does the state have a statute that allows the property owner to record either a deed notice or a deed restriction on the site? If that state does not have a statute, is the state's property law supportive of restrictive covenants between the property owner and the state agency, or the property owner and a third party? Would it make sense to post signs or fences

[Vol. 35:1255

around the site advising the public not to dig on the site?

A similar analysis would then need to be conducted for the VOCs in the soils, and then for the semi-VOCs in the ground water.

Upon completion of this preliminary analysis, the ASTM Standard Guide then recommends that the user apply various screening and balancing criteria to determine which institutional control works "best" for each contaminant, each exposure pathway, and each potential receptor. The suggested screening criteria are effectiveness, amenability to integration with property redevelopment plans, implementability, technical practicability, and cost prohibitiveness. The suggested balancing criteria include long-term reliability and durability, acceptability to stakeholders, and cost effectiveness.

ASTM E 2091 describes the types of institutional controls that are currently available and describes their relative strengths and weaknesses. The Standard Guide also discusses "best practices" and the types of concerns that the practitioner should examine when deciding what type of institutional control might be appropriate and what types of implementation issues should be examined.

Finally, in the appendix, the ASTM Standard Guide describes other issues that might be relevant, including the role of financial risk allocation mechanisms (such as environmental insurance), transactional issues (such as the need to obtain the property owner's consent prior to recording a deed restriction in the chain of title, and the need to clarify whether the landlord or tenant, or both, have primary responsibility for implementing and maintaining an institutional control), potential stigma issues, and potential takings claims.

V. FEDERAL AND STATE INITIATIVES ON INSTITUTIONAL CONTROLS

A. Federal Initiatives

Recognizing that more guidance was needed in this area, the EPA has issued a guidance document and has held a series of internal workshops in order to improve the level of understanding and consistency of decision-making that involves implementing institutional controls at contaminated sites. The "Site Manager's Guide to Identifying, Evaluating and Selecting Institutional Controls at Superfund and RCRA Corrective Action Sites" (the "Site Manager's Guide"), issued in September of 2000, provides definitions, describes the types of institutional controls that are available, explains a process for evaluating institutional controls, and describes the site manager's role after the institutional controls have been selected. The Site Manager's Guide also includes a matrix listing the types of institutional controls, as well as the relative benefits, limitations, and enforcement issues associated with each type of control.

EPA held numerous internal workshops during 2001 to identify common and recurrent issues such as training, documentation of institutional controls, life cycle costs, and tracking mechanisms. The EPA is planning to issue other guidance documents shortly, including a Guide to Implementing, Monitoring and Enforcing Institutional Controls⁶⁰, a Guide on Tracking Systems, and a Guide on Life Cycle Costs. Finally, EPA is funding numerous pilot studies to evaluate other mechanisms for implementing, monitoring and enforcing institutional controls.⁶¹

The Department of Defense has also issued a series of guidance documents relating to institutional controls. The Department acknowledges the important role that institutional controls play in the cleanup of active and closed military facilities, but has taken the position that obligations relating to institutional controls should not be incorporated into legally-binding documents.⁶²

The Department of Energy has taken an active role in evaluating the effectiveness of institutional controls at closed DOE sites because of the long-term stewardship needs associated with these facilities. DOE established an Office on Long Term Stewardship and issued a Final Long-Term Stewardship Study in October of 2001. The report was prepared to comply with the terms of a settlement agreement in *Natural Resources Defense Council v. Richardson*. DOE claims to have taken steps to institutionalize sound decision-making with regard to the implementation, maintenance and enforcement of institutional controls, including the following:

- Assigning responsibility for long-term stewardship to program offices with landlord responsibilities at each site
- Managing the long-term stewardship information center
- Providing training to DOE contractors and staff
- Developing guidance to comply with long-term stewardship requirements

 $^{^{60}}$ These fact sheets and related documents should be posted on EPA's IC website when completed. See http://www.epa.gov/superfund/action/ic/index.htm.

⁶¹ Two examples include the Guardian Trust, a § 501(c)(3) organization that would assume responsibility to monitor and enforce institutional controls once they have been implemented at a site, and One Call Systems, where local utilities would coordinate with the state environmental agency to determine whether a restrictive covenant has been placed on a site where intrusive activities are planned.

