

1-1-2000

Reforming State Brownfield Programs to Comply with Title VI

Bradford Mank

University of Cincinnati College of Law, brad.mank@uc.edu

Follow this and additional works at: http://scholarship.law.uc.edu/fac_pubs

 Part of the [Civil Rights and Discrimination Commons](#), and the [Environmental Law Commons](#)

Recommended Citation

Mank, Bradford, "Reforming State Brownfield Programs to Comply with Title VI" (2000). *Faculty Articles and Other Publications*. Paper 117.

http://scholarship.law.uc.edu/fac_pubs/117

This Article is brought to you for free and open access by the Faculty Scholarship at University of Cincinnati College of Law Scholarship and Publications. It has been accepted for inclusion in Faculty Articles and Other Publications by an authorized administrator of University of Cincinnati College of Law Scholarship and Publications. For more information, please contact ken.hirsh@uc.edu.

REFORMING STATE BROWNFIELD PROGRAMS TO COMPLY WITH TITLE VI

*Bradford C. Mank**

I. INTRODUCTION

A major disagreement exists about whether the redevelopment of contaminated "brownfield" properties in low-income and minority neighborhoods is essential for economic development in those areas, or whether it exacerbates existing cumulative pollution problems in these communities.¹ The U.S. Environmental Protection Agency ("EPA") has not yet resolved how to balance its interest in promoting economic development of brownfields in minority communities with its obligations under Title VI of the 1964 Civil Rights Act² to prevent states and local governments from discriminating against minorities.³ This Article will discuss whether state voluntary cleanup statutes violate Title VI and proposes several ideas to reduce the possibility that a brownfield project will cause adverse disparate impacts to a minority group. It proposes several ways to increase participation by minority communities in the brownfield redevelopment process and to collect more and better information about possible health impacts on those communities.

Many developers avoid redeveloping abandoned former industrial sites because they fear the environmental liability they may incur in cleaning up the property before they can reuse it.⁴ To address this prob-

* Professor of Law, University of Cincinnati; J.D., Yale Law School, 1987; A.B., Harvard, 1983.

1. See Joel B. Eisen, *Brownfield Policies for Sustainable Cities*, 9 DUKE ENVTL. L. & POL'Y F. 187, 219-21 (1999); Paul Stanton Kibel, *The Urban Nexus: Open Space, Brownfields, and Justice*, 25 B.C. ENVTL. AFF. L. REV. 589, 605-13 (1998); *infra* notes 10-15 and accompanying text.

2. 42 U.S.C. § 2000d (1994).

3. See REPORT OF THE TITLE VI IMPLEMENTATION ADVISORY COMMITTEE, NEXT STEPS FOR EPA, STATE, AND LOCAL ENVIRONMENTAL JUSTICE PROGRAMS 19-20 (1999) [hereinafter REPORT OF THE TITLE VI ADVISORY COMMITTEE].

4. See CHARLES BARTSCH & ELIZABETH COLLATON, BROWNFIELDS: CLEANING AND REUSING CONTAMINATED PROPERTIES vii-viii, 1-3 (1997); Todd S. Davis & Kevin D. Margolis, *Defining the Brownfields Problem*, in BROWNFIELDS: A COMPREHENSIVE GUIDE TO REDEVELOPING CONTAMINATED PROPERTY 3, 3-14 (Todd S. Davis & Kevin D. Margolis eds., 1997); Joel B. Eisen, "Brownfields of Dreams"?: *Challenges and Limits of Voluntary Cleanup Programs and Incentives*, 1996 U. ILL. L. REV. 883, 886-87, 898-912 (1996); Stephen M. Johnson, *The Brownfields Action Agenda: A Model for Future Federal/State Cooperation in the Quest for Environmental Justice?*, 37 SANTA CLARA L. REV. 85 (1996); Douglas A. McWilliams, *Environmental Justice and Industrial Redevelopment: Economics and Equality in Urban Revitalization*, 21 ECOLOGY L.Q. 705 (1994); Larry Schnapf, *State-by-State Survey of Brownfield and Voluntary Cleanup Programs*, 28 Env't Rep. (BNA) 2488, 2488 (Mar. 27, 1998); R. Michael Sweeney, *Brownfields Restoration*

lem, state and federal brownfield programs seek to encourage the redevelopment of environmentally contaminated land, especially abandoned or underused former industrial sites in impoverished inner-city communities.⁵

While EPA has pursued several initiatives to encourage reuse of brownfield sites,⁶ states have supervised most brownfield cleanups.⁷ By 1998, forty-four states had voluntary cleanup statutes that frequently reduced cleanup standards, limited future environmental liability, and expedited administrative approval for many contaminated sites.⁸ EPA has shown greater interest in brownfield redevelopment, completing more cleanups of large Superfund sites and turning its attention to smaller sites.⁹

In theory, developing abandoned and unused contaminated property should benefit a community by creating new jobs, expanding the property tax base, and eliminating existing pollution.¹⁰ Yet state voluntary cleanup statutes that authorize relaxed cleanup standards for redevelopment of brownfield sites raise troubling questions about whether such projects may increase health risks to the surrounding community.¹¹ After all, states, in most cases, would eventually clean up brownfield sites to meet strict residential standards, unless the site qualifies for a voluntary action program that allows for lower commercial or industrial standards. In particular, forty-one states consider future land use as a factor in determin-

and Voluntary Cleanup Legislation, 2 ENVTL. L. 101 (1995).

5. See BARTSCH & COLLATON, *supra* note 4, at 1-3; Eisen, *supra* note 4, at 886-88, 894-95; Becky Jacobs, *Basic Brownfields*, 12 J. NAT. RESOURCES & ENVTL. L. 265, 265-306 (1996-97); *infra* notes 34-42 and accompanying text.

6. EPA has awarded 227 Brownfield Assessment Demonstration pilot grants of up to \$200,000 and 16 Showcase Community grants of up to \$1 million. See Carol Browner, Speech at Brownfields 98 Conference (Nov. 16, 1998); Office of Emergency and Remedial Response, U.S. EPA, SUPERFUND REFORMS ANN. REP. FY 1998, at 14, EPA-540-R-99-002 (1999) [hereinafter SUPERFUND REFORMS].

7. See *Superfund: States Taking on More Responsibility with Hazardous Waste Cleanups, Panel Says*, NAT'L ENVTL. DAILY (BNA), Nov. 16, 1998, at d8 [hereinafter BNA *Superfund*] (reporting states have more than 13,700 cleanups in progress, have completed more than 5500 in FY 1997 and are also overseeing more than 5000 voluntary cleanups).

8. See ENVIRONMENTAL LAW INSTITUTE, AN ANALYSIS OF STATE SUPERFUND PROGRAMS: 50-STATE STUDY, 1998 UPDATE, Table V-22 (1998) [hereinafter ELI SUPERFUND REPORT] (reporting as of 1998, 44 states had voluntary cleanup statutes); David B. Hawley, *The Brownfields Property Reuse Act of 1997: North Carolina Creates an Additional Incentive to Reclaim Contaminated Properties*, 76 N.C. L. REV. 1015, 1026-27 n.65 (1998) (listing states with voluntary action programs); BNA *Superfund*, *supra* note 7, at d8 (reporting as of 1998, 44 states had voluntary cleanup statutes); *infra* notes 80-88 and accompanying text.

9. See Jenna Greene, *Super Fight over Superfund*, LEGAL TIMES, Sept. 27, 1999, at 10.

10. See E. Lynn Grayson, *Facilitating Good Decision, An Alliance of Necessity: EnviroJustice and Brownfields*, 14 ENVTL. COMPLIANCE & LITIG. (Nov. 1998), at 4; Rodger C. Field, *Siting, Justice, and the Environmental Laws*, 16 N. ILL. U. L. REV. 639, 652 (1996).

11. See McWilliams, *supra* note 4, at 708-10, 767-68; Georgette C. Poindexter, *Addressing Morality in Urban Brownfield Redevelopment: Using Stakeholder Theory to Craft Legal Process*, 15 VA. ENVTL. L.J. 37, 37-38 (1995); Kris Wernstedt & Robert Hersh, "Through a Lens Darkly": *Superfund Spectacles on Public Participation at Brownfield Sites*, 9 RISK: HEALTH, SAFETY AND ENV'T 153, 159-60 (1998).

ing cleanup standards, allowing less stringent cleanups if the future use of a site is likely to be industrial rather than residential.¹²

The environmental justice movement has raised serious concerns about whether redevelopment of brownfield sites leads predominantly minority inner-city communities to accept disproportionately higher health risks in exchange for the possibility of jobs and economic development.¹³ Programs allowing less stringent cleanups of brownfield sites may disproportionately affect minority and low-income populations because most brownfields are concentrated in predominantly minority and lower-income inner-city neighborhoods.¹⁴ Proponents of brownfields argue that redevelopment usually improves both the economic condition and public health of surrounding communities.¹⁵

State voluntary cleanup statutes may violate Title VI of the Civil Rights Act of 1964,¹⁶ which forbids discrimination by programs receiving federal financial assistance.¹⁷ In February 1998, EPA promulgated a controversial "Interim Guidance for Investigating Title VI Administrative Complaints Challenging Permits" ("Interim Guidance") to help the agency resolve a number of pending complaints under that statute.¹⁸ Many state representatives and industry developers fear that the Interim Guidance's

12. See BNA SUPERFUND, *supra* note 7, at d8 (reporting as of 1998 41 states considered future land use as a factor in determining cleanup standards).

13. See Eisen, *supra* note 4, at 887, 1002-03 (arguing brownfield redevelopment "may perpetuate environmental inequities by increasing the high degree of risk that affected communities are already forced to bear"); Georgette C. Poindexter, *Separate and Unequal: A Comment on the Urban Development Aspect of Brownfields Programs*, 24 FORDHAM URB. L.J. 1, 1-2 (1996); Samara F. Swanston, *An Environmental Justice Perspective on Superfund Reauthorization*, 9 ST. JOHN'S J. LEGAL COMMENT. 565, 568-72 (1994) (arguing reduced cleanup standards for brownfield projects will increase risks to poor and minority communities). *But see* Tara Burns Koch, *Betting on Brownfields—Does Florida's Brownfields Redevelopment Act Transform Liability Into Opportunity?*, 28 STEYERSON L. REV. 171, 215-20 (1998) (arguing that the environmental justice critique that brownfield redevelopment trades jobs for health of community is misplaced and that such redevelopment usually improves both economic needs and public health of surrounding communities); *infra* notes 122-128 and accompanying text.

14. See Eisen, *supra* note 4, at 887, 891, 1001-03; Kirsten H. Engel, *Brownfield Initiatives and Environmental Justice: Second-Class Cleanups or Market-Based Equity?*, 13 J. NAT. RESOURCES & ENVTL. L. 317, 319 (1997-98); Swanston, *supra* note 13, at 568-72; *infra* notes 23, 122-128 and accompanying text.

15. See CHRISTOPHER H. FOREMAN, JR., *THE PROMISE AND PERIL OF ENVIRONMENTAL JUSTICE* (1998) (discussing federal policy approaches to brownfields redevelopment); Grayson, *supra* note 10, at 4; Koch, *supra* note 13, at 197-200.

