I. INTRODUCTION

This special issue of the *Duke Environmental Law and Policy Forum* on sustainable development and environmental justice could hardly have better timing, as commentators are calling increasingly upon the United States to make sustainable development the basis for a new generation of environmental law.[1] This spring's National Town Meeting led by the President's Commission on Sustainable Development ("PCSD")[2] may well mark the beginning of a major American campaign to tap sustainable development's exceptional potential.

In this article, I explore the nexus between sustainable development and another "revolution" in environmental law: the proliferation of state and federal policies designed to combat the "brownfields" phenomenon (the existence of abandoned or underutilized urban sites that sit idle in part due to concerns over environmental contamination).[3] Brownfields sites remain idle in part be-

1. *See* Ben Boer, *The Rise of Environmental Law in Asia*, 33 U. RICH

cause of the threat of liability for brownfields developers under CERCLA or its state analogues.[4] The consequences of this threat include the migration of jobs and tax revenues to suburban "greenfields" locations.[5] Thus, states and the federal government are developing and implementing policies designed to promote the redevelopment of brownfields sites, such as voluntary cleanup programs, prospective purchaser agreements, innovative funding arrangements, and so forth.

Both foci of this special issue—sustainable development and environmental justice—are directly relevant to any discussion of brownfields. The link between brownfields and sustainability seems obvious. The Clinton Administration has recently incorporated major features of Vice President Al Gore's "livability agenda." In its recent high-profile announcement proposing increased devolution of environmental funds to state and local governments, this set of initiatives aimed at promoting "smart growth" authorizes $9.5 billion for "Better America Bonds" designed for reclaiming brownfields (among other purposes).[6] Reusing unproductive urban land instead of spoiling "greenfields" land comports with the Brundtland Report's definition of sustainable development. In the words of the PCSD, which adopts the Brundtland formulation,[7] "Brownfields reuse and redevelopment promotes urban revitalization and reduces the development pressures on greenfields."[8]

evolved also seems important. Commentators agree that creating new domestic environmental laws and retooling existing ones is necessary for sustainability.[9] They also find that relying on state and local actors is important.[10] Surely there can be no better implementation of both principles than a set of laws that transforms CERCLA and its state analogues and creates innovative partnerships between the public and private sectors.

Governmental and private sector pronouncements of a connection between brownfields and sustainability are not hard to find. The Environmental Protection Agency seemingly cannot describe any of its brownfields policies without pairing the phrases "sustainable" and "reuse of brownfields."[11] The multi-agency "Brownfields National Partnership Action Agenda" contains a list of initiatives of federal agencies and departments designed to promote "sustainable reuse"

9. In those nations where development of environmental law lags behind the U.S., Professors Ben Boer and Nicholas Robinson see implementing laws as an important first step for sustainable development. *See generally* Boer, *The Rise*, *supra* note 1 (discussing sustainability and the evolution of environmental laws in China, Vietnam and the Asia Pacific region);

The optimal way to ensure that brownfields programs mesh with this body of law—whatever it turns out to be—is to incorporate basic norms of sustainable development about which there is widespread agreement. Those agreed-upon norms are the following: brownfields

cept in those states with whom the EPA has agreed to refrain from pursuing enforcement actions.[26] This brief summary of the brownfields remediation process does not account for the many variations in individual states, some of which I discuss in Part II.

On the federal level, there is considerable activity to promote brownfields redevelopment and reuse. The EPA's "Brownfields Economic Redevelopment Initiative" features a wide array of initiatives.[27] These include (among others): (1) guidance designed to limit risks for property buyers through the use of prospective purchaser agreements;[28] (2) pilot projects pursuing strategies to "test redevelopment models; (3) special efforts directed toward removing regulatory barriers without sacrificing protectiveness; and (4) facilitation of coordinated site assessment, environmental cleanup and redevelopment efforts at the federal, state, and local levels."[29] Another initiative is "Brownfields Showcase Communities" which enables certain cities to serve as laboratories to "promote environmental protection, economic redevelopment and community revitalization through the assessment, cleanup and sustainable reuse of brownfields."[30] Congress has created a targeted tax deduction for brownfields redevelopment[31] and reduced the risk of liability under CERCLA for lenders that become involved with brownfields sites.[32] It has also unsuccess-

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26. At present, only 11 states have signed agreements with EPA Regional Offices that would preclude such enforcement actions. *See infra* note 108 and accompanying text (discussing these "Superfund Memoranda of Agreement"); *see also Superfund Memoranda of Agreement* (unpublished manuscript, on file with author).

27. For discussions of federal brownfields initiatives, see Eisen, *Brownfields of Dreams*, *supra* note 3, at 979-84 and Wolf, *supra* note 3, at 15-16. *See also* United States Environmental Protection Agency, *Office of Solid Waste and Emergency Response, Brownfields Homepage* (last modified March 12, 1998) <http://www.epa.gov/swerosps/bf/index.html>.

28. *See* Guidance on Settlements with Prospective Purchasers of Contaminated Property and Model Prospective Purchaser Agreement, 60 Fed. Reg. 34,792 (1995).

29. *See* United States Environmental Protection Agency, *Office of Solid Waste and Emergency Response, Brownfields Pilots* (last modified March 12, 1999) <http://www.epa.gov /swerosps/ bf/pilot.htm>; Eisen *Brownfields of Dreams*, *supra* note 3 at 980-82; Wolf, *supra* note 3 at 15 (discussing the pilot projects which are funded at up to $200,000).

30. *Id*. *See also* Wolf, *supra* note 3, at 16.