⁶² See, e.g., Interim Guidance on Environmental Restoration Records of Decision (June 4, 2002); U.S. Air Force, Policy and Guidance on Remedy Selection Documentation in Records of Decision (January 23, 2002).

- Preparing guidance on the development of site specific long-term stewardship plans and performance objectives
- Developing guidance to address coordination between DOE and local land use planning officials
- Revising the Life Cycle Asset Management process to account financially for long-term stewardship costs.

B. State Initiatives

Many states have promulgated new statutes or regulations to improve their ability to implement reliable and enforceable institutional controls. One key example is the statute promulgated by the state of Colorado in April of 2001. S.B. 1-145, which became effective on July 1, 2001, created a statutory environmental covenant that is directly enforceable by the Colorado Department of Public Health and the Environment. This covenant runs with the land and is enforceable against subsequent owners and tenants. The Department has taken the position that its statute creates a regulatory interest that runs with the land, rather than a property interest. Local ordinances may be used, particularly where there are off-site plumes of contamination, if the local government and the Department enter into an intergovernmental agreement and the ordinance imposes the relevant use restriction. The Colorado statute requires that notice of the covenant be given to all persons holding an interest of record and all persons known to have an unrecorded interest. The Department may enforce the covenant by issuing an administrative order requesting compliance or by filing a suit for injunctive relief, and any other person with an interest in the covenant may also sue for injunctive relief.

Massachusetts has a comprehensive program that takes a slightly different approach. In 1983, it enacted Chapter 21E of the Massachusetts General Laws, which created three different types of institutional controls: (1) a Grant of Environmental Restriction, which conveys a limited property interest to the state; (2) a Notice of Activity and Use Limitation, which is a "deed notice" rather than a legally enforceable contract or the conveyance of a limited property right to the state; and (3) environmental restrictions imposed by the state. The Notices of AULs have been used most commonly in Massachusetts because they are easy to implement, require no prior agency approval, and no subordination agreements. Both the Grant and the Notice must be filed in the Registry or with the Land Court. The Notice cannot be used to impose restrictions on ground water, but a Grant can.

California also has a comprehensive program that takes yet another approach. California has four distinct authorities that allow its state environmental agency to enter into institutional controls, plus some

overarching general authority for institutional controls. The Health and Safety Code Division 20, Chapter 6.8, section 25355.5(a)(1)(c) authorizes the California Department of Toxic Substances Control ("DTSC") to enter into land covenants that run with the land. Health and Safety Code Division 20, Chapter 6.5, section 25202.5, authorizes DTSC to require a property owner to record covenants imposing institutional controls as a condition of a permit or interim status. Another section of this chapter, Article 11, allows an area to be designated a hazardous waste property or a border zone property through a formal process. Alternatively, DTSC and the property owner may enter into a covenant pursuant to section 25222.1. In addition, Health and Safety Code Division 20, Chapter 6.85, provides that institutional controls may be established at sites going through the state's Expedited Remedial Action Reform Act. Finally, California also relies on Civil Code section 1471 to justify its imposition of institutional controls on contaminated sites. This code section generally provides that a property owner may enter into a covenant agreeing to refrain from doing certain acts on his land, and thereby bind future owners, if the instrument containing the covenant is labeled "Environmental Restriction" and recorded in the local land records.

VI. THE NCCUSL EFFORT

The National Conference of Commissioners on Uniform State Laws ("NCCUSL") is in the process of drafting a model environmental covenant law that could ultimately be adopted in all fifty states. The draft Uniform Environmental Covenants Act ("UECA") would eliminate many of the common law impediments that are undermining regulators' confidence in current tools. More specifically, the draft Act addresses and seeks to eliminate common law impediments to the implementation and enforcement of restrictive covenants, such as the requirement that there be vertical and horizontal privity; that the benefited real estate be "appurtenant;" and that the restriction "touch and concern" the land. In addition, the common law has traditionally frowned upon negative restrictions, as well as upon covenants that impose affirmative obligations ("spurious easements"). Affirmative obligations are important in the brownfields context, where the regulatory agency might require the property owner or responsible party to inspect an asphalt cap annually or to operate a ground water pump and treat system. Finally, under the common law, most restrictive covenants automatically expire after a set period of time, such as forty or sixty years, unless re-recorded. The draft Act would exempt environmental covenants adopted pursuant to the Act from the Marketable Title Act, thereby eliminating this obstacle. To be exempted, notice of the environmental covenant must be provided by means of visible evidence (i.e., signs or monuments), maps, a land recording system, or

[Vol. 35:1255

similar means.