16. See Bradford C. Mank, *Title VI*, in ENVIRONMENTAL JUSTICE 23-52 (Michael Gerrard ed., 1999).

17. Title VI does not apply to federal programs. See Mank, *Title VI*, *supra* note 16, at 25. Nevertheless, EPA's policies for cleaning up and redeveloping brownfield sites may indirectly affect how the agency evaluates whether similar state programs violate Title VI.

18. U.S. EPA, INTERIM GUIDANCE FOR INVESTIGATING TITLE VI ADMINISTRATIVE COMPLAINTS CHALLENGING PERMITS (Feb. 1998) [hereinafter EPA, INTERIM GUIDANCE]; Cheryl Hogue, *EPA Issues Guidance for Investigating Claims That State, Local Permits Are Discriminatory*, 66 U.S.L.W. (BNA), at 2504 (Feb. 24, 1998) [hereinafter Hogue, *EPA Issues*]; Mank, *Title VI*, *supra* note 16, at 40-45.

broad and vague definition of what constitutes a disparate impact will discourage brownfield redevelopment projects.¹⁹ So far, however, no citizen has filed a Title VI complaint against a brownfield project.²⁰

Despite the current absence of Title VI complaints against brownfield projects, EPA is seeking to revise its Title VI policies to reduce the possibility that such complaints could hinder redevelopment efforts. Furthermore, EPA is also working to develop a memorandum of understanding with brownfield developers to create a sustainable redevelopment process that addresses environmental quality and equity issues.²¹ Nevertheless, EPA's Title VI Implementation Advisory Committee observed in its March 1, 1999 report that its members disagreed about whether the economic benefits of brownfield redevelopment outweighed its possible adverse health impacts in minority communities.²²

While there is considerable uncertainty about how EPA will enforce Title VI, there are reasons to believe that state brownfield programs may violate the statute. First, state brownfield programs are likely to approve individual projects that disproportionately affect minority groups because the programs fail to address disproportionate or cumulative impacts. Second, state brownfield programs are systemically flawed because they often allow lower health standards in industrial or nonresidential areas. Because minorities are more likely to live in nonresidential or industrial areas,²³ state brownfield statutes or regulations disproportionately increase health risks to minority groups.

EPA is currently revising its Title VI policy, but states can and should adopt three reforms now to prevent their brownfield programs from causing disparate impacts, thereby avoiding potential Title VI claims. First, states should amend their voluntary action programs to require developers to collect data about the racial demographics and rela-

19. See Stephen C. Jones & Annop G. Shroff, *Balancing Growth and the Environment: Environmental Justice Concerns Delay Industrial Expansion*, 13 ENVTL. COMPLIANCE & LITIG. STRATEGY, No.5, 1 (1997) (arguing EPA's environmental justice and Title VI policies threaten to undermine its brownfield policies); Mank, *Title VI*, *supra* note 16, at 40-44; *Environmental Justice Policy to Hurt Brownfields, Superfund Revitalization*, HAZARDOUS WASTE NEWS, Oct. 5, 1998; *infra* notes 253-257 and accompanying text.

20. See *EPA Defends Environmental Justice Policy, Process to Bliley*, ENVTL. POL'Y ALERT, Dec. 30, 1998, at 30-31.

21. See EPA, *Stakeholder Group to Launch New Brownfields Redevelopment Program*, ENVTL. POL'Y ALERT, Mar. 24, 1999, at 9.

22. See REPORT OF THE TITLE VI ADVISORY COMMITTEE, *supra* note 3, at 19-20.

23. See Craig Anthony Arnold, *Planning Milagros: Environmental Justice and Land Use Regulation*, 76 DENV. U. L. REV. 1, 80-89 (1998) (study of 31 census tracts in seven cities nationwide found that industrial and commercial zoning is more common in low-income, high-minority neighborhoods than in high-income, low-minority neighborhoods); see also Yale Rabin, *Expulsive Zoning: The Inequitable Legacy of Euclid*, in ZONING AND THE AMERICAN DREAM 101, 102-20 (Charles M. Haar & Jerold S. Kayden eds., 1990) (presenting case studies of "expulsive zoning" where cities from 1917 through at least 1930s re-zoned minority residential areas to allow intensive industrial or commercial use, often with intent to reduce minority populations).

tive burden of pollution in several neighborhoods surrounding brownfield projects. States should require developers to consider whether their project will cause adverse disparate impacts against a minority group. Furthermore, states should require developers to examine mitigation measures and to determine whether less discriminatory or environmentally damaging alternatives exist.

Nevertheless, developers should have the opportunity to justify a project that has some disparate impacts by showing that the benefits exceed the costs and that alternative sites are not available. Title VI need not interfere with legitimate redevelopment of brownfield sites as long as such projects reasonably address the health and economic needs of all members of a community.²⁴

Finally, states should establish procedures for early and meaningful public participation in their decision-making process for approving brownfield projects. While those with the most knowledge, wealth, and political resources are best able to utilize opportunities for public participation, even the poorest and weakest members of society have a better opportunity to influence environmental decision-making if there are efforts to encourage participation by a diverse and broad segment of the public. Unfortunately, most state brownfield programs restrict public participation in the approval process.²⁵

EPA should reward states that adopt these reforms by giving greater deference to their decisions, including expediting review of possible civil rights complaints and imposing lesser penalties if a well-intentioned state occasionally makes poor decisions. For example, when the agency evaluates a Title VI complaint against a state or local government, EPA should take into account whether the state or local government considered community views about a project's risks and benefits to different subpopulation groups. However, the agency should not automatically defer to states without examining whether their reforms are actually effective. Furthermore, the mere opportunity for public participation in a state program is not enough to warrant EPA giving deference to a state's decision-making. A state or local agency must show that it seriously considered public comments about a proposed project's economic benefits and the possibility of less discriminatory alternatives to be entitled to a measure of deference from EPA.

EPA has recognized that the ultimate goal of brownfield redevelopment projects is to create sustainable projects that benefit a community

24. See Leslie Goff-Sanders, *Brownfield Legislation: A Viable Option for the Southeast*, 12 J. NAT. RESOURCES & ENVTL. L. 141, 146 (1996-97) ("So long as state legislatures avoid implementing cleanup standards that are too relaxed in urban areas, the revitalization of the urban areas should please both environmental justice advocates and urban redevelopment advocates."); Grayson, *supra* note 10, at 4. See generally Johnson, *supra* note 4, at 96-97.

25. See Wernstedt & Hersh, *supra* note 11, at 159-60.

over the long-run and that do not result in the reversion of the property to brownfield status in the future.²⁶ The proposed reforms would promote sustainable brownfield projects that are reasonably safe and provide long-term benefits to a diverse range of community groups.

Part II of this Article will explain how state and federal liability provisions inhibit redevelopment of brownfields. Part III will discuss the common and varying features of state voluntary action programs. Part IV will explain environmental justice concerns about brownfields. Part V will provide a brief overview of Title VI. Part VI will examine whether state voluntary cleanup statutes violate Title VI. Part VII will make several recommendations for creating state brownfield programs that do not violate Title VI.

II. BROWNFIELDS AND REDEVELOPMENT

A. Brownfields

1. Defining Brownfields

Most commentators define a brownfield site as abandoned or underused former industrial land that is difficult to redevelop because of existing or possible environmental contamination.²⁷ Developers usually seek to redevelop such properties if they have only a small to moderate amount of contamination.²⁸ Such less contaminated sites include former industrial facilities, warehouses, gas stations, and dry cleaners.²⁹ Most brownfields are located in inner-city neighborhoods that were centers of industry in the past.³⁰ These areas now contain predominantly minority and lower-income populations.³¹ Since the 1940s, industry has shifted to "greenfield" locations in the suburbs, which are predominantly white.³²

Although the precise number of sites remains unknown, estimates range from tens of thousands to half a million sites; it could cost as much as \$650 billion to clean up all of these properties.³³

26. See OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE, U.S. EPA, A SUSTAINABLE BROWNFIELDS MODEL FRAMEWORK, i, viii, 3-4, 46, 113, EPA-500-R-99-001 (Jan. 1999) [hereinafter EPA, SUSTAINABLE BROWNFIELDS].

27. See William W. Buzbee, *Brownfields, Environmental Federalism, and Institutional Determinism*, 21 WM. & MARY ENVTL. L. & POL'Y REV. 1, 3-4 (1997); Eisen, *supra* note 4, at 890-91; McWilliams, *supra* note 4, at 707 n.3.

28. See Eisen, *supra* note 4, at 901; Johnson, *supra* note 4, at 94.

29. See Eisen, *supra* note 4, at 890-91.

30. See BARTSCH & COLLATON, *supra* note 4, at 2-3; Eisen, *supra* note 4, at 890-91; see also Buzbee, *supra* note 27, at 10-11.

31. See Eisen, *supra* note 4, at 891; see also Buzbee, *supra* note 27, at 11.

32. See Eisen, *supra* note 4, at 891-92; Johnson, *supra* note 4, at 95; McWilliams, *supra* note 4, at 717-22.

33. See, e.g., *Brownfield Redevelopment: Hearings on S. 8 Before the Comm. on*

2. Advantages of Redeveloping Brownfields

Abandoned brownfield sites often pose significant economic burdens and health risks to surrounding communities.³⁴ Abandoned sites do not provide jobs and yield lower property tax revenues.³⁵ In addition, vacant sites may be magnets for crime and encourage illegal dumping that worsens environmental contamination at the facility.³⁶ The presence of vacant property also may discourage economic development.³⁷ Finally, such sites may contain environmental contamination that can spread to surrounding property.³⁸

Redeveloping brownfield sites offers several advantages. Redevelopment of these sites can create new jobs, provide property tax revenues, and eliminate existing environmental contamination.³⁹ In addition, brownfield redevelopment avoids the often substantial environmental costs of exploiting "greenfield" locations⁴⁰ because brownfield areas usually already contain infrastructure such as roads, railroads, water, and sewer systems.⁴¹ By contrast, developing a greenfield often requires developers to build infrastructure, imposing substantial new costs on the environment.⁴²

Env't and Pub. Works, 105th Cong. (Mar. 4, 1997) (Prepared Testimony of Timothy Fields, Acting Assistant Administrator, Office of Solid Waste and Emergency Response, U.S. EPA) (reporting that best available estimate is that 450,000 brownfields exist); Davis & Margolis, *supra* note 4, at 6 (estimating 130,000 to 450,000 contaminated sites); Barbara Ruben, ENVTL. ACTION, Jan. 1, 1995, at 12 (reporting 130,000 to 425,000 brownfield sites).

34. See BARTSCH & COLLATON, *supra* note 4, at 2-3; Hawley, *supra* note 8, at 1017-18; Eric D. Madden, Comment, *The Voluntary Cleanup and Property Redevelopment Act—The Limits of the Kansas Brownfield Law*, 46 U. KAN. L. REV. 593 (1998).