31. The Taxpayer Relief Act of 1997, Pub. L. No. 105-34, § 941(a), 111 Stat. 882, established a tax deduction for certain "qualified environmental remediation expenditures" including some expenses that would otherwise have to be amortized over several years. *See generally* Andrea Wortzel, *Greening The Inner Cities: Can Federal Tax Incentives Solve The Brownfields Problem?*, 29 URB. LAW. 309 (1997).

32. The Asset Conservation, Lender Liability and Deposit Insurance Protection Act of 1996, (to be codified as amended in scattered sections of 42 U.S.C.) creates an exemption from CERCLA liability for a lender that takes any of certain enumerated actions to protect its security interest in a contaminated site. *See also* STRUCTURING REAL ESTATE WORKOUTS:

much about how to translate its normative statement into law. But in

an international treaty, would elevate sustainable development from its current soft law status to an international requirement.[40]

After all this activity, sustainable development still has not been universally accepted as a blueprint for action. Critics call it a "manipulative and confusing slogan,"[41] a "myth,"[42] a utopian reformer's fantasy,[43] a "meaningless post-hoc label used to justify the continuation of the status quo,"[44] or even a buzzword concealing a threat to roll back existing environmental laws.[45] Some see it as oxymoronic, arguing that if one accepts "development," or the now out of fashion "sustainable growth," one submits to ever-expanding consumption of scarce resources.[46] Thus, developing nations may see sustainable development as an imposition on them that allows developed nations' wasteful policies to continue.[47] This relies on an outmoded notion of sustainability as a concept pertaining only to the

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and productive life within nature." IUCN DRAFT COVENANT, at art. 1. *See also* Nicholas A. Robinson, *IUCN's Proposed Covenant on Environment & Development*, 13 , 13

maintenance of resource stocks[48] which ignores both the normative force of simultaneous consideration of social, economic, and environmental factors and the importance of the equity component.[49] The criticism would have more bite if we had termed it "sustainable *environment*" or "sustainable *economy*," as we "would have opened up a rehash of the old preservationism versus resourcism debate that paralyzed environmental law for decades."[50]

Critics also deplore the vague definition of "sustainable development." No one would doubt there is considerable confusion on this point.[51] One scholar has discovered at least *seventy* different definitions, none of which offer much in the way of precision.[52] It does not help to say that Agenda 21's forty chapters "define" sustainable development; resolving the ambiguities in its hundreds of pages of specific proposals is "a bit like being told to follow through on the Bible."[53] However, the definitional imprecision may not matter in the end. Professor J. B. Ruhl argues forcefully that we should treat "sustainable development" as we do "democracy"[54] by refusing to

48. *See, e.g*

allow definitional vagueness to prevent translating a broadly understood concept into hard law.[55]

2. . . . But Still Less Than Hard Law

Despite the lingering criticism, sustainable development is an idea with staying power.[56] In a previous issue of this journal, Professor Ruhl sizes up the current status of sustainable development law in

No state or federal agency has anything resembling a sustainability strategy.[63] The general impression one gets of the atmosphere surrounding sustainable development efforts is of the energy and uncertainty of . . . the early years of personal computing.[64] State and federal regulators use "sustainable" and "sustainable development" as if everyone understands what they mean, which is hardly the case. Surf any agency's Web site[65] and observe that "sustainability" encompasses a wide-ranging assortment of new and existing programs: a notice of a $5,000 grant to a local urban forestry unit, a request for comments on a complicated energy deregulation package, or, perhaps, a description of a state's brownfields program. The Web site of the EPA's Office of Sustainable Ecosystems and Communities (OSEC)[66] lists programs and initiatives under the heading "Integrated Approaches," including case studies of community sustainability programs, projects on climate change issues, and efforts to develop sustainable community indicators, to name just a few.[67] While that is a commendable list of projects, there is no consistent effort to link sustainability and the EPA's regulatory programs.[68]

On occasion, a governmental program appears to be a more conscious effort to incorporate the substance of sustainable develop-

63. Some states have begun to develop statewide sustainability strategies. A Virginia

ment.[69] Some notable examples are the EPA's grant programs aiming to spur creation of innovative frameworks to guide urban development. The EPA's "Sustainable Development Challenge Grant" program funds projects "to promote long-term investment in sustainable development" in such areas as developing "regional governance processes for better management of urban development."[70] The brownfields analogues are the EPA-funded pilot projects,[71] some of which seem to have been designed with sustainability objectives in mind. For example, the Portland, Oregon project has set out to involve a broad spectrum of community members in brownfields decisions.[72]

It is important, however, to differentiate between a governmental program that advances *components* of the sustainable development agenda and one that reflects "a conscious effort to craft an integrated sustainable development approach."[73] The pilot projects, unfortunately, fall into the former category. Though many have yielded promising ways to conduct site assessments and remediation planning, the $200,000 funding ceiling ensures each project rarely does more than create a mechanism for governing remediation activities at a demonstration site.[74] These and other EPA sustainability

69. Professor Ruhl notes this trend with respect to certain recently enacted federal environmental laws. *See* Ruhl, *The Seven Degrees of Relevance*, *supra* note 9, at 288 n.46.

70. The SDCG program objectives include "partnering among community members, business and governmental entities to work cooperatively to develop flexible, locally-oriented approaches that link place-based environmental management and quality of life activities with sustainable development and revitalization." *Financial and Technical Resources: 1998 SDCG Federal Register Notice - Solicitation of Proposals* (last modified Nov. 9, 1998) <http://yosemite.epa.gov/osec/osechome.nsf/all/g-sdcg.html>. Brownfields-related projects are eligible for grants. *See id*. *See also* Matthew W. Ward et al., *National Incentives for Smart Growth Communities*, 13 NAT. RESOURCES & ENV'T 325, 327 (1998).