In addition, any environmental covenant adopted pursuant to the Act could not be extinguished by means of issuance of a tax deed, foreclosure of a tax lien, adverse possession, eminent domain, lack of enforcement, or similar common law doctrines. The covenants would be perpetual unless limited by their terms to a specific duration, or unless modified or terminated in accordance with the draft Act.

The draft Act recognizes that environmental covenants would be adopted as part of an overall environmental response project conducted pursuant to Federal or state environmental law (e.g., CERCLA, RCRA, or a state voluntary cleanup program) under the direction and supervision of the appropriate environmental regulatory agency. The draft Act would encourage the environmental agency to communicate and cooperate with local governmental agencies who have authority over zoning and land use. If the environmental covenant needs to impose more stringent requirements than those imposed by local land use law, that can be accomplished under the draft Act. The decisions made pursuant to the draft Act would not, however, otherwise displace or preempt local zoning or land use law.

Real estate and environmental practitioners need to be aware of how the draft Act would work in practice. As currently drafted, the following actions would need to occur:

- The holders of all property interests whose interests would be subordinated to the covenant would need to be a signatory to the environmental covenant. Depending upon the nature of the restriction, these interest holders could include the property owner, lessees, utilities, holders of mineral interests, and lenders.
- The regulatory agency could require each party to a covenant to incorporate the terms of the covenant into all leases, licenses, and similar agreements.
- The regulatory agency could require the owner to provide copies of the covenant to any affected local government agency.
- The regulatory agency could require that it be provided with notice of any applications for building permits, proposed changes in land use, or any proposals to excavate, trench, install wells, or use ground water.
- The regulatory agency could require subordination of prior interests in the real estate.

- The property owner would be encouraged to conduct annual inspections and to certify that the environmental covenant is continuing to work as intended.
- The environmental agency could elect to maintain a registry containing the complete text of all environmental covenants adopted pursuant to the Act, as well as any modifications or terminations thereto and any recorded notices.
- The parties would be required to record either a notice of the covenant, or the complete covenant, in the local land records in order for it to be effective.

NCCUSL hopes to present a final draft of the model law to the full Conference for approval in the summer of 2003. The model law would then need to be presented to each state legislature for adoption into law in that state.

VII. UNIQUE TRANSACTIONAL AND ENFORCEMENT ISSUES PRESENTED BY THE FOREGOING DEVELOPMENTS

In this brave new world, real estate and environmental practitioners need to work closely together to ensure that any institutional controls that are implemented at a contaminated site make sense from both a real estate and environmental perspective. Attorneys need to be aware of the limitations of current tools in many jurisdictions. This Article will briefly describe the types of transactional and enforcement issues that are likely to arise in the foreseeable future:

A. Transactional Issues

1. All Appropriate Inquiry⁶³

Many attorneys have assumed that existing institutional controls will be detected during routine environmental due diligence, but they are sadly mistaken. The ASTM "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process," E 1527-00 ("ASTM 1527"), specifies that the *owner*, not the consultant, is responsible for providing information relating to title, and institutional controls are considered to be an issue relating to title. The user and the consultant may agree that the consultant is required to look for this information as part of the standard Phase I report, but the consultant is not required to do so

⁶³ The current version of ASTM Standard Practice E 1527-00 [hereinafter ASTM E 1527-00] does not address business risk considerations, such as institutional controls.

otherwise. Prudent prospective purchasers and their lenders will insist that their consultants look for this information. In addition, to date, federal and state agencies have generally not maintained lists of sites using institutional controls, and consultants have generally not requested this information. In general, no one has examined the land records for evidence of institutional controls, either. This practice is likely to change as parties become more aware of the need to request this information, and as the states develop registries in accordance with § 231(b) of the Brownfields Amendments.⁶⁴ However, many state registries are not likely to contain information about sites that were cleaned up prior to 2002 where institutional controls were part of the remedy.

2. Reasonably Anticipated Future Land Use

In determining what type of cleanup is appropriate, it is critically important to understand what types of uses are reasonably likely to occur on the site in the future, and to reflect those assumptions in the institutional controls that are implemented at the site. It is also important that the responsible party and the environmental regulatory agency have early notice of any changes in those assumptions about future land use. The Colorado statute, and the draft UECA law, address this concern by recommending notice from the property owner or the local government of potential changes in zoning or land use law. This approach obviously places substantial new burdens upon both the property owner, the environmental regulatory agency, and the local governmental unit to understand why this information is important and to track it.