35. See BARTSCH & COLLATON, *supra* note 4, at 2-3; Madden, *supra* note 34, at 595; Sarah Rubenstein, Comment, *CERCLA's Contribution to the Federal Brownfields Problem: A Proposal for Federal Reform*, 4 U. CHI. L. SCH. ROUNDTABLE 149, 150 (1996-97).

36. See BARTSCH & COLLATON, *supra* note 4, at 2; Davis & Margolis, *supra* note 4, at 6-7; Jacobs, *supra* note 5, at 266-67; Madden, *supra* note 34, at 595-96.

37. See BARTSCH & COLLATON, *supra* note 4, at 2; Davis & Margolis, *supra* note 4, at 6-7.

38. See BARTSCH & COLLATON, *supra* note 4, at 2; Davis & Margolis, *supra* note 4, at 6-7; Madden, *supra* note 34, at 595-96.

39. See Eisen, *supra* note 4, at 894-95; see also McWilliams, *supra* note 4, at 710, 714-17; *infra* notes 194-195 and accompanying text.

40. See Eisen, *supra* note 4, at 890-91, 895-96 (avoiding brownfield redevelopment will likely spread industrial pollution to greenfields); McWilliams, *supra* note 4, at 717-22, 725 (greenfield development often damages the environment and usually shifts jobs from cities to suburbs); Ruben, *supra* note 33, at 12 (quoting EPA Administrator Carol Browner).

41. See Eisen, *supra* note 4, at 896-97. See generally McWilliams, *supra* note 4, at 717-22, 725.

42. See Johnson, *supra* note 4, at 95; McWilliams, *supra* note 4, at 717-22, 725; Madden, *supra* note 34, at 596.

B. Federal and State Liability

The fear of both state and federal environmental liability discourages brownfield redevelopment.⁴³

*1. Federal Liability**a. CERCLA*

The greatest risk of liability arises under the federal Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), which classifies past and present property owners of any site contaminated with a "hazardous substance" as potentially responsible parties that are subject to strict, joint, several, and retroactive liability.⁴⁴ Prospective purchasers of contaminated property are likely to be subject to full liability for all past contamination unless they negotiate an agreement with EPA before buying the site.⁴⁵ Under CERCLA and similar state statutes, the property owner or facility operator may be liable for past contamination at a site even if they did not cause that contamination.⁴⁶ Since prospective purchasers of contaminated property are generally liable under CERCLA for cleaning up any past contamination, the cost of cleanup strongly discourages purchasers.⁴⁷ Cleanup costs can range from tens of thousands to millions of dollars and can easily exceed the value of the contaminated property.⁴⁸

In some circumstances, Congress or EPA has limited liability under CERCLA. For instance, an "innocent" purchaser who had no reason to know that contamination existed at a site is free from liability, but only if the purchaser conducted an appropriate environmental audit that found no hazardous substances.⁴⁹ Few owners have qualified for this defense. Additionally, in 1996, Congress enacted legislation providing qualified

43. See Eisen, *supra* note 4, at 898–912; Johnson, *supra* note 4, at 97–98; McWilliams, *supra* note 4, at 725–27; Sweeney, *supra* note 4, at 113–14.

44. 42 U.S.C. § 9607(a)(1)–(4) (1994) (defining liability of past and present owners of properties or vessels contaminated with hazardous substances, as well as transporters and those who arranged for disposal); Jacobs, *supra* note 5, at 269–70 (discussing joint and several liability under CERCLA).

45. See 42 U.S.C. § 9607(a) (1994 & Supp. III 1997) (defining liability of past and present owners of properties or vessels contaminated with hazardous substances); see also BARTSCH & COLLATON, *supra* note 4, at 5–6; Jacobs, *supra* note 5, at 269–70; Johnson, *supra* note 4, at 98–99 (discussing joint and several liability under CERCLA).

46. See Eisen, *supra* note 4, at 901–05; McWilliams, *supra* note 4, at 725–27.

47. See Eisen, *supra* note 4, at 904–05; McWilliams, *supra* note 4, at 727–28.

48. See Buzbee, *supra* note 27, at 8; Hawley, *supra* note 8, at 1021; see also Rubenstein, *supra* note 35, at 161–63 (discussing uncertain and expensive costs of cleanups under CERCLA).

49. See 42 U.S.C. § 9601(35)(A), (B) (1994 & Supp. III 1997); Brian C. Walsh, *Seeding the Brownfields: A Proposed Statute Limiting Environmental Liability for Prospective Purchasers*, 34 HARV. J. ON LEGIS. 191, 196–97 (1997).

liability protection for lenders who do not become involved in the management of a facility to encourage lenders to finance development of possibly contaminated properties.⁵⁰

When prospective purchasers seek to buy contaminated property, EPA will sometimes limit liability through a prospective purchaser agreement.⁵¹ The agency's 1989 policy regarding prospective purchaser agreements was extremely restrictive. To qualify for limited liability, a developer had to provide the agency with a "substantial benefit" by either performing cleanup work itself or reimbursing the agency for its response costs.⁵²

In 1995, EPA issued a revised prospective purchaser guidance that is more sympathetic toward developers.⁵³ The 1995 guidance expands the coverage of these agreements beyond sites where EPA enforcement action is expected, and includes properties where there has already been federal involvement. In addition, the 1995 guidance relaxes the "substantial benefit" requirement to include not only direct monetary and cleanup benefits, but also indirect public benefits in combination with a reduced direct benefit to EPA.⁵⁴ Yet, the 1995 guidance is still limited to the small minority of contaminated sites with which EPA is involved and does not address the larger number of sites that are wholly within the jurisdiction of state or local governments.⁵⁵

Prior to the publication of the 1995 guidance, EPA had entered into only twenty agreements, but in the first three years under the 1995 policy the agency referred eighty additional agreements to the Department of Justice, including seventy final agreements.⁵⁶ Nevertheless, the 1995 policy is fairly restrictive because the purchaser could be liable for contamination unknown at the time an agreement is signed, and these agreements are limited to purchasers of National Priorities List ("NPL") sites⁵⁷ or properties where EPA anticipates enforcement action.⁵⁸ A final

50. See 42 U.S.C. § 9601(20)(A) (1994 & Supp. III 1997) ("The term 'owner or operator' . . . does not include a person, who, without participating in the management of a vessel or facility, holds indicia of ownership primarily to protect his security interest in the vessel or facility."); *id.* § 9601(20)(E) (limiting lender liability); Buzbee, *supra* note 27, at 14.

51. See Guidance on Agreements With Prospective Purchasers of Contaminated Property and Model Prospective Purchaser Agreement, 60 Fed. Reg. 34,792 (1995); Johnson, *supra* note 4, at 108-09; Walsh, *supra* note 49, at 205-07.

52. Superfund Program, 54 Fed. Reg. 34,235, 34,241-42 (1989); Eisen, *supra* note 4, at 983; McWilliams, *supra* note 4, at 744-45.

53. See Guidance on Agreements With Prospective Purchasers of Contaminated Property and Model Prospective Purchaser Agreement, 60 Fed. Reg. at 34,792; Walsh, *supra* note 49, at 205-07.

54. See Guidance on Agreements With Prospective Purchasers of Contaminated Property and Model Prospective Purchaser Agreement, 60 Fed. Reg. at 34,794.

55. See *id.* at 34, 793.

56. See SUPERFUND REFORMS, *supra* note 5, at 16.

57. NPL sites are often referred to as Superfund sites because the agency may only spend special tax funds placed in the Superfund trust on such sites. See 42 U.S.C. § 9605(a)(8) (1994); 40 C.F.R. § 300.3 (1998) (stating cleanups of NPL sites must follow National Contingency Plan); Jacobs, *supra* note 5, at 267-68.

58. See Guidance on Agreements With Prospective Purchasers of Contaminated

restriction on the purchaser agreements is that the Department of Justice's Assistant Attorney General must provide "concurrence" of every prospective purchaser agreement.⁵⁹

Accordingly, there is no broad protection yet for brownfield developers. For potential brownfield redevelopers, the threat of CERCLA liability creates huge obstacles because the costs of remediating a site are often uncertain and there are often significant delays before a cleanup can be approved by state or federal officials.⁶⁰ Furthermore, if contamination is found in the future, nothing protects the developer from additional liability.⁶¹

While the threat of CERCLA liability obstructs developers from redeveloping contaminated sites, not all brownfields are subject to stringent federal cleanup rules. EPA focuses on the worst sites and gives states primary jurisdiction over less contaminated properties. EPA uses a numerical scoring system, the Hazard Ranking System ("HRS"),⁶² to place the most contaminated sites on the NPL.⁶³ The agency's main focus is on remediating the approximately 1300 sites on the NPL.⁶⁴ However, the agency has recently shifted its focus to smaller brownfield sites because it has completed many Superfund cleanups.⁶⁵ The agency has jurisdiction over any site that contains a "hazardous substance," which includes virtually all toxic substances and chemicals except petroleum.⁶⁶ The agency also keeps a list of several thousand potential Superfund sites on its Comprehensive Environmental Response, Compensation, and Liability Information System ("CERCLIS") database, but has deleted over 30,000 sites, about seventy-five percent of the 42,000 sites, from that list be-

Property and Model Prospective Purchaser Agreement, 60 Fed. Reg. at 34,792; Eisen, *supra* note 4, at 983-84; *see also* Wendy Wagner, *Overview of Federal and State Law Governing Brownfields Cleanups*, in *BROWNFIELDS: A COMPREHENSIVE GUIDE TO REDEVELOPING CONTAMINATED PROPERTY* 15, 25-26 (Todd S. Davis & Kevin D. Margolis eds., 1997).

59. *See* Guidance on Agreements With Prospective Purchasers of Contaminated Property and Model Prospective Purchaser Agreement, 60 Fed. Reg. 34,792, 34,795 (1995).

60. *See* Eisen, *supra* note 4, at 901, 906-10; Sweeney, *supra* note 4, at 110.

61. *See* Eisen, *supra* note 4, at 910-11; Andrea Lee Rimer, *Environmental Liability and the Brownfields Phenomenon: An Analysis of Federal Options for Redevelopment*, 10 *TUL. ENVTL. L.J.* 63, 93-94 (1996).

62. *See* 40 C.F.R. § 300.425(c)(1) (1998); *see also* 42 U.S.C. §§ 9604(c)(1), 9605(g)(2)(B) (1994); Robert H. Abrams, *Superfund and the Evolution of Brownfields*, 21 *WM. & MARY ENVTL. L. & POL'Y REV.* 265, 270-71 (1997) (discussing Hazard Ranking System).

63. *See generally* 42 U.S.C. §§ 9604, 9605(a)(8), 9605(c), 9611 (1994) (Superfund); 40 C.F.R. pt. 300 (1998); Wagner, *supra* note 58, at 16-17; Wernstedt & Hersh, *supra* note 11, at 156.

64. *See* BARTSCH & COLLATON, *supra* note 4, at 2 (EPA has identified about 1300 high-priority NPL sites); *see also* BNA SUPERFUND, *supra* note 7, at d8 (indicating that as of 1998, EPA had listed about 1,300 NPL sites and was planning to add approximately 200 more in the next two years).