71. *See also* Ward et al., *supra* note 70, at 327 (discussing the Sustainable Development Challenge Grant program and the Brownfields Action Agenda pilot projects).

72. *See Portland Brownfields Initiative: Community Strategies to Recycle Land* (last modified Nov. 23, 1998) <http://www.brownfield.org/>. *See also* Wolf, *supra* note 3 at 23 n.92 (noting that recent solicitations for brownfields pilot proposals call *inter alia* for "applications that demonstrate the integration or linking of . . . pilots with . . . *local sustainable development* . . . programs").

73. Ruhl, *The Seven Degrees of Relevance*, *supra* note 9, at 288, 746.0.eci

74. *See, e.g.*, *Region 3 Brownsfields Pilots: Richmond, VA* le D

programs are simply not comprehensive enough to amount to an organized effort to implement Agenda 21.[75]

3. A Prudent, "Adaptive" Approach To Attaining Sustainability

Without sustainable development "law," there are no adverse consequences to employing nominal means for bringing sustainability about, or even maintaining a certain fuzziness about the definition of sustainability. At the "fifth degree of relevance," the idea of sustainability may have pervaded the collective governmental consciousness, but it is still just that—an idea. Consequently, there is still a wide range of perspectives on sustainability programs. To sympathetic commentators, they are embryonic formulations of strategies and goals. To critics, they are slapdash uses of the "sustainable" label or even cynical *post hoc* justifications of existing programs.

Where do we go from here? Professor Ruhl's article provides milestones for assessing our progress toward the "hard law" stage, but he observes quite correctly that "it is far too early to predict the outcome in terms of the finished product . . . ."[76]

strategies.[79] This "total makeover" approach would address the lack of consistency among laws so frequently decried by commentators.[80] Those who want to "reinvent" regulation[81] could agree to start over with sustainable development as an organizing principle.

However, this policy path is an unlikely one. Historically, environmental law has shown a propensity to evolve in a nonlinear fashion that defies our attempts to impose order. Likewise, sustainable development law surely will develop through a similar process of evolution and experimentation. As one commentator observes, the "framework of a new paradigm of [sustainable development] law cannot be built in the proverbial 'day.'"[82] Two of our foremost environmental law scholars have called upon other disciplines to explain this dynamic: Professor William Rodgers invokes the metaphors of evolutionary biology,[83] and Professor Ruhl relies on the "complex adaptive systems" theory to illustrate environmental law's intricacies.[84] Professor Ruhl endorses an experimental approach to sustain-

79. *See id.* at 33.

80. *See, e.g.*, CASS R. SUNSTEIN, AFTER THE RIGHTS REVOLUTION: RECONCEIVING THE REGULATORY STATE 93-94 (1990) (observing that "failures of coordination" lead to "inconsistency and incoherence in the law").

81. *See id.*at 84-102 (for a comprehensive discussion of the many criticisms of governmental regulation (including environmental statutes and regulations));

ability programs, championing "adaptive management"—"'the concept of experimentation to the design and implementation of natural-resource and environmental policies'"[85]—as the process for attaining sustainability. Ruhl comments that, "we do not really know how to get to either a sustainable economy or sustainable development. Failure to experiment, in other words, would be folly."[86] Others might call this a path toward achieving a solution for a "second-best" world.[87]

Brownfields proponents are quick to argue that this is exactly what they are doing: experimenting and reinventing law in the states' "laboratory of ideas."[88] But, it is important that this reinvention incorporates the core principles of sustainable development. Experiments in the brownfields arena will only crystallize into a body of sustainable development law if these core principles are included and followed.[89] To argue otherwise is to run the risk of negative consequences stemming from the failure to adopt sustainable development as an organizing principle. We may disagree about the details of sustainable development, but "[w]ithout some clarity and social consensus about the characteristics of [sustainable] places, it will be difficult to achieve a more positive result . . . [Sustainable development] is a

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Professor Ruhl's insights are elaborated further in J.B. Ruhl & Harold J. Ruhl, Jr., *The Arrow of the Law in Modern Administrative States: Using Complexity Theory to Reveal the Diminishing Returns and Increasing Risks the Burgeoning of Law Poses to Society*, 30 U.C. DAVIS L. REV. 405 (1997); J.B. Ruhl, *Complexity Theory as a Paradigm for the Dynamical Law-and-Society System: A Wake-Up Call for Legal Reductionism and the Modern Administrative State*, 45 DUKE L.J. 849 (1996); J.B. Ruhl, *The Fitness of Law: Using Complexity Theory to Describe the Evolution of Law and Society and Its Practical Meaning for Democracy*, 49 VAND. L. REV. 1407 (1996).

85. Ruhl, *Thinking of Environmental Law, supra* note 1, at 996 (quoting KAI N. LEE, COMPASS AND GYROSCOPE 53 (1993)).

86. *Id.*

87. For a provocative discussion of "second-best" theory, see John J. Donohue III, *Symposium on Second-Best Theory and Law & Economics: Some Thoughts on Law and Economics and the General Theory of Second Best*, 1 Tfı˝Ei85.c5.ı˝/c524ı˝1 Tm˝0 Tcı˝(Hu 1 (8 0 0 6.48 45)Tjı˝/F7ar)-10s, ˝6.48 0 0 8[(.-)9(K)]TJı˝ (containing symposium on the theory and articles on pollution taxes and public utility regulation).