3. Evaluation of Best Available Legal Tools for Implementing ICs

Until the uniform model law is adopted, in most jurisdictions, real estate and environmental practitioners will be faced with the need to make the best out of clearly inadequate tools. They will need to carefully examine what tools are currently available to them in their jurisdiction; evaluate the potential exposure pathways and potential receptors for each chemical of concern; and then apply the screening and balancing criteria that are described in the ASTM Standard Guide. They will need to ensure that someone clearly has responsibility for maintaining the selected institutional control over time. If the control is being implemented in a jurisdiction where restrictions on land automatically expire after a given period of time, they will need to establish procedures for making sure that the restriction is re-recorded if needed. They will need to insist that someone involved in the real estate transaction (e.g., the owner, the

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⁶⁴ See 42 U.S.C. 9628(b)(1)(C)(2000).

environmental consultant, the title company, or the lender) takes responsibility for determining whether institutional controls have been placed on a site.

4. Evolving Burdens on Landlords and Tenants

Recent federal, state and private initiatives, including the Colorado statute and the draft UECA law, have recognized the importance of having all parties who should be bound by the restrictions either being an actual party to the covenant or having those obligations incorporated into the lease or related legal instruments. This can be a somewhat contentious issue between landlords and tenants, particularly where some unrelated third party is the entity that is responsible for cleanup. For example, at the Industri-Plex Superfund site in Woburn, Massachusetts, the potentially responsible parties funded a trust to conduct the actual cleanup at the site. The trust entered into a Record of Decision with EPA and the state of Massachusetts where institutional controls were part of the remedy that allowed this Superfund site to be brought back into productive use. Actual implementation of the institutional controls has been contentious because of concerns about who should be ultimately responsible for ensuring that the controls are maintained and enforced over time. In the meantime, the new property owners have been requiring their "innocent" tenants to accept responsibility for inspecting and maintaining the institutional and engineering controls that have been put in place.

5. Recordation Issues

Records of Decisions and similar environmental cleanup documents tend to be voluminous and extremely technical. Existing state programs have sometimes required that these voluminous documents be recorded in the land records, which has not met well with land recording offices. Some states allow a simple notice instrument to be recorded. The draft UECA effort has suggested that a simple notice may be recorded, provided that the complete copy of the environmental covenant is available in the state registry. Whichever of these approaches is taken, it is important that the documentation, either as recorded in the land records or as available in the registry, communicate sufficient information about the sources of exposures, potential pathways of exposure, and likely receptors that future generations will fully understand why the restrictions were required in the first place, what harms were intended to be prevented, and who is most likely to be harmed if the restrictions are not followed.

6. Subordination Issues

An important consideration is whether prior interests, particularly those of a mortgagee, should be subordinated to the institutional control. The concern is that, if the mortgagee exercises its right to foreclose, the

mortgagee could eliminate the restriction. The practical consideration is whether a mortgagee is likely to be willing to subordinate its interest and whether it may view the existence of an institutional control as reducing the value of its interest. Some states, such as Colorado and Massachusetts, have recognized this issue either by requiring subordination of prior interests or providing standard forms to accomplish this. The draft UECA encourages the parties and the regulatory agency to consider the need for subordination at a particular site.

7. Marketable Title Act Considerations

Until adoption of the draft UECA as a model law, and its enactment as law within a specific state, practitioners will need to understand any common law impediments within their state that may terminate restrictive covenants after a specified period of time (typically, forty to sixty years). In order to remain viable as long as it is needed, will the institutional control need to be re-recorded after a set period of time? Who will take responsibility to make sure that re-recordation occurs forty or sixty years from now? How will institutional knowledge of this obligation be maintained? Who will be responsible for further cleanup if the institutional control lapses?