65. *See* Greene, *supra* note 9, at 10.

66. 42 U.S.C. § 9601(14) (1994) (defining the term "hazardous substance"); 40 C.F.R. § 302.4 (1998) (same).

cause the agency realizes that the stigma and cleanup uncertainties associated with such a listing may discourage redevelopment.⁶⁷

Developers normally avoid heavily contaminated sites on EPA's Superfund or CERCLIS lists because the agency's complicated rules for cleaning up such sites makes it very expensive to redevelop them and many states prohibit voluntary cleanups of federal NPL sites.⁶⁸ Still, there are tens of thousands of potential brownfield sites that contain a small to moderate amount of contamination and are primarily under state jurisdiction.⁶⁹

b. Limiting Federal Liability

While states cannot limit federal liability without EPA approval,⁷⁰ EPA has cautiously moved to give states greater authority to set cleanup standards. Traditionally, EPA officials have been reluctant to cede final cleanup authority to states or to spend administrative resources reviewing state agreements with developers.⁷¹ However, to facilitate brownfields redevelopment, EPA can issue a comfort/status letter (i.e., a "No Current Federal Superfund Interest Letter") to a developer or a "State Action Letter" to a state. These letters are issued when the agency does not intend to exercise its CERCLA jurisdiction because the owner is cooperating with state authorities in performing a cleanup. Such letters are not binding on the agency.⁷² The agency has issued at least 300 comfort/status letters.⁷³

Furthermore, in 1997, EPA issued a final draft guidance that encouraged state voluntary cleanup programs by allowing the agency to enter into an agreement with a state. The agency agreed not to exercise its CERCLA cleanup authority at low-risk sites undergoing a voluntary cleanup according to state rules approved in the agreement.⁷⁴ The agency

67. See SUPERFUND REFORMS, *supra* note 5, at 2, 15.

68. See, e.g., COLO. REV. STAT. ANN. § 25-16-303(3)(b)(I) (West 1998); FLA. STAT. ch. 376.82(1) (1997); OHIO REV. CODE ANN. § 3746.02 (West 1999); see Eisen, *supra* note 4, at 923 (stating that most states prohibit voluntary cleanups of federal NPL sites); Johnson, *supra* note 4, at 94, 98 (noting that most developers do not consider NPL sites to fit the definition of "brownfield"); Hawley, *supra* note 8, at 1039-40.

69. See Eisen, *supra* note 4, at 901-02.

70. See Buzbee, *supra* note 27, at 15-16; Johnson, *supra* note 4, at 105-06; Walsh, *supra* note 49, at 210.

71. See Buzbee, *supra* note 27, at 15-16.

72. See Policy on the Issuance of Comfort/Status Letters, 62 Fed. Reg. 4624 (1997); Jacobs, *supra* note 5, at 275; Frona M. Powell, *Amending CERCLA to Encourage the Redevelopment of Brownfields: Issues, Concerns, and Recommendations*, 53 WASH. U. J. URB. & CONTEMP. L. 113, 126-27 (1998) (discussing "comfort letters" for prospective brownfield purchasers).

73. See SUPERFUND REFORMS, *supra* note 5, at 17.

74. See Notice of the Availability of Final Draft Guidance for Developing Superfund Memoranda of Agreement (MOA) Language Concerning State Voluntary Cleanup Programs, 62 Fed. Reg. 47,495 (1997); *Superfund Reauthorization: Hearings on S. 8 Before the Senate Comm. on Env't and Pub. Works*, 105th Cong. (1997) (statement of Carol Browner, U.S. EPA Administrator); Koch, *supra* note 13, at 209 (describing Florida's ef-

reached such memoranda of agreement (“MOA”) with eleven states.⁷⁵ However, in late 1997, the agency withdrew that final draft guidance because of conflicting public comments on revising it, but left the eleven existing MOAs in effect.⁷⁶ Even where EPA has not entered into an agreement with a state, the agency is unlikely to reopen a state-approved voluntary cleanup.⁷⁷

2. State Liability

Brownfield developers are subject to state liability as well as federal liability, but states often are willing to limit state liability for legitimate brownfield redevelopment projects. At least forty-five states have enacted hazardous waste statutes that may raise additional liability issues for developers because CERCLA does not preempt parallel or more stringent state hazardous waste and cleanup laws.⁷⁸ Many state “mini-CERCLA” laws also apply expansive, strict, joint and several liability on both present and past property owners.⁷⁹

III. STATE VOLUNTARY ACTION PROGRAMS

Most states have enacted legislation or promulgated regulations that encourage developers voluntarily to clean up contaminated properties.⁸⁰ While federal programs have had some effect in encouraging brownfield redevelopment, state voluntary action programs have had far more impact for two reasons.⁸¹ First, most sites fall under state jurisdiction because

ports to negotiate a MOA with EPA).

75. See *BNA Superfund*, *supra* note 6, at d8 (reporting statement of Earl Salo, EPA’s assistant general counsel for Superfund).

76. See Memorandum from Timothy Fields, Acting Assistant Administrator, Office of Solid Waste and Emergency Response, U.S. EPA, & Steven A. Herman, Assistant Administrator, EPA’s Office of Compliance Assurance, to EPA Regional Administrators, Withdrawal of Proposal: Final Draft Guidance for Developing Superfund Memoranda of Agreement Concerning State Voluntary Cleanup Programs (Nov. 26, 1997) (on file with *Harvard Environmental Law Review*); Eisen, *supra* note 1, at 207–12.

77. See Buzbee, *supra* note 27, at 16.

78. See 42 U.S.C. § 9614(a) (1994) (stating that CERCLA does not preempt state law); *id.* § 9614(b) (clarifying that multiple recovery of same costs not allowed under both state and federal law); see also 415 ILL. COMP. STAT. 5/22-2 (West 1998); MASS. GEN. LAWS ch. 21E, §§ 1–18 (1998); N.C. GEN. STAT. §§ 130A-310 to 130A-310.13 (1999); Abrams, *supra* note 62, at 267–68 (noting that at least 45 states have statutes similar to CERCLA).

79. See, e.g., FLA. STAT. ch. 376.30–319 (1997); IOWA CODE § 455B.381–.399 (1997); N.H. REV. STAT. ANN. § 147-B:1 to B:15 (1996); PA. STAT. ANN. tit. 35, § 6020.101–.1305 (West 1993); R.I. GEN. LAWS § 23-19.14-6 to -7 (1996). *But see* TENN. CODE ANN. § 68-212-207(A)–(B) (1996) (mandating that courts examine fault as well as equitable factors in apportioning liability); UTAH CODE ANN. § 19-6-310(2)(g) (1998) (rejecting explicitly joint-and-several liability).

80. See Eisen, *supra* note 4, at 915–27; Sweeney, *supra* note 4, at 121–23.

81. See Eisen, *supra* note 4, at 914–15.

EPA focuses on NPL or CERCLIS sites, which are only a small percentage of all contaminated properties.⁸² Second, states have generally been far more willing than EPA to accept cleanups that only reduce contamination to levels safe for industrial use.⁸³

A. Common Elements in State Brownfield Programs

There are common elements in most state brownfield programs.⁸⁴ First, all are voluntary and do not require property owners to join.⁸⁵ Second, most states prohibit voluntary cleanups of federal NPL sites.⁸⁶ Third, state voluntary action statutes and programs generally streamline the cleanup approval process.⁸⁷ Most importantly, state voluntary action statutes and programs usually set forth statewide cleanup standards that allow for higher levels of risk than the Superfund program if a site will be used for commercial or industrial rather than residential purposes.⁸⁸ Finally, voluntary action statutes and programs typically limit a developer's liability against state enforcement actions⁸⁹ through (1) "no action" letters, which indicate that a state probably will not pursue further enforcement actions unless new information about contamination is discovered;⁹⁰ (2) covenants not to sue, which provide express protection that a state will not pursue further enforcement actions;⁹¹ (3) releases from state CERCLA liability;⁹² and (4) certificates of completion indicating that a cleanup meets applicable state standards.⁹³

B. Three Types of State Voluntary Cleanup Statutes

States have adopted a variety of different cleanup standards to encourage voluntary cleanups, but they generally fall into three major cate-

82. See *id.* at 923 (indicating that most states prohibit voluntary cleanups of federal NPL sites); Sweeney, *supra* note 4, at 157–58 n.329 (listing California, Colorado, Montana, New York, Ohio, and Pennsylvania statutes as specifically prohibiting voluntary cleanups of federal NPL sites); *supra* notes 64–67 and accompanying text.

83. See Eisen, *supra* note 4, at 909–10.

84. See *id.* at 915–27.

85. See *id.* at 920.

86. See *id.* at 923; Sweeney, *supra* note 4, at 157–58 n.329 (listing California, Colorado, Montana, New York, Ohio as specifically prohibiting voluntary cleanups of federal NPL sites); Madden, *supra* note 34, at 612–13 (stating that Kansas excludes NPL sites from its voluntary action program).

87. See Eisen, *supra* note 4, at 920.

88. See *id.* at 920, 936–49.

89. See *id.* at 921, 950–65.

90. See *id.* at 952–54.

91. See *id.* at 955–56; Johnson, *supra* note 4, at 102; Sweeney, *supra* note 4, at 163.

92. See Eisen, *supra* note 4, at 957–58.

93. See *id.* at 956–57; Sweeney, *supra* note 4, at 163.

gories: (1) background standards; (2) model state-approved generic risk-based cleanup standards; and (3) site-specific standards.⁹⁴ Some states allow developers considerable freedom in choosing among these three approaches.⁹⁵

1. Background Standards

A background standard is usually the most stringent approach because it requires a developer to reduce the level of contamination to the conditions present at the site before the contamination occurred.⁹⁶ Some states do not allow institutional controls, which include physical barriers such as fencing, or legal restrictions on future land use to meet background standards, although they may be used to maintain them after a cleanup.⁹⁷ Perhaps because of a fear that meeting background standards may be very expensive, some states treat background standards as an option for a developer to select, but do not require that they must be met.⁹⁸

Some states define background levels of contamination in terms of the generally prevailing levels in the surrounding area.⁹⁹ In Illinois, the

94. See, e.g., IND. CODE ANN. § 13-25-5-8.5 (West 1997) (providing a three-tier system for cleanup levels: (1) "background" levels; (2) site-specific, risk-based standard depending upon future use of the site; (3) either background levels or generic risk-based standards using statewide standards developed by state department of environmental protection); IOWA CODE § 455H.201 (1999) (providing three types of cleanup standards: (1) "background" standards; (2) statewide standards; and (3) site-specific standards); Thomas G. Kessler, *The Land Recycling and Environmental Remediation Standards Act: Pennsylvania Tells CERCLA Enough Is Enough*, 8 VILL. ENVTL. L.J. 161, 184-94 (1997) (discussing Pennsylvania's three cleanup standards: (1) background levels; (2) statewide health standards; and (3) site-specific standards).