8 8 . T *See* New State Ice Co. v. s u s Liebman, 285 U.S. 262, 311 (1932) (Brandeis, J. dissenting) (stating that, "It is one of the happy incidents of the federal system that a single courageous state may, if its citizens choose, serve as a country"). *See also* Robert R. Kuehn, *The Limits of Developing Enforcement of Federal Environmental Laws*, 0 T UL.

better model for planning and managing in the future, and [a] vast improvement over our current way of thinking about communities."[90]

Unfortunately, we do not have the benefit of hindsight from future decades, when there may well be a fully developed body of sustainable development law. For all we know, any of today's experiments could be a precursor to a more evolved understanding of sustainable development, a false start or even a detour from the correct policy path. Many earnest attempts to provide guidance follow an Agenda 21-like strategy, articulating an all-things-to-all-people list of prerequisites for sustainability. But other scholars have done an outstanding job of distilling the mandate of sustainable development down to three prerequisites for any program claiming to be a foundation of sustainable development law. The first prerequisite builds upon the notion that regulators must make a "concerted effort to progressively integrate governmental decisionmaking [sic] on environmental, social, and economic issues . . . ."[91] The second prerequisite reflects the reality that governments must ensure that policy decisions actually further sustainable development goals. The final prerequisite recognizes that programs must be designed to achieve "equity," the third element of the sustainable development agenda.

A. *Brownfields Programs Require Procedures Designed To Integrate Simultaneous Consideration Of Economic, Environmental, and Equity Goals ("Procedural Integration")*

The first core principle emanates from Chapter 8 of Agenda 21, "one of the more important sections of the document in terms of legal implementation of sustainable development, . . ."[93] Chapter 8 calls upon governments to: integrate environment and development at the policy, planning and management levels; adopt a national strategy for sustainable development; provide an effective legal and regulatory framework; make effective use of economic instruments in market and other incentives; [and] establish systems for integrated environmental and economic accounting.[94]

Like most of Agenda 21, this principle is vague. What governmental policies count, and how do they "integrate environment and development"? Doesn't much of modern American environmental law implement this mandate, i.e., the environmental impact statement requirement of the National Environmental Policy Act ("NEPA") serving to "[i]ntegrate environment and development,"[95] the Clean Air Act emissions trading system incorporating market incentives,[96] and so forth?

Interpreting Chapter 8, Professor Dernbach reaches a different conclusion. He calls upon governments at all levels to foster "procedural integration" by creating processes for simultaneous and coordinated consideration of social, environmental, and economic goals.[97] A key feature of this is curbing regulatory tunnel vision. In this view, governments have fundamental responsibilities to ensure

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93. Boer, *Institutionalising Ecologically Sustainable Development*, *supra* note 1, at 323.

94. *See id.* at 324.

95. Several commentators have termed NEPA a precursor to an American sustainable development ideal. *See* Dernbach, *Agenda 21*, *supra* note 38, at 10520 (NEPA is "part of the legal and policy foundation necessary to build [a U.S. sustainable development] strategy."); Ruhl, *The Seven Degrees of Relevance*, *supra* note 9, at 278 n.10 ("NEPA may play an important role in rediscovering a pre-existing national commitment to . . . sustainable development.").

96. Title IV of the Clean Air Act (codified as amended at 42 U.S.C. §§ 7651-7671 (1996)) created the market-based system for trading sulfur dioxide allowances. *See generally*, James E. Krier, *Marketable Pollution Allowances*, 25 U. TOL. L. REV. 449 (1994); Henry E. Mazurek, Jr., *The Future of Clean Air: The Application of Futures Markets to Title IV of the 1990 Amendments to the Clean Air Act*, 13 TEMP. ENVTL. L. & TECH. J. 1 (1994).

97. Dernbach, *Sustainable Development*, *supra* note 1, at 47; *compare* Eileen Gauna, *The Environmental Justice Misfit: Public Participation and the Paradigm Paradox*, 17 STAN. ENVTL. L.J. 3, 50 n. 214 (1997) (calling for integrated decision-making with respect to hazardous waste disposal site locations).

consideration of all environmental costs and benefits from a project's inception, in order to avoid making unsound and irreversible decisions at an early stage.[98] Integrated procedures also require coordination of decision-making authority to prevent a government's right hand from not knowing what the left hand is doing, as is the case, for example, when a national agriculture ministry subsidizes wasteful practices and leaves it up to the environment ministry to clean up the damage.[99] As Professor Dernbach demonstrates masterfully, many American environmental laws do not fully measure up to the standards of procedural integration.[100]

In considering "procedural integration" in the brownfields setting, I examine three significant steps: how states administer brownfields cleanups; how, with federal oversight, states determine cleanups' sufficiency; and how, if at all, localities review projects.