B. Enforcement Issues

1. All Appropriate Inquiry

The Brownfields Amendments require parties who wish to avail themselves of the innocent landowner, contiguous property owner, or bona fide prospective purchaser defenses to CERCLA liability to conduct "all appropriate inquiry". This requirement has been present in the CERCLA statute since at least 1986, when the Superfund Amendments and Reauthorization Act ("SARA") clarified that a potentially responsible party would need to be able to demonstrate that it had "no reason to know" because it had conducted "all appropriate inquiry" in accordance with § 101(35)(B) of CERCLA. In response to questions about what this language meant, the ASTM developed, through a consensus based process, the Standard Practice for Environmental Site Assessments, ASTM E 1527, which has gone through several iterations over the past ten years. It also developed a companion practice known as the Transaction Screen, E 1528.

Despite numerous attempts over the years to persuade EPA to issue guidance on "all appropriate inquiry," the EPA traditionally resisted these pressures. EPA has now been directed under § 223(2)(B)(ii) of the Brownfields Amendments to issue regulations defining the standards and practices which will constitute "all appropriate inquiry" by January 11, 2004. Congress provided EPA with some minimal criteria in § 223(2)(B)(iii) of the Brownfields Amendments, including the requirement

2003] INSTITUTIONAL CONTROLS 1277

to:

- use an environmental professional;
- interview past and present owners, operators, and occupants;
- review historical sources of information;
- search for recorded liens;
- review Federal, state and local records regarding waste disposal practices, spills, underground storage tanks, and the like;
- conduct a visual inspection of the facility and adjoining properties;
- utilize any specialized knowledge;
- evaluate the relationship between the purchase price and the value of the property;
- utilize commonly known or reasonably ascertainable information about the property; and
- consider the degree of obviousness of the likely presence of contamination.

EPA has announced that it is planning to initiate a negotiated rulemaking proceeding shortly to develop a proposed rule.⁶⁵

One question is whether EPA will provide any direction about who has the obligation of discerning whether institutional controls have been placed on a property and whether it will direct the states to maintain this information in a readily retrievable form. As mentioned previously, despite misperceptions to the contrary, this information is not typically being retrieved during a routine ASTM Phase I ESA because the consultant has no affirmative obligation to look for this information. Similarly, title companies are not typically bringing this information to a property owner's

⁶⁵ The EPA announced in a Federal Register notice published March 6, 2003, that it would be initiating a negotiated rulemaking proceeding to develop the regulations about "all appropriate inquiry" that are required under section 223(2)(B) of the Brownfields Amendments. *See* 68 Fed. Reg. 10675 (Mar. 6, 2003). In the meantime, EPA will permit the 1997 version of the ASTM E 1527 to be used as a basis for establishing that "all appropriate inquiry" was conducted. *See* 68 Fed. Reg. 3430-33 (Jan. 24, 2003).

or lender's attention because they frequently take exception to all environmental matters. Questions have been raised whether title companies, at a minimum, should be identifying in their title reports institutional controls that clearly restrict real property interests.

2. Who Has the Right to Enforce the Institutional Control

One of the factors that has driven the current efforts to improve the types of available institutional controls and their reliability, has been the regulatory agencies' concerns about who may enforce existing institutional controls. While proprietary controls have the advantage of "running with the land," common law doctrines have frequently prevented regulatory agencies from being a holder of these interests and have therefore deprived them of a direct right to enforce. Federal agencies have been reluctant to rely upon local government controls, such as zoning, because they have no direct right to enforce these controls and have concerns whether local government will have the financial and political ability to enforce the controls. Federal and state agencies have a direct right to enforce permits and orders, but recognize that these controls do not "run with the land" and thus could be inadvertently terminated in the event of a land transfer. The draft UECA would cure many of these concerns by specifying who may be "holders" and granting them a direct right under the statute to enforce the restrictions.

Unless a state has enacted a statute granting it direct rights of enforcement, or until passage of a model environmental covenant law in each state, these concerns will linger. Even innovative concepts like the Guardian Trust⁶⁶ will need to battle with this issue until better legislation is adopted in most of the states. The handful of existing state laws do not traditionally give an unrelated third party, such as the Guardian Trust, a direct right to enforce proprietary rights. Moreover, even though some jurisdictions, such as Pennsylvania, might not frown upon an unrelated third party holding a proprietary interest in the first instance, there is no assurance in the case law that the courts would uphold these restrictions upon a transfer of the property. Before the potential usefulness of the Guardian Trust could be evaluated as a potential solution on a nationwide basis, the common law of each jurisdiction would need to be examined to determine the likelihood that the courts in that jurisdiction would allow the restrictions to be enforced by an unrelated third party, such as a trust, holding an easement "in gross," and whether the courts in that jurisdiction would allow the restriction to "run with the land." The law of each

⁶⁶ The Guardian Trust is a § 501(c)(3) that has received funding from EPA and the State of Pennsylvania to evaluate the potential role of a non-profit trust organization in monitoring and enforcing institutional controls.