95. See, e.g., OHIO REV. CODE ANN. § 3746.04(B)(1)-(2) (West 1998); OHIO ADMIN. CODE § 3746-300-08 to -09 (1998); PA. STAT. ANN. tit. 35, §§ 6026.301, 6026.303, 6026.304 (West 1999); see also Eisen, *supra* note 4, at 948.

96. See IND. CODE ANN. § 13-25-5-8.5(b)(1) (West 1997) (defining "background levels" as the level of "hazardous substances that occur naturally on the site"); PA. STAT. ANN. tit. 35, § 6026.103 (West 1999) (defining "background" standards as "[t]he concentration of a regulated substance determined by appropriate statistical methods that is present at the site, but is not related to the release of regulated substances at the site"); James W. Creenan & John Q. Lewis, *Pennsylvania's Land Recycling Program: Solving the Brownfields Problem with Remediation Standards and Limited Liability*, 34 DUQ. L. REV. 661, 677-79 (1996) (discussing the definition of "background standards" under Pennsylvania statute); Alexander H. Tynberg, *Oregon's New Cleanup Law: Short-Term Thinking at the Expense of Long-Term Environmental and Economic Prosperity*, 12 J. ENVTL. L. & LITIG. 471, 474 (1997) (defining "background" levels).

97. See PA. STAT. ANN. tit. 35, § 6026.302(b)(4) (West 1999); Steven F. Fairlie, *The New Greenfields Legislation: A Practitioner's Guide to Recycling Old Industrial Sites*, 5 DICK. J. ENVTL. L. & POL'Y 77, 84 n.43 (1996).

98. See IOWA CODE § 455H.201 (1999) (allowing developer to choose "background" standards as an option); MD. CODE ANN., ENVIR. § 7-508(b)(3) (1998) (participant in voluntary cleanup has option to select background levels as cleanup standard); PA. STAT. ANN. tit. 35, § 6026.302 (c) (West 1999).

99. See, e.g., 415 ILL. COMP. STAT. 5/58.2 (West 1998) (defining "area background" standard), *id.* 5/58.5(b)(1) (remediation must achieve "area background levels" unless exception applies); 35 ILL. ADMIN. CODE tit. 35, § 742.400-.415 (1996) (regulations for

“area background” standard explicitly includes not only background levels naturally present in the soil, but also contamination from areawide releases outside the site.¹⁰⁰ Accordingly, in Illinois, the area background standard in a heavily industrial or commercial location is likely to be less protective of human health and the environment than in a primarily residential neighborhood.¹⁰¹ Illinois explicitly recognizes that a cleanup to area background levels may not be sufficiently safe to permit future residential development or may even pose “an acute threat to human health.”¹⁰²

Some proponents of environmental justice argue that all properties should meet rigorous background standards to avoid the possibility of harm to minority communities.¹⁰³ Developers respond that a rigorous background cleanup standard may not make sense if a permanent cleanup is impractical or the costs exceed the benefits. For instance, it may be impractical to “pump and treat” contaminated groundwater on a site if the surrounding aquifer is contaminated and will re-contaminate the groundwater.¹⁰⁴

determining “area background” concentrations for contaminants of concern at site); David L. Reiser, *A Practical Approach to Brownfields: An Overview of TACO and the SRP*, 86 ILL. B.J. 262, 264–65 (1998) (discussing Illinois’ “area background” standards); see also PA. STAT. ANN. tit. 35, § 6026.302(b)(1) (West 1999) (listing criteria for attainment of the background standard); Kessler, *supra* note 94, at 187–88 (discussing Pennsylvania’s background standards).

100. See 415 ILL. COMP. STAT. § 5/58.2 (West 1998) (defining “area background” to refer to regulated substances “consistently present in the environment in the vicinity of a site that are the result of natural conditions or human activities, and not the result solely of releases at the site.”); *id.* § 5/58.5(b)(1) (remediation must achieve “area background levels” unless exception applies); 35 ILL. ADMIN. CODE tit. 35, § 742.400–.415 (1996) (regulations for determining “area background” concentrations for contaminants of concern at site); David L. Reiser, *Brownfields Bill Promotes Sweeping Changes*, 16 N. ILL. U. L. REV. 621, 626–27 (1996) (Illinois allows use of “area background” standards that take into account areawide releases outside the site and thus allows lesser cleanups in industrial areas as long as contamination does not pose an acute risk to workers on the site).

101. 415 ILL. COMP. STAT. § 5/58.2 (West 1998) (defining “area background” standards), *id.* § 5/58.5(b)(1) (remediation must achieve “area background levels” unless exception applies); 35 ILL. ADMIN. CODE tit. 35, § 742.400–.415 (1996) (regulations for determining “area background” concentrations for contaminants of concern at site); Reiser, *Brownfield Bill Promotes Sweeping Changes*, *supra* note 100.

102. 415 ILL. COMP. STAT. § 5/58.5(b)(3) (West 1998); see also 415 ILL. COMP. STAT. § 5/58.5 (b)(2) (if concentration of regulated substance of concern does not meet residential standards, property may not be used for residential use in the future unless it undergoes further cleanup); ILL. ADMIN. CODE tit. 35, §§ 742.415(c)–(d) (1996) (area background standard may not be used if it would pose acute health risk); Reiser, *Brownfield Bill Promotes Sweeping Changes*, *supra* note 100 (reporting Illinois’ “area background” standards allow lesser cleanups in industrial areas as long as contamination does not pose an acute risk to workers on the site).

103. See Tynberg, *supra* note 96, at 476 (“Because there is a significant disparate correlation between industrial contamination and its occurrences in low-income minority communities, the most socially appropriate remedy may be to force cleanup of a site to background levels.”).

104. See 40 C.F.R. § 300.430(a)(1)(iii)(F) (1998) (when restoration of groundwater is not practicable, cleanup plan may use measures to prevent further migration of contami-

2. Model State-Approved Generic Risk-Based Cleanup Standards

Model state-approved generic risk-based cleanup standards set numerical standards for acceptable cancer risk.¹⁰⁵ While numerical risk standards may appear to be precise, states vary widely with respect to the assumptions used to measure the risk. For example, Pennsylvania does not consider the impact of institutional controls, such as fencing and future land use restrictions, in determining whether a developer has met statewide health standards, but does consider them after an initial cleanup to determine if the standards are maintained.¹⁰⁶ Other states establish separate statewide health standards for residential and nonresidential uses, allowing higher levels of contamination at commercial or industrial sites.¹⁰⁷ A state may allow a greater risk level for nonresidential sites. Alternatively, a state may set the same risk level for all sites, but allow more contamination at an industrial site based on the assumption that human beings are much less likely to be exposed at such a site than a residential site.¹⁰⁸ These differential standards raise questions about

nation); Jonathan S. Karmel, *Title 5 of New York's Clean Water/Clean Air Bond Act Authorizes Risk Assessment to Clean up Brownfields*, 63 BROOK. L. REV. 469, 477-78 (1997).

105. See, e.g., IND. CODE § 13-25-5-8.5(d)(1) (1998) (providing generic risk-based standards using statewide standards developed by state Department of Environmental Protection); OHIO REV. CODE ANN. § 3746.04(B)(1) (West 1998); OHIO ADMIN. CODE § 3745-300-08 (1998) (generic numerical standards based upon intended use of property after voluntary cleanup); PA. STAT. ANN. tit. 35, § 6026.303 (West 1999) (establishing cleanup requirements to meet statewide health standards under regulations adopted by state Environmental Quality Board); Jacobs, *supra* note 5, at 284 (discussing Ohio's generic and property-specific risk assessment procedures); *id.* at 291-94 (discussing Pennsylvania's generic and property-specific risk assessment procedures); Kessler, *supra* note 94, at 188-90 (discussing Pennsylvania's health-based standards).

106. See PA. STAT. ANN. tit. 35, § 6026.303(e)(3) (West 1999); Fairlie, *supra* note 96, at 84 n.43.

107. See CONN. GEN. STAT. § 22a-133k(a)(3) (1997) (Commissioner of Environmental Protection may set more stringent cleanup standards for residential than historically industrial or commercial property); 415 ILL. COMP. STAT. 5/58.5(d) (West 1998) (requiring one-in-a-million cancer risk for residential uses in "Tiers I and II," but only one-in-ten-thousand for commercial and industrial uses in "Tier III"); OHIO REV. CODE ANN. § 3746.04(B)(1) (West 1998); OHIO ADMIN. CODE § 3745-300-08(A)(2) (1998); PA. STAT. ANN. tit. 35, § 6026.305 (West 1999) (establishing less stringent cleanup standards for special industrial sites that have no financially viable responsible person to remediate them or are located in an "enterprise zone"); Jacobs, *supra* note 5, at 284 (discussing Ohio's generic and property-specific risk assessment standards for nonresidential and residential properties); *id.* at 291-96 (discussing Pennsylvania's generic and property-specific risk assessment standards for nonresidential and residential properties). *But see* WASH. ADMIN. CODE § 173-340-740(1), -745 (1997) (requiring presumption of residential cleanup standards unless site meets specific industrial use criteria).

108. See Michael L. Gargas & Thomas F. Long, *The Role of Risk Assessment in Redeveloping Brownfield Sites*, in BROWNFIELDS: A COMPREHENSIVE GUIDE TO REDEVELOPING CONTAMINATED PROPERTY, at 214, 229-32, 242-45 (Todd S. Davis & Kevin D. Margolis eds., 1997) (discussing differences in human and ecological exposure assumptions for plausible future-use scenarios).

whether particular population groups living near commercial or industrial areas will be disproportionately impacted.

3. Site-Specific Standards

Site-specific standards are based upon an individualized risk assessment that considers the future use of a property (i.e., commercial, industrial, or residential).¹⁰⁹ A site-specific plan may allow for limited treatment of contamination in conjunction with the use of institutional and engineering controls to contain any remaining contamination.¹¹⁰ An increasing number of cleanups are applying site-specific approaches, but the expense of conducting such a risk assessment may make that method inappropriate for some developers.¹¹¹

C. Do Future Use Provisions and Institutional Controls Lower Cleanup Standards and Raise Health Concerns?

A controversial issue is whether EPA or states should consider the future use of a site, and allow lower cleanup standards if a site will be used for industrial or commercial uses rather than residential purposes. To guarantee long-term protection of public health and the environment, CERCLA explicitly prefers permanent treatment remedies that destroy hazardous chemicals rather than simply contain them with clay liners or other protective barriers.¹¹² Additionally, in evaluating risks at Superfund

109. See IND. CODE § 13-25-5-8.5(b)(2) (1998) (allowing site-specific, risk-based standard depending upon future use of the site); IOWA CODE § 455H.204 (1999) (providing site-specific cleanup standards); MD. CODE ANN., ENVIR. § 7-508(b)(2) (1998) (participant in voluntary cleanup may select cleanup standard based on site-specific risk assessment); PA. STAT. ANN. tit. 35, § 6026.304 (West 1999) (state may approve voluntary cleanup based upon site-specific risk assessment); VA. CODE ANN. § 10.1-1429.1(A)(1) (Michie 1998) (state may issue regulations allowing voluntary cleanup based upon site-specific risk assessment); Jacobs, *supra* note 5, at 284 (discussing Ohio's site-specific standards); *id.* at 293-94 (discussing Pennsylvania's site-specific standards); Sweeney, *supra* note 4, at 154-55 (discussing Pennsylvania's site-specific standards); Koch, *supra* note 13, at 200-01 (discussing Florida's site-specific standards); Kessler, *supra* note 94, at 190-94 (discussing Pennsylvania's site-specific standards).