1. The EPA's Failed Attempt to Insist on Uniform VCP Procedures

When the brownfields remediation process begins, developers have already calculated project benefits and costs.[101] States are not usually required to second-guess these assessments, confining their involvement with developers' applications to a completeness review. Often, there is also little meaningful review during the remediation process itself. Some states require developers to enter into enforceable consent agreements; others involve the state extensively in approving work plans and supervising the cleanup process. These states

98. *See id.*; *see also* BEATLEY & MANNING, *supra* note 8, at 38 ("Sustainn74˝(100)T5(n)(74h9(.)SfTmı˝0.e(a)0(in)5(n)(74˝(100)˝(

are in the minority. Most allow the developer to operate more or less independently with little or no state oversight beyond a review of documentation submitted at the end of remediation activities.[102]

The typical process thus falls far short of the procedural integration ideal. Throughout the life of the project, states delegate responsibility for making significant decisions about environmental, economic, and equity issues to developers. With the state's role being minimized or deferred to the end of the project, the process fails to consider costs and benefits *ab initio* or conduct full environmental accounting throughout the process.[103]

No single governmental agency engages in the searching project review required under Agenda 21. Of course, that is exactly what states want. They traffic in the late-90s lexicon of lightening governmental burdens: VCPs are designed to "streamline" redevelopment[104] or "reduc[e] process barriers."[105] Elaborate procedures would only hamper the goal of returning brownfields sites to commerce.

Given the states' resistance to integrated procedures, the federal government is the only actor capable, by invoking its mandate under CERCLA, of ensuring that brownfields redevelopment achieves sustainable development's procedural objectives.[106] But federal involvement in overseeing brownfields cleanups is anathema to the states.[106] El s an 5(ew r5(ew rd(y what)-6aevec-4(i)-5deba5(eanup5(n)2(ove-5(vem)-)-5(l)-5

guidance a "disastrous mistake"[113] that would do "severe damage to state brownfield initiatives"[114] and "create further obstacles to

an important analysis that would have allowed for consideration of all environmental impacts of brownfields projects.

Recognizing the extensive differences in VCPs, the EPA had also agreed to sign off only on sites remediated in approved programs which contained six specified features.[120] This drew heavy fire from commenters, one of whom observed that the federal baseline would "give[ ] EPA veto power over state laws."[121] The EPA planned to approve a VCP only if it "provide[d] opportunities for meaningful community involvement . . . responsive to the risk posed by the site contamination and the level of public interest," including notice and other requirements.[122] The EPA's proposal recognized that many VCPs require notice or a brief notice-and-comment period, while others require no public outreach efforts whatsoever.[123] Thus decisions on site uses and cleanup standards are often precluded from community scrutiny, the first issue having been decided by developers and the second often determined by a generic cleanup standard.[124] The EPA's attempt to bring community members into the process was overwhelmingly rejected as tending to "indirectly impose cost and procedural impediments on brownfields developers."[125]

Other criteria called on states to "provide adequate oversight to ensure that voluntary response actions . . . are conducted in such a manner to assure protection of human health, welfare and the envi-

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at 47502 (factors leading to designation as a Tier I site); State Attorneys General Comment, *supra* note 114, at 3.

120. *See EPA Draft SMOA Guidance*, *supra* note 108, at 47497 ("This guidance is intended to be flexible enough to accommodate variability among State voluntary cleanup programs; however, the guidance does describe a minimum set of criteria that a State voluntary cleanup program should meet before EPA signs an MOA with the State concerning its voluntary cleanup program."). The draft guidance also recognized that brownfields policies are constantly changing, providing for periodic EPA reviews of its approval and for a review if a state made "significant changes" to its VCP. *Id.* at 47498-99.

121. Gov. E. Benjamin Nelson, Chair, Comm. on Nat. Res. and Gov. Mark Racicot, Vice Chair, Comm. on Nat. Res., Nat'l Governor's Ass'n, Comment on *EPA Draft SMOA Guidance*, Oct. 3, 1997, EPA Docket MOA-2-22 at 1.

122. *See EPA Draft SMOA Guidance*, *supra* note 108 at 47499. Ten methods of public involvement were deemed acceptable. *Id.*

123. *See* Eisen, *Brownfields of Dreams*, *supra* note 3, at 972-77 (discussing public participation provisions in VCPs). S*ee generally* BROWNFIELDS LAW AND PRACTICE, *supra* note 20 (discussing state VCP public participation requirements and comparing them to those of CERCLA).

124. *See* Eisen, *Brownfields of Dreams*, *supra* note 3, at 998-1020.

125. Detroit Renaissance Comment, *supra* note 118, at 2. While most commenters objected to requiring public participation, not all did so. *See* U.S. Conference of Mayors Comment, *supra* note 118 at 4 (the minimal requirement of notice gave localities flexibility); Mary Beth Tuohy, Ass't Comm'r., Indiana Dep't of Envtl. Mgmt., Comment on *EPA Draft SMOA Guidance*, Oct. 24, 1997, EPA Docket MOA-2-52 at 2.

ronment . . ." by, among other means, incorporating the CERCLA preference for permanent cleanups, and including "a requirement that the State program receives progress reports on site conditions, or [reserves] the State program's right to conduct site inspections."[126] The states rejected these proposals. Once again, they resisted any EPA role in deciding whether a brownfields cleanup protects human health and the environment.[127] As I demonstrate more fully in the next section, the EPA proposal responded to an important procedural shortcoming of state programs, namely, the lack of consistent and effective means to guarantee that cleanups remain protective over time.[128]

Bowing to the inevitable, the EPA withdrew the draft in January 1998.[129] Though no one recognized it as such, this experience can be reconceptualized as an early battle to stake out positions in the evolution of sustainable development law. One could easily recast the EPA's proposals on major areas of disagreement as attempts to bring "procedural integration" to the brownfields process, and states' responses as demonstrating strong resistance. After this debacle, there is no consistent "procedural integration" in brownfields policies, nor can most developers have the protection from CERCLA liability they desire.