2003] INSTITUTIONAL CONTROLS 1279

jurisdiction would also need to be examined to determine whether restrictions on land automatically expire after a set period of time.

3. Release Reporting

In order to qualify for any of the three defenses to CERCLA liability set forth in the Brownfields Amendments, the party must comply with all legally required release reporting requirements. As practitioners in this field know, release reporting obligations can be a fairly murky area. Many statutes provide that a release must be reported when a specified minimum quantity of a regulated material is released into the environment. As a practical matter, releases are frequently discovered during routine environmental due diligence, without any information about the quantity of material released. Parties hoping to qualify for one of the three CERCLA defenses mentioned above may want to report this condition, regardless of the lack of information about the quantity of material released, in order to preserve their ability to qualify for one of the CERCLA defenses. Property owners, on the other hand, are likely to resist such reporting unless it is unequivocally required out of concern that this purchaser is likely to "walk" and leave them with an open ended investigation or enforcement action. This concern has already arisen in some routine transactions where sellers have been unwilling to allow prospective purchasers to conduct Phase II intrusive work. Under circumstances where the Seller has denied the Purchaser the right to conduct additional due diligence, would the purchaser be considered to have conducted "all appropriate inquiry" under the Brownfields Amendments? Further guidance from EPA, or judicial decisions, will be needed to clarify this issue.

4. Not Impeding the Integrity and Effectiveness of Institutional Controls

Again, in order to qualify for one of the three CERCLA defenses under the Brownfields Amendments, the party must be able to demonstrate, by a preponderance of the evidence, that it has not impeded the integrity and effectiveness of institutional controls. Further EPA guidance is expected on this topic, but has not been issued to date. The agency appears to recognize that this language does not necessarily shift the entire burden for inspecting and maintaining the institutional control onto the new property owner or the contiguous landowner, but it presumably also does not condone ostrich-like behavior by these parties. Prospective purchasers and contiguous landowners will presumably have an obligation to seek out information about institutional controls and to have a clear understanding whether the responsible party, or they as the new or contiguous landowner, will have primary responsibility for complying with these controls. Sophisticated responsible parties are already trying to shift responsibility for complying with these obligations to the new or contiguous property

[Vol. 35:1255

owner. In addition, several of the state programs and the draft UECA law clearly anticipate that prospective purchasers and lessees will be required to assume some of these responsibilities by contract.

5. Continuing Liability of Responsible Parties

For the brownfields movement to succeed, responsible parties need to have firm assurances that they will not be held ultimately responsible for breaches or failures of institutional controls if they have placed legitimate restrictions in place and communicated the existence of those controls to future land owners and users. The Brownfields Amendments do not contain any clear assurances on this issue. Sophisticated responsible parties understand that they should incorporate language into the legal instruments transferring title requiring that they be notified, and their approval obtained in writing, in the event that future users intend to change the land use or to modify or terminate the restriction, although this would not necessarily absolve them of all liability.

6. Who Should be Bound by the Institutional Control

The draft UECA law places numerous burdens and responsibilities upon the property owner. Who should be considered to be an "holder" is still under discussion. Clearly, anyone whose actions could cause the restrictions to be violated should be bound by the terms of the covenant, either directly or by contract. On the other hand, one doesn't want to encumber real estate transactions unduly by requiring the signature of every holder of every property interest, no matter how small, before changes in land use or zoning can be requested, or before the restrictions can potentially be modified or terminated. A balance needs to be struck between these competing interests.

7. Stigma

The presence of contamination on real property has frequently led to claims that the value of the property has been diminished and that there is "stigma" because of the contamination. Numerous cases have been fought in the court house with mixed results. It is important to recognize that brownfields are not likely to be redeveloped unless owners are allowed to apply risk-based corrective action principles and allow some residual contamination to remain in place. Some experts have argued that there is no stigma to the property if the property is allowed to operate at its highest and best use, and the presence of a reliable and effective institutional control is frequently the tool that is necessary to make this happen.