110. See PA. STAT. ANN. tit. 35, § 6026.304(i) (West 1999) (site-specific response action may consist "solely of fences, warning signs or future land use restrictions" only if such institutional controls would satisfy land use law applicable at time site was contaminated); Creenan & Lewis, *supra* note 96, at 684-85.

111. See Abbi L. Cohen, *Voluntary Remediation Programs*, LEGAL INTELLIGENCER, Apr. 2, 1997, at 11.

112. See 42 U.S.C. § 9621(b)(1) (1994); Lynn E. Blais, *Environmental Racism Reconsidered*, 75 N.C. L. REV. 75, 146 (1996); Susan C. Borinsky, *The Use of Institutional Controls in Superfund and Similar State Laws*, 7 FORDHAM ENVTL. L.J. 1, 8-10 (1995) (discussing EPA's preference for treatment over engineering and institutional controls); Powell, *supra* note 72, at 117; Rimer, *supra* note 61, at 90; Krista J. Ayers, Comment, *The Potential for Future Use Analysis in Superfund Remediation Programs*, 44 EMORY L.J. 1503, 1503-05 (1995).

sites, EPA has usually employed a conservative, protective “reasonable maximum exposure” approach that assumes a site would be used for residential purposes and will be a significant source of drinking water even if it currently is used for industrial or commercial purposes.¹¹³ As a result, for many years EPA strongly preferred permanent treatment to residential levels instead of remedies that contained existing contamination to industrial or commercial safety levels by employing institutional and engineering controls, such as capping and fencing the site, posting signs, monitoring and limiting use of groundwater, deed restrictions, zoning requirements, or restrictive covenants or easements.¹¹⁴ EPA’s National Contingency Plan regulations for Superfund cleanups, however, recognize that permanent treatment may be impractical in some circumstances and therefore authorize engineering or institutional controls, such as containment, in appropriate cases.¹¹⁵ Thus, EPA will consider a site’s future use in determining the appropriate remedy under CERCLA.¹¹⁶

Proponents of brownfield redevelopment argue that EPA and states should consider whether a site’s future use is most likely to be industrial or commercial to avoid unnecessarily expensive cleanups.¹¹⁷ Brownfield developers argue that residential exposure assumptions should be used only when residential use and the exposure of children is likely.¹¹⁸ Assuming a site will be used for residential purposes rather than industrial uses may increase risk estimates by up to a thousand times.¹¹⁹ Even if the

113. See James H. Hamilton & W. Kip Viscusi, *The Benefits and Costs of Regulatory Reforms for Superfund*, 16 STAN. ENVTL. L.J. 159, 165 (1997) (EPA uses “reasonable maximum exposure” to assess risk of Superfund sites); Alex Karlin, *How Long is Clean?: The Temporal Dimension to Protecting Human Health Under Superfund*, 9 NAT. RESOURCES & ENV’T 6, 47 (1994).

114. See Rimer, *supra* note 61, at 90–92; Borinsky, *supra* note 112, at 8–10 (discussing EPA’s preference for treatment over engineering and institutional controls). See generally 40 C.F.R. § 300.430(a)(1)(iii)(B)–(D), 300.430(e)(3)(i)–(ii) (1998) (referring to engineering and institutional controls); John Pendergrass, *Use of Institutional Controls as Part of a Superfund Remedy: Lessons From Other Programs*, 26 ENVTL. L. REP. (ENVTL. L. INST.) 10,109 (1996); *infra* notes 115–116, 129–131 and accompanying text.

115. See 40 C.F.R. § 300.430(a)(1)(iii)(B)–(D) (1998) (EPA may allow engineering controls such as containment where permanent treatment of hazardous contamination is impractical); *id.* § 300.430(e)(9)(iii)(C)–(G) (EPA must consider risks and costs of removal and treatment with risks and costs of less permanent cleanup approaches); Karmel, *supra* note 104, at 477. See generally Borinsky, *supra* note 112; Pendergrass, *supra* note 114, at 10, 109–10.

116. See Memorandum from Elliott P. Laws, Assistant Administrator, Office of Solid Waste and Emergency Response, U.S. EPA, to EPA Regional Directors, OSWER Directive No. 9355.7-04, Land Use in the CERCLA Remedy Selection Process (May 25, 1995) (addressing consideration of future land use in remedy selection determinations under CERCLA); Land Use Directive, 60 Fed. Reg. 29,595 (1995) (same).

117. See James H. Hamilton & W. Kip Viscusi, *Human Health Risk Assessments for Superfund*, 21 ECOLOGY L.Q. 573, 587–88 (1994) [hereinafter Hamilton & Viscusi, *Human Health Risk Assessment*] (observing that EPA often assumes future residential use at Superfund site that has low probability of future residential use); Rimer, *supra* note 61, at 90–92.

118. See Gargas & Long, *supra* note 108, at 245.

119. See *id.* at 244–45 (discussing case study of brownfield where cleanup to residential standards would have cost \$55 million, but cleanup to industrial standards only

same risk levels are used at both residential and nonresidential sites (for example, a one-in-a-million maximum lifetime risk of contracting cancer from a chemical), a much higher level of contamination is usually allowed at an industrial site because of the assumption that human beings are much less likely to be exposed at the industrial site.¹²⁰ For instance, a realistic industrial future use scenario might assume that an adult worker may be exposed twelve hours a day, 250 days a year, for a maximum of thirty years. Additionally, a realistic industrial use scenario might assume limited surface-soil contact and exposure to dusts. By contrast, a residential model might set a much more restrictive exposure limit based on the greater vulnerability of children to substances such as lead and the likelihood that children may ingest soil. Furthermore, some commentators maintain that EPA should strongly consider the use of less expensive institutional and engineering controls such as land use restrictions or physical barriers that could limit human access to a site.¹²¹

Many environmentalists have raised concerns that government officials will allow developers to clean up sites under less stringent industrial standards, but then later approve residential development, or that contamination from an industrial site will migrate to residential areas.¹²² While restrictive covenants or other land use restrictions should prevent sites designated for commercial or industrial use from being used for residential purposes, there are serious questions about who will actually enforce such provisions in the future.¹²³ Furthermore, even if these sites are only used for industrial and commercial purposes, is it fair to make some neighborhoods "sacrifice zones"?¹²⁴ Because many brownfields are located in heavily minority, inner-city areas, proponents of environmental justice are concerned that such sacrifice zones will disproportionately affect minority groups.¹²⁵ Additionally, some environmentalists have

\$500,000); *Land-Use Planning Can Reduce Cost of Cleanup at Superfund Sites: Study*, HAZARDOUS WASTE NEWS, Sept. 22, 1997 (reporting that a study by Peter Katsumata and William Kastenberg found that assumption a site will be used for residential purposes rather than industrial uses may increase risk estimates by up to three orders of magnitude).

120. See Gargas & Long, *supra* note 108, at 229-32, 242-45.

121. See Hamilton & Viscusi, *Human Health Risk Assessments*, *supra* note 117, at 608-09 (arguing institutional or engineering controls could avoid many risks currently assumed to exist in EPA risk assessments of Superfund sites); John Pendergrass, *Sustainable Redevelopment of Brownfields: Using Institutional Controls to Protect Public Health*, 29 *Envtl. L. Rep. (Envtl. L. Inst.)* 10,243-48 (1999) (discussing various types of institutional controls and financing of these systems); Rimer, *supra* note 61, at 90-92.

122. See McWilliams, *supra* note 4, at 706-08; Powell, *supra* note 72, at 132-33; Sweeney, *supra* note 4, at 115-16; Wernstedt & Hersh, *supra* note 11, at 159-61; Rimer, *supra* note 61, at 93-94.

123. See Borinsky, *supra* note 112, at 7; Pendergrass, *supra* note 121, 10,255; Rimer, *supra* note 61, at 99-100.

124. Stacie A. Craddock, *A Call for Public Participation in State Voluntary Remediation Programs: Strategies for Promoting Public Involvement Opportunities in Virginia*, 30 *U. RICH. L. REV.* 499, 509 (1996).

125. See Eisen, *supra* note 4, at 887, 1002-03 (arguing brownfield redevelopment "may perpetuate environmental inequities by increasing the high degree of risk that af-

raised questions about whether industrial-use cleanups will really be less expensive or time-consuming if the remedies truly provide long-term protection of public health and the environment. Protecting workers from occupational exposure to soil risks, for instance, can be very expensive.¹²⁶ There are also serious questions about whether existing land use and institutional controls will be effective because no agency has a clear oversight role to monitor their effectiveness.¹²⁷ Institutional and engineering controls do not provide finality and, thus, require the government or a private entity to supervise the property to assure that contamination does not spread, especially to residential areas or sources of drinking water.¹²⁸

EPA recently has become somewhat more willing to accept cleanups that do not meet permanent, residential cleanup standards.¹²⁹ In 1995, EPA issued a guidance that allows the agency to consider the likely future use of a site as long as the agency consults with a wide range of interested parties about the site's likely use.¹³⁰ As a result, EPA is more willing to consider remedies that include institutional and engineering controls rather than permanent treatment.¹³¹

States have been far more aggressive than EPA in allowing consideration of future use in setting cleanup standards for voluntary cleanups. Approximately forty-one states have enacted statutes or regulations that

affected communities are already forced to bear"); Field, *supra* note 10, at 652; Poindexter, *supra* note 13, at 37-38; Swanston, *supra* note 13, at 568-72 (arguing reduced cleanup standards for brownfield projects will increase risks to poor and minority communities); *but see* Koch, *supra* note 13, at 215-20 (arguing environmental justice critique that brownfield redevelopment trades jobs for health of community is misplaced and that such redevelopment usually improves both economic needs and public health of surrounding communities).

126. See Rimer, *supra* note 61, at 93-94.

127. See Bradford C. Mank, *Other Remedial Issues: Long-Term Monitoring, Re-openers and Cost Underestimates*, in 1 BROWNFIELDS LAW AND PRACTICE: THE CLEANUP AND REDEVELOPMENT OF CONTAMINATED LAND § 25.01 (Michael Gerrard ed., 1998) [hereinafter, Mank, *Other Remedial Issues*] (long-term monitoring and maintenance of engineering controls under RCRA or CERCLA can be very expensive); *Ponder Land Use, Institutional Controls When Reauthorizing Superfund: RFF*, HAZARDOUS WASTE NEWS, June 23, 1997 (reporting that a Resources for the Future report raised questions about effectiveness of land use and institutional controls at three National Priority List ("NPL") sites). *But see* Pendergrass, *supra* note 121, at 10,243-48 (discussing various types of institutional controls and financing of these systems).