To break this logjam, some change along the substantive lines of the failed guidance is necessary. The brownfields process need not be federalized.[130] Instead, Congress could either amend CERCLA to

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126. *EPA Draft SMOA Guidance*, *supra* note 108, at 47,500.

127. *See, e.g.*, David B. Struhs, Comm'r., Executive Office of Envtl. Affairs, Mass. Dept. of Envtl. Protection, Comment on *EPA Draft SMOA Guidance*, Oct. 23, 1997, EPA Docket MOA-2-16 at 5 (calling the EPA's attempt to impose these criteria "condescending").

128. *See infra* notes 145-169 and accompanying text (discussing the importance of ensuring protectiveness of brownfields cleanups in the future).

129. *See* Withdrawal of Proposal: Final Draft Guidance for Developing Superfund Memoranda of Agreement Concerning State Voluntary Cleanup Programs, Memorandum From Timothy Fields, Jr., Acting Ass't Adm'r., EPA Ofc. Of Solid Waste and Emerg. Response, and Steven A. Herman, Ass't Adm'r., EPA Ofc. Of Enforcement and Compliance Assurance, to EPA Regional Administrators, Regions 1-10, Nov. 26, 1997 (on file with author).

130. Professor Buzbee has proposed a "Cleanup Approval Process," a federally-sanctioned method of remediating brownfields sites that would parallel the structure of other federal environmental laws. *See* William W. Buzbee, *Remembering Repose: Voluntary Contamination Cleanup Approvals, Incentives, and the Costs of Interminable Liability*, 80 MINN. L. REV. 35, 100-04 (1995) [hereinafter Buzbee, *Remembering Repose*].

As Professor Buzbee later observed, "[c]ritical to rehabilitating Brownfields are questions about which levels or units of government should be involved in such efforts." Buzbee, *Institutional Determinism*, *supra* note 3, at 1. Evolving notions of environmental federalism probably require a split of responsibility between federal and state governments in this area. *See* Daniel C. Esty, *Revitalizing Environmental Federalism*, 95 MICH. L. REV. 570, 613 (1996) (noting that

zoning frameworks ensure citywide analyses of brownfields projects. As my former student Patrick Skelley has demonstrated, however, rezoning is not necessary for most brownfields projects.[135]

The site-specific inquiry is antithetical to the community-wide approach of evaluating environmental impacts that sustainable development requires.[136] As one brownfields proponent observes, "You can't address one isolated brownfield and expect it to survive alone."[137] In a recent article, my colleague Michael Allan Wolf recognizes the need for a citywide approach to evaluating the impacts of brownfields reuse and redevelopment. He proposes a "Protective Land-Use Scheme," the "heart" of which is a new zoning classification, the "Brownfield Investment Zone" (BIZ), to "create a uniform method for assuring a zone of comfort around certain brownfields."[138] The BIZ proposal uses regulatory tools already in place and could govern today's brownfields experiments. The same cannot be said of citywide sustainability planning processes which are underway in only a few cities (besides Chattanooga, notable examples include Seattle and San Francisco).[139] The BIZ proposal also uses a process which, despite its well-known drawbacks,[140] is oriented to contemplation of

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Of course, there is widespread concern that current environmental laws fail to take account of problems posed by the interaction of multiple chemicals and the presence of multiple sources of contamination. *See, e.g.*, Frances H. Irwin, *An Integrated Framework For Preventing Pollution and Protecting the Environment*, 22 ENVTL. L. 1, 15 (1992) ("[T]he present [environmental law] approach often fails to account for multiple sources of exposure."); Robert R. Kuehn, *The Environmental Justice Implications of Quantitative Risk Assessment*, 1996 U. ILL. L. REV. 103, 121 (risk assessment policies "rarely take synergism into account"); William D. Ruckelshaus, *Twentieth Anniversary Commemorative: The Role of the Environmental Protection Agency*, 19 B.C. ENVTL. AFF. L. REV. 725, 725 (1992) (statement by a former EPA Administrator that "[w]e know very little about the additive and synergistic effects of diverse contaminants in our environment").

135. *See generally* Patrick J. Skelley II, *Public Participation in Brownfield Remediation Systems*, 8 FORDHAM ENVTL. L.J. 389 (1997). Florida's brownfields statute is relatively un-

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sustainable development unless it ensures that urban residents will enjoy a safe and healthy environment in the future.

To brownfields boosters, though, dealing with the past is what matters. Their view of the remediation process looks primarily to the past: cleaning up contamination at abandoned sites to spur their redevelopment and working around real or perceived barriers. This is not to say that the future is completely irrelevant. State VCPs that use generic cleanup standards make the future use of each site a consideration.[146] Beyond this, however, the future is of little import, as little attention is paid to the condition of brownfields sites after initial cleanups.

There are three primary concerns about the post-remediation future of a brownfields site. The first and perhaps the only one which is adequately addressed in current programs is the likelihood that the

that a limitation of the property to specified uses will be recorded with the deed and run with the land.[150] Professor Wolf and I argue this servitude-based approach might not allow adjoining residents to prevent undesirable impacts.[151] In the failed SMOA guidance, the EPA also found the use of common law tools insufficient. It suggested that states should reserve "authority to remove the cleanup certification under certain circumstances, such as a change in the site's use, a failure of institutional controls, or the discovery of additional contamination."[152] Some statutes, such as Florida's new brownfields statute, do include reopeners of this sort.[153]

The third important question is whether brownfields cleanups will result in reduced urban pollution. Experience to date shows industrial redevelopment is common at brownfields sites, raising the possibility of "repollution."[154] *Lessons From the Field*'s case studies demonstrate that industrial users are prized for jobs and tax revenues they provide.[155] Yet no developer need prove it will not contaminate a site. As one might imagine, the typical reopener clause does give the state authority to pursue an enforcement action against a repolluter.[156] Assuming the state was inclined to flex its regulatory muscle at a brownfields site, which, as noted above, is not necessarily a good assumption, it would face significant hurdles, including the problem of distinguishing between historical and post-cleanup contamination. This determination would be particularly difficult if the nature of the development on the site was such that it obscured the contamination.[157]

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150. *See* Eisen, *Brownfields of Dreams*, *supra* note 3, at 949; Wolf, *supra* note 3, at 38.