8. Potential Takings Concerns

Regulatory agencies have expressed some concern that the imposition of institutional controls on contaminated property could be viewed by the

property owner as a "takings" without just compensation. Existing case law suggests that this issue does not need to be a concern, provided that the controls are tailored to be no more restrictive than necessary and provided that there is a process for modifying or terminating the controls when they are no longer needed. A governmental regulation will constitute a taking when it does not substantially advance a legitimate state interest, or when it denies the property owner of an economically viable use of his land.⁶⁷ Frequently, institutional controls are a necessary tool to facilitate the economically viable use of land where that land has previously been underutilized or abandoned. There may be certain circumstances where just compensation is required in order to compensate a property owner for a restriction on the use of his land.⁶⁸ Only time will tell if and when any court will find that the placement of an institutional control on contaminated land constitutes a "takings" that merits "just compensation."

9. Potential Challenges to the Viability of Existing Institutional Controls

In light of the issues that have been examined by the NCCUSL drafting committee as it has developed a model environmental covenant law, one has to question whether institutional controls that have been adopted in the past addressed all of the key real estate and environmental issues and whether they will remain viable and enforceable as long as they may be needed. The draft UECA provides a mechanism for existing institutional controls to "opt in" to the new system. There may be transactional reasons why parties do not want to do so. On the other hand, it would behoove all parties to a loan, lease, or sale to examine carefully the true viability of institutional controls that have been adopted prior to promulgation of the model law in their state. Most state voluntary cleanup programs provide that any liability protections, generally given in the form of a No Further Action letter or Certificate of Satisfactory Completion, are either invalid or subject to a regulatory re-opener if any condition of the NFA letter or Certificate is violated. Frequently, the obligation to implement institutional controls is a clear condition of the NFA letter or the Certificate.

VIII. CONCLUSION

The success of the brownfields movement will ultimately depend upon whether interested stakeholders believe that institutional controls can be

⁶⁷ Agins v. City of Tiburon, 447 U.S. 255, 260 (1980).

⁶⁸ First English Evangelical Lutheran Church of Glendale v. County of Los Angeles, CA, 482 U.S. 304 (1987).

implemented, monitored and enforced as long as they are needed. The success of this movement will also depend upon whether the processes and procedures for implementing institutional controls become too burdensome from a real estate perspective. Finally, the ultimate success of the brownfields movement will depend upon whether responsible parties can become comfortable that, if they cleanup a site to applicable Federal or state requirements, and implement viable institutional controls, they will not be brought back into the "strict, joint and several" liability scheme when some subsequent owner or user of the site blithely ignores the restrictions that have been recorded against the site.

Some progress is being made in addressing these concerns. Central players in the environmental agencies and in industry understand that more thought needs to be given throughout the remedy selection process to selecting, implementing, maintaining and enforcing appropriate institutional controls. Environmental practitioners are beginning to talk with real estate practitioners to be sure that the controls they have in mind make sense from a real property perspective.

ASTM E 2091 and guidance issued by federal and state regulators have helped all stakeholders better understand the types of available tools, how to evaluate the relative effectiveness of those tools, and how those tools may have fallen short of their ultimate performance objectives in the past. These efforts need to be continued and expanded to a broader market, such as the real estate and financial communities. Both ASTM and EPA have initiated training programs, and these types of programs are to be encouraged and expanded.

The draft model law effort undertaken by NCCUSL will go a long way toward getting past the obstacles presented by the common law in most jurisdictions. Support from all interested stakeholders will be needed to ensure that this model law, once approved, is introduced and enacted in state legislatures.

Finally, various initiatives are underway in the private sector, and federal and state regulators should encourage the development and evolution of these alternative mechanisms. As we have seen from the evolution of environmental database companies since the early 1990's, the financial incentives in the private marketplace can be a very potent mechanism for filling gaps in the regulatory system. The private sector can play a critical role in making sure that institutional controls are properly implemented, monitored and maintained over time. Systems that are being developed at the present time include the Guardian Trust, a non-profit trust that would assume responsibility for monitoring institutional controls; Terradex, an internet-based tracking system that would link critical information about the contaminants and exposure pathways at a site to the local permitting agency; and consultants who specialize in auditing the institutional controls that have been placed on a site. Federal seed money

2003] INSTITUTIONAL CONTROLS

could substantially advance these nascent efforts.