128. See Rimer, *supra* note 61, at 93-94.

129. See Ayers, *supra* note 112, at 1506-07, 1513-18 (noting that EPA is expanding its consideration of future use in cleanup decisions despite CERCLA's preference for permanent cleanups); Rimer, *supra* note 61, at 90-92 (same).

130. See OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE ("OSWER"), U.S. EPA, LAND USE IN THE CERCLA REMEDY SELECTION PROCESS, OSWER Directive No. 9355.7-04 (May 25, 1995); Rimer, *supra* note 61, at 91-92; Lauri DeBrie Thanheiser, *The Allure of a Lure: Proposed Federal Land Use Restriction Easements in Remediation of Contaminated Property*, 24 B.C. ENVTL. AFF. L. REV. 271, 287-88 (1997); Corrective Action for Releases from Solid Waste Units at Hazardous Waste Management Facilities, 61 Fed. Reg. 19,432, 19,439, 19,452, 19,460 (1996).

131. See Rimer, *supra* note 61, at 90-92; *supra* notes 115-116 and accompanying text.

authorize environmental agencies to consider the future use of a site when setting cleanup standards or approving a remedy at a specific site.¹³² These states allow higher levels of contamination if a site is likely to remain commercial or industrial for the foreseeable future. To guarantee that the future use remains industrial or commercial, states typically require the developer to impose land use restrictions and perhaps physical engineering controls to ensure that the area does not become residential.¹³³

There is a middle ground between mandating permanent residential treatment in all cases and liberally allowing industrial-level cleanups whenever a developer seeks a less stringent cleanup. In some circumstances, it may be appropriate to use lower cleanup standards at certain industrial or commercial sites that are unlikely to be used for residential purposes in the future and pose no risk to surrounding populations.¹³⁴ Considering a site's future use is appropriate as long as a remedy adequately protects public health and the environment.

Nevertheless, a cleanup that leaves a significant level of contamination poses risks because institutional or engineering controls can fail in

132. See, e.g., CAL. HEALTH & SAFETY CODE § 25398(d)(1) (West 1999) (allowing remedy to be based on intended use of property); CONN. GEN. STAT. § 22a-133k (1999) (remedy may consider future use if property was traditionally industrial or commercial property); MONT. CODE ANN. § 75-10-734(f) (1999) (voluntary cleanup plan may address "current and reasonably anticipated future uses of the facility and immediately adjacent properties."); N.J. STAT. ANN. § 58:10B-12a, -12c(1) (West 1999) (allowing remedy to be based on intended use of property); OHIO REV. CODE ANN. § 3746.04(B)(1), (2) (West 1998) (allowing remedy to be based on intended use of property); OR. REV. STAT. § 465.315(1)(g) (1997) (allowing consideration of "current and reasonably anticipated" future use); PA. STAT. ANN. tit. 35, § 6026.304(f) (1999) (site-specific remediation plan may consider future use of site); UTAH ADMIN. CODE § R315-101-5.2(b)(2) (1996) (allowing future land use planning to be considered if potential land use is more protective than actual land use conditions); see BNA *Superfund*, *supra* note 6, at d8 (reporting that as of 1998 41 states consider future land use as a factor in determining cleanup standards); *infra* notes 12, 107-108, 133 and accompanying text.

133. See, e.g., CAL. HEALTH & SAFETY CODE § 25398.6(b)(1) (West 1999) (allowing state to approve engineering and land use controls); CONN. GEN. STAT. § 22a-133o(b) (1999) (requiring binding land use restrictions if cleanup is below residential levels); MICH. COMP. LAWS § 324.20120b(2), (4) (1999) (requiring cleanups below residential standards to include notice to land records and restrictive covenants); N.J. STAT. ANN. § 58:10B-12g(3) (allowing state to approve engineering and institutional controls); N.Y. ENVTL. CONSERV. LAW § 56-0503(2)(g) (McKinney 1999) (allowing Department of Environmental Conservation to approve municipal restoration project that employs engineering and institutional controls); OHIO REV. CODE ANN. § 3746.01(N), 3746.05 (West 1999) (allowing engineering and institutional controls for complying land uses); PA. STAT. ANN. tit. 35, § 6026.304(i) (1999) (noting that site-specific response action may only consist "solely of fences, warning signs or future land use restrictions" if such institutional controls would satisfy land use law applicable at time site was contaminated); Borinsky, *supra* note 112, at 24-25; Karmel, *supra* note 104, at 490.

134. See Gargas & Long, *supra* note 108, at 244-45 (discussing case study of brownfield where cleanup to residential standards would have cost \$55 million, cleanup to industrial standards only \$500,000, and industrial/commercial use scenario was far more realistic); Karmel, *supra* note 104, at 479-80.

the future.¹³⁵ Contamination from an industrial or commercial site may migrate to an aquifer or well used for drinking water. Accordingly, an agency should not allow a developer to rely on engineering or institutional controls if there is a significant likelihood of off-site migration or human exposure.¹³⁶ Owners or operators of a property that is limited to industrial or commercial use should be liable if the property is later used for purposes that affect residential neighbors.¹³⁷ If future scientific research demonstrates a higher risk than was understood at the time of a cleanup agreement between a developer and a government agency, the owner should have a duty to eliminate contamination that poses substantial risks to public health and the environment.¹³⁸ However, states should consider providing funding if unanticipated risks that could not have been expected at the time of the initial cleanup later develop at a site.

D. Numerical Cleanup Standards: Do Relaxed Standards at Industrial or Commercial Sites Raise Concerns?

States frequently rely on numerical cleanup standards to define acceptable risk, but these standards may fail to address the greater susceptibility of some minority groups to risks that may be acceptable to the general population. These numerical cleanup standards also could produce disparate racial impacts because states often set a different, less protective standard for industrial and commercial sites that may be disproportionately located near minority populations.

Numerical risk standards usually try to define the lifetime risk of contracting cancer from a particular chemical, but they frequently fail to reflect scientific uncertainties or the possibility that different social, ethnic, or racial groups may be more or less susceptible to certain chemical exposures.¹³⁹ Risk-based standards are usually established by estimating the lifetime risk that a hypothetical person will develop cancer as a result of being subject to the reasonable maximum exposure of the facility's chemicals from living close to the site for thirty or seventy years.¹⁴⁰ There

135. See Karmel, *supra* note 104, at 492.

136. See Ayers, *supra* note 112, at 1507-08.

137. See Mank, *Other Remedial Issues*, *supra* note 127, § 25.02[4][c] n.76; Ayers, *supra* note 112, at 1508-09.

138. See Mank, *Other Remedial Issues*, *supra* note 127, § 25.03[2] (observing that government regulation may become more stringent, especially as technology develops and future scientific discoveries may reveal risks that are unknown today); Rimer, *supra* note 61, at 97 (stating that future scientific discoveries may reveal risks that are unknown today); Ayers, *supra* note 112, at 1509-10 (arguing that government regulation may become more stringent, especially as technology develops).

139. See *infra* notes 139-143, 165-167.

140. See Gargas & Long, *supra* note 108, at 230-31; Hamilton & Viscusi, *Human Health Risk Assessments*, *supra* note 117, at 579 n.33; Bradford C. Mank, *What Comes After Technology: Using an "Exceptions Process" to Improve Residual Risk Regulation of*

has been considerable controversy about the assumptions used in such estimates, including whether the hypothetical person used in these type of estimates accurately reflects how long or how close real people typically live near such sites.¹⁴¹ Furthermore, estimates based on the “average” person, typically a white man, may not reflect gender differences or the different dietary or lifestyle patterns of various minority subpopulations.¹⁴² These differences are discussed in detail in Part IV, Section A, below. Because residents of low-income and minority communities often have poorer health than the general population, the Institute of Medicine, which is affiliated with the National Academy of Sciences, has recommended that policymakers should presume that those residents may be more susceptible than others to environmental hazards.¹⁴³ Thus, even if a chemical is safe for the majority of the population, it may disproportionately affect certain minority groups. Yet EPA’s risk assessment procedures do not adequately address this problem.¹⁴⁴

Federal environmental statutes and regulations vary somewhat in the level of risk they allow. For its Superfund risk assessments, EPA requires risks to an individual subject to a “reasonable maximum exposure,” such as living near a facility for thirty years, to be reduced to within or below the range of a one-in-ten-thousand to a one-in-one-million lifetime cancer risk.¹⁴⁵ EPA considers a cancer risk of one-in-one-million to be the most conservative, protective approach to protecting health that is feasi-

Hazardous Air Pollutants, 13 STAN. ENVTL. L.J. 263, 281–83, 332 (1994) [hereinafter, Mank, *What Comes After Technology*].

141. See Mank, *What Comes After Technology*, *supra* note 140, at 312, 336–37 (looking at maximally exposed individual near a factory rather than a hypothetical maximally exposed individual can reduce estimated exposures by a factor of 100 at some sources); see also John S. Applegate, *Risk Assessment, Redevelopment, and Environmental Justice: Evaluating the Brownfields Bargain*, 13 J. NAT. RESOURCES & ENVTL. L. 243, 265–70 (1997–98) (arguing that risk assessment often inflates risk through overly conservative assumptions); Alon Rosenthal et al., *Legislating Acceptable Cancer Risk from Exposure to Toxic Chemicals*, 19 ECOLOGY L.Q. 269, 340–44 (1992) (critiquing current risk assessment techniques used by EPA).

142. See Robert R. Kuehn, *The Environmental Justice Implications of Quantitative Risk Assessment*, 1996 U. ILL. L. REV. 103, 121–23; Mank, *What Comes After Technology*, *supra* note 140, at 336.

143. See *Environmental Justice: Policymakers Urged to Focus on Health When Data Are Lacking*, 29 Env’t Rep. (BNA) 2231 (Mar. 12, 1999).

144. See Kuehn, *supra* note 142, at 117–23, 151–53; Mank, *What Comes After Technology*, *supra* note 140, at 336.

145. See National Oil and Hazardous Substances Contingency Plan, 40 C.F.R. § 300.430(e)(2)(i)(A)(2) (1998) (“For known or suspected carcinogens, acceptable exposure levels are generally concentration levels that represent an excess upper bound lifetime cancer risk to an individual of between 10^{-4} [one in ten thousand] to 10^{-6} [one in one million] . . .”); OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE, U.S. EPA, *ROLE OF THE BASELINE RISK ASSESSMENT IN THE SUPERFUND REMEDY SELECTION DECISIONS*, OSWER Directive No. 9355.0-30 (1991); BARTSCH & COLLATON, *supra* note 4, at 10 (EPA uses risk range of one-in-ten-thousand to one-in-one-million excess cancer deaths for Superfund cleanups); Hamilton & Viscusi, *The Benefits and Costs of Regulatory Reforms for Superfund*, *supra* note 113, at 167; Hamilton & Viscusi, *Human Health Risk Assessments*, *supra* note 117, at 579–80, 583 n.66; Karlin, *supra* note 113, at 7.

ble in a modern, industrial society.¹⁴⁶ To put this standard into perspective, there is a one-in-one-million chance that a person will die from smoking two cigarettes.¹⁴⁷

States have adopted different numeric cleanup standards. To protect human health, some states require a maximum risk of one-in-one-million for all types of sites.¹⁴⁸ Statutes requiring uniform standards for all types of brownfield sites are less likely to cause disparate impacts against groups that are more likely to live near industrial or commercial sites.¹⁴⁹ However, developers have complained that a uniform standard requiring a maximum lifetime cancer risk of one-in-one-million is too restrictive and prevents redevelopment of many brownfield sites.¹⁵⁰ Some states require a one-in-one-million lifetime cancer risk standard for individual carcinogens,¹⁵¹ but allow a one-in-one-hundred-thousand¹⁵² or even one-in-ten-thousand¹⁵³ risk if multiple carcinogens or exposure pathways are present at a site. Other states establish a one-in-one-million or one-in-one-hundred-thousand maximum risk for carcinogens at residential sites,

146. See National Oil and Hazardous Substances Contingency Plan, 40 C.F.R. § 300.430(e)(2)(i)(A)(2) (1998) (“The 10⁻⁶ [one in one million] risk level shall be used as the point of departure for determining remediation goals for alternatives when ARARs are not available or are not sufficiently protective because of the presence of multiple contaminants at a site or multiple pathways of exposure.”).