151. Professor Wolf explains:

> [A]s every first-year, property law student schooled in the intricacies of common-law servitudes could testify, the most common form of use restriction found in private law—the real covenant— is an eminently unwieldy and unreliable mechanism to bind subsequent purchasers of the brownfield parcel to the promises made by the original redeveloper.

Wolf, *supra* note 3, at 39.

152. *EPA Draft SMOA Guidance*, *supra* note 108, at 47500.

153. *See* FLA. STAT. ch. 376.82(3)(d)-(e) (1998); *see also* Koch, *supra* note 33, at 207.

154. *See, e.g.*, Wolf, *supra* note 3, at 22 n.90 (citing Eisen, *Brownfields of Dreams*, *supra* note 3, at 1004 n.552).

155. In eight case studies, the designated use of the site after remediation was "industrial"; in several others, part of the site was dedicated to industrial uses. *See* Pepper, *supra* note 92, at 5-6.

156. *See* Eisen, *Brownfields of Dreams*, *supra*

Marginalizing concern for the future in these ways mortgages the sustainability of cities in favor of short-term gains. Fortunately, one commentator proposes a comprehensive solution to this problem. Professor Wolf's PLUS scheme contains a set of six features designed to complement the zoning designation and ensure the protection of brownfields cleanups.[158] For example, to ensure that improper use is not made of a parcel remediated to a use-specific cleanup level, he proposes a "devastation easement," a new form of conservation easement in which "any inherent 'right' to develop or use the BIZ parcel for anything other than industrial purposes will be transferred . . . from the landowner to a governmental unit, preferably the state, with local neighborhood organizations as co-owners."[159] To combat the potential for repollution at brownfields sites, he proposes that each developer post a performance bond that "could 'roll over' into a 'perpetual maintenance' policy, ..."[160]

These are excellent ideas directly oriented to achieving "substantive integration" objectives. I would add another: states and localities must develop measurable indicators of progress to ensure that brownfields initiatives are evaluated and updated in a meaningful way.[161] Professor Ruhl sees this as critical to an adaptive approach to attaining sustainability, observing:

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therein.

158. The goals of PLUS are to "(1) protect[ ] local residents from the increased risks attributable to brownfields remediation at lower-than-CERCLA levels, and (2) guarantee[ ] that only industrial uses will be permitted on the reused site." The complete set of features includes the following:

> (1) "devastation easements," (2) CIS-enhanced brownfields inventories; (3) a "Megan's Law" for brownfields, even formerly contaminated, reused sites; (4) easements or set-asides in fee to create buffer zones; (5) pre-construction bonds to guarantee remediation completion and to fund perpetual maintenance; and (6) environmental awareness and safety programs.

See Wolf, *supra* note 3 at 42, 44-47. *But see* Eisen, *Brownfields of Dreams*, *supra* note 3, at 1023-24 (calling for enhanced risk communication programs, similar to the sixth element of the PLUS scheme).

159. Wolf, *supra* note 3 at 44.

160. *Id.* at 47. The ASTM's "Standard Guide to the Process of Sustainable Brownfields Redevelopment" encourages developers to maintain environmental insurance for this purpose. *See Standard Setter Weighs*, *supra* note 14, at 6.

161. I am hardly alone in calling for the development of appropriate sustainability indicators. *See, e.g.*, Dernbach, *Sustainable Development*, *supra* note 1 at; Ruhl,

> As Professor James Salzman has posited, . . . valuations of 'nature's services' can be used to create indices of ecosystem sustainability, which, when combined with improved economic and social sustainability indices, can be used the same way Wall Street uses stock performance indices to make adaptive decisions.[162]

Developing "indices of ecosystem sustainability" is obviously not

have done little more than note common themes[178] or assume a link without much analysis.[179]

"Equity" and "environmental justice" overlap in significant ways. In a democratic society, protecting the environment for future generations cannot be done without attention to legitimate distributional concerns.[180] However, as Professor Ruhl demonstrates ably, there are differences between the two.[181] The former was originally grounded in the tension between developed and developing nations[182] and in the evolving concept of intergenerational equity.[183] The latter began as a piercing response to inequities in siting of hazardous waste facilities and similar concerns.[184] Both Professors Ruhl and Dernbach conclude that "equity" is broader than the set of concerns advanced by the American environmental justice movement.[185] "It is quite possible," Ruhl says, "that the law of sustainable development will eventually catch up with and then subsume the law of environmental justice."[186] In this issue, he examines how that may occur.[187]

For now, I address environmental justice advocates' concerns about brownfields policies, recognizing that achieving "equity" will

178. *See, e.g.*, Torres, *supra* note 51, at 618-20.

179. *See, e.g.*, Robin Morris Collin & Robert Collin, *Where Did All the Blue Skies Go? Sustainability and Equity: The New Paradigm*, 9 J. ENVTL. L. & LITIG. 399, 445 (1994) (arguing that environmental justice is an indispensible component in the quest for urban sustainability). For a contrary perspective, see Kent E. Portney, *Environmental Justice and Sustainability: Is There a Critical Nexus in the Case of Waste Disposal or Treatment Facility Siting?*, 21 FORDHAM URB. L.J. 827, 827 ("[T]he pursuit of environmental justice may, at least conceptually, undermine goals of sustainability.")

180. *See* Torres, *supra* note 51, at 618-19.

181. *See* Ruhl, *Co-Evolution*, *supra* note 177, at 182-85.

182. *See* Dernbach, *Sustainable Development*, *supra* note 1, at 16; Eisen, *Toward a Sustainable Urbanism*, *supra* note 41, at 3 (sustainable development can "address equity concerns, such as achieving a just dist10(nc˝2.6n10(u)10(t)11(s5aeS4.7ach)7s)7(tain) 185.56 350.67 Tm˝(RB)Tj˝8.04 0 0 8.v˝0.001s8[T8.0eT91(T)

require even more attention. One policy path to this goal might be to apply current laws to brownfields programs. There is no well-defined body of "environmental justice law" *per se*, but rather a scattered set of pronouncements that reinterprets existing laws, such as Title VI of the Civil Rights Act, to address environmental justice issues.[188] As Professor Ruhl observes, it is still far too soon to predict the eventual shape of environmental justice law,[189] and adopting its current legal proxies would require us to deal with all the uncertainties about the effectiveness of laws not designed specifically to address environmental justice concerns.[190] We would be better off enumerating specific core principles, incorporating them in brownfields programs, and revisiting them if necessary.

Perhaps the most important core principle is broad-based public participation in brownfields remediation efforts, which is both consistent with Agenda 21[191] and important for a VCP's success. Professor Wolf notes: "[t]here is . . . strong sentiment that public participation is the public policy component that most efficiently addresses environmental justice concerns" at brownfields sites.[192] The National Environmental Justice Advisory Council's report on environmental justice and brownfields policies calls for expanded public participation,[193]

188. *See* Ruhl,

as does the draft ASTM standard.[194] Three years ago, I called upon states to provide "meaningful input by the surrounding community" in the two areas typically of most concern to them: "decisions on site uses and cleanup activities."[195] At the time, public participation was not widely accepted because public outreach efforts could threaten to delay a project interminably, perhaps even causing a developer to abandon it. Many perceived it as incompatible with the streamlining spirit of VCPs.[196] As noted earlier, many state brownfields statutes reflected this attitude, providing few if any public input opportunities.

However, there has been a sea change in opinion. Proponents have now come to believe public participation is essential for projects to succeed. In a recent article, a team of policy analysts concludes, "Community relations can make or break a brownfields project."[197] *Lessons From The Field* demonstrates the importance of public participation, stating that,

The obvious response to this problem would be to incorporate meaningful public participation requirements in state statutes. Florida's brownfields statute, adopted in 1997, is noteworthy for aiming to do just that.[200] Under that statute, environmental justice advocates have opportunities for input in the public hearing supporting a locality's designation of a "brownfield area" for redevelopment (when a hearing is necessary),[201] and the deliberations of an "advisory committee" established to make recommendations about the cleanup of an

Sustainable development requires us to reject this *ad hoc*, politicized approach to urban redevelopment. *Lessons From The Field* notes, "brownfield initiatives should dovetail with a community's 'vision' for growth."[215] The process of articulating that vision should feature public input. An example of a more inclusive sustainability planning process is that of Chattanooga, where "[t]he city has achieved economic prosperity, greater social equity, and a higher quality environment by using a broad-based citizen involvement process to set and achieve goals."[216] However, while broad-based public participation processes are important, we must heed Professor Wolf's caution about relying on public outreach efforts as a "panacea." The other reforms discussed in this Article are important as well.

Consider this example of Pfizer Inc.'s 1998 announcement that it would build a research facility in Connecticut: "Before announcing it would build a facility in New London, Pfizer worked out a wide-ranging deal with the state and local officials covering financial incentives, community development and liability." *Pfizer provides return on cleanup investment*, THE BROWNFIELDS LETTER, Nov. 1998, at 1. The state recruited Pfizer, extending it incentives totaling almost $75 million, including $9 million for complete remediation of the site under the state's brownfields program. *Id. See also* Tom Condon, *Sweet Smell of Success Drifting Into New London*, H

IV. CONCLUSION

As Professor Ben Boer has noted, "[t]he question of sustainability will continue to be high on the political agenda in coming years."[217] The only real remaining question of any significance is how to manage the discussion's end game.

For now, the link between brownfields and sustainability must be more than something built on assumptions. Attaining the societal goal of sustainable development requires institutions at all levels of government to implement strategies to ensure that economic development, social goals, and environmental regulation go hand in hand. The failure of state VCPs and federal policies to reach this level is readily apparent when one evaluates these laws and policies under the three core principles for implementing sustainability.

The upcoming National Town Meeting provides an excellent opportunity to recognize a strong connection between brownfields policies and sustainable development by declaring a goal of making these core principles part of the foundation of every state VCP and federal brownfields program. To those who would respond that "sustainable development" is too vague or the specifics of implementing it in the brownfields arena elude definition or agreement, my response is simple: follow my reform proposals and those advocated by commentators Wolf, Buzbee, Abrams, Kibel, and Poindexter, and the rest may well take care of itself.

217. Boer, *Institutionalising Ecologically Sustainable Development*, *supra* note 1, at 358.