147. See STEPHEN BREYER, *BREAKING THE VICIOUS CIRCLE: TOWARD EFFECTIVE RISK REGULATION* 5–6 (1993).

148. See FLA. STAT. § 376.81(1), (g)(1) (1997) (requiring one-in-one-million lifetime cancer risk for groundwater cleanups); *id.* § 376.81(1)(j)(1) (requiring one-in-one-million lifetime cancer risk for soil cleanups); N.J. STAT. ANN. § 58:10B-12(d)(1) (West 1999) (soil remediation health risk standards requiring one-in-one-million lifetime cancer risk for both residential and nonresidential uses from any particular contaminant and not from cumulative effects of more than one contaminant).

149. See generally John Graham et al., *Who Lives Near Coke Plants and Oil Refineries?: An Exploration of the Environmental Equity Hypothesis*, 19 RISK ANALYSIS 171, 183 (1999) (minorities and low-income populations are more likely to live near coke plants and oil refineries).

150. See Evan Perez, *Lawmakers to Re-Examine Brownfield Clean-Up Rules*, WALL ST. J., Dec. 2, 1998, at F1 (finding minorities are more likely to live in industrial and commercial areas).

151. See OR. REV. STAT. 465.315(1)(b)(A) (1997) (requiring one-in-one-million cancer risk for individual carcinogens); WASH. ADMIN. CODE § 173-340-700(3)(b),(c) (1997) (requiring one-in-one-million cancer risk for individual carcinogens, but one-in-one-hundred-thousand risk for multiple carcinogens or exposure pathways); WIS. ADMIN. CODE § 720.19(5)(1), (2) (1997) (requiring one-in-one-million cancer risk from soil contact for individual carcinogens, but one-in-one-hundred-thousand risk for cumulative exposure).

152. See MICH. COMP. LAWS ANN. § 324.20120a(4) (West 1999) (requiring one-in-one-hundred-thousand maximum cancer risk); OR. ADMIN. R. § 340-122-045(3) (1997) (requiring one-in-one-million lifetime cancer risk for individual carcinogens, but allowing one-in-one-hundred-thousand risk if there are more than ten carcinogens); WASH. ADMIN. CODE § 173-340-700(3)(b),(c) (1997); WIS. ADMIN. CODE § 720.19(5)(1), (2) (1997); Tynberg, *supra* note 96, at 477–78 (discussing risk levels in Oregon’s statute and administrative regulations).

153. See 9 Va. Regs. Reg. 20-160-90(C)(1)(a) (requiring one-in-one-million cancer risk for individual carcinogens, but one-in-ten-thousand risk for multiple carcinogens or exposure pathways).

but allow a one-in-ten-thousand risk for industrial uses.¹⁵⁴ By using lower numerical standards for industrial or commercial sources, states use quantitative risk assessment methodology to implement the future use strategies discussed in Section C that contemplate lower levels of human exposure in such areas.

Still other states set a cancer risk range between one-in-one-million and one-in-ten-thousand lifetime risk for all types of sites.¹⁵⁵ Statutes that allow a one-in-ten-thousand cancer risk in some circumstances may cause disproportionate risks to low-income and minority groups because they are more likely to live near industrial and commercial areas that disproportionately contain brownfield sites.¹⁵⁶ Furthermore, redevelopment of such sites may pose risks in the future if subsequent users of a site fail to maintain institutional or engineering controls. There is also a risk that a commercial or industrial neighborhood may become residential in the future and, thus, a plan that is protective now may become inadequate in the future.

IV. ENVIRONMENTAL JUSTICE AND BROWNFIELDS

A. Environmental Justice: Minorities Are More Likely to Live Near Multiple Sources of Pollution and May Be More Susceptible to Certain Chemicals

The environmental justice movement has grown into a major political movement because a number of studies have found that minority groups and low-income people are more likely to live near sources of

154. See 415 ILL. COMP. STAT. 5/58.5(d) (West 1998) (requiring one-in-one-million cancer risk for residential uses, but allowing risk range of one in ten thousand to one in one million for commercial and industrial uses); OHIO ADMIN. CODE § 3745-300-09(C)(1)(a),(b)(i) (1998) (providing for risk level of one in one hundred thousand for residential and commercial and one in ten thousand for industrial uses); BARTSCH & COLLATON, *supra* note 4, at 60 (discussing Illinois' consideration of future use to determine cleanup levels, requiring one-in-one-million cancer risk for residential uses in "Tiers I and II," but only one-in-ten-thousand for commercial and industrial uses in "Tier III"); Sweeney, *supra* note 4, at 126 n.147 (discussing Ohio's site-specific standards).

155. See ARIZ. ADMIN. CODE R18-7-201(27) (1998) (setting risk range between one in ten thousand and one in one million excess cancer risk for nonresidential uses); *id.* R18-7-201(35) (setting risk range between one in ten thousand and one in one million excess cancer risk for residential uses); PA. STAT. ANN. tit. 35, § 6026.303(c)(1) (West 1999) (setting risk range between one in ten thousand and one in one million excess cancer risk as statewide health standard); *id.* § 6026.304(b) (setting risk range between one in ten thousand and one in one million excess cancer risk for site-specific cleanups); UTAH ADMIN. CODE § R315-101-6(c)(1)-(3),(d)-(e) (1996) (if risk is less than one in one million, no action required; if risk is between one in one million and one in ten thousand, some corrective action or containment measures required).

156. See Arnold, *supra* note 23, at 80-89; see also Rabin, *supra* note 23, at 101-20; *supra* notes 23, 125 and accompanying text.

harmful pollutants.¹⁵⁷ Furthermore, cities are more likely to locate industrial or commercial zoning in low-income, high-minority census tracts than in high-income, low-minority areas.¹⁵⁸ Several studies have found that racial minority and low-income groups disproportionately live near hazardous waste treatment or disposal facilities.¹⁵⁹

Minorities, especially African American and Hispanic farm workers, are far more likely to be exposed to and to die from pesticide-related illnesses.¹⁶⁰ Urban African American children under the age of five have substantially higher lead levels in their blood than white children of similar age groups living in the same cities.¹⁶¹ Certain minority groups are disproportionately likely to consume fatty fish that concentrate toxins in their fat tissues.¹⁶²

However, other studies have failed to find that minority groups disproportionately live near hazardous waste storage facilities.¹⁶³ One highly sophisticated study sponsored by EPA found statistically significant discrimination against Hispanics in the location of such facilities, but not against African Americans or poor communities.¹⁶⁴ There is also dis-

157. See John A. Hird & Michael Reese, *The Distribution of Environmental Quality: An Empirical Analysis*, 79 Soc. Sci. Q. 693, 707–11 (1998) (finding that “[e]ven when numerous other potentially relevant variables are included in the analysis, race and ethnicity remain strongly associated with environmental quality, with both nonwhite and Hispanic populations experiencing disproportionately high pollution levels” but not finding that low income levels are associated with higher levels of pollution); Bradford C. Mank, *Environmental Justice*, in 2 ENVIRONMENTAL LAW PRACTICE GUIDE, at 12B-7 (Michael Gerrard ed., 1999) (summarizing several studies finding low-income and minority populations are disproportionately exposed to various types of pollutants).

158. See Arnold, *supra* note 23, at 80–89; see also Rabin, *supra* note 23, at 101–20; *supra* notes 23, 125, 156 and accompanying text.

159. See Mank, *Environmental Justice*, *supra* note 157, at 12B-7 (summarizing several studies finding evidence of environmental discrimination).

160. See Kuehn, *supra* note 142, at 118.

161. See I ENVIRONMENTAL EQUITY WORKGROUP, OFFICE OF POLICY, PLANNING, AND EVALUATION, U.S. EPA, ENVIRONMENTAL EQUITY: REDUCING RISK FOR ALL COMMUNITIES, WORKGROUP REPORT TO THE ADMINISTRATOR 11, 11–12 (June 1992) [hereinafter EPA ENVIRONMENTAL EQUITY REPORT]; FOREMAN, *supra* note 15, at 78–80 (acknowledging substantial evidence that minority children are exposed to higher levels of lead than white children, but arguing that evidence of health impacts from those higher levels remains uncertain); Field, *supra* note 10, at 642 (16% of all children in United States have elevated blood lead levels, but the rate is close to 70% for inner-city African American children); Michael Fisher, *Environmental Racism Claims Brought Under Title VI of the Civil Rights Act*, 25 ENVTL. L. 285, 299 (1995); Kuehn, *supra* note 142, at 118.

162. See U.S. EPA ENVIRONMENTAL EQUITY REPORT, *supra* note 161, at 15–16; Kuehn, *supra* note 142, at 118; Mank, *Environmental Justice*, *supra* note 157, at 12B-7.

163. See generally FOREMAN, *supra* note 15, at 18–27 (summarizing conflicting studies about whether hazardous waste sites are disproportionately located in minority population areas and arguing that there is only weak evidence of disproportionate siting or exposure); Mank, *Environmental Justice*, *supra* note 157, at 12B-8 (summarizing several studies finding no evidence of environmental discrimination).

164. See Vicki Been & Francis Gupta, *Coming to the Nuisance or Going to the Barrios? A Longitudinal Analysis of Environmental Justice Claims*, 24 ECOLOGY L.Q. 1, 9, 19–27, 33–34 (1997) (using 1990 census data, examining 544 communities that hosted active commercial hazardous waste treatment storage and disposal facilities and finding no

agreement over whether EPA and state agencies enforce environmental laws equally in white and minority areas.¹⁶⁵

There is some evidence that minority groups are disproportionately exposed to multiple sources of pollution.¹⁶⁶ For instance, some studies suggest that particular minority groups are more likely to live near Superfund sites, and, as a result, are more likely to be exposed to multiple chemicals.¹⁶⁷ Furthermore, the disproportionate exposure of minorities to multiple sources of pollution may be especially harmful because certain minority groups have dietary or lifestyle patterns that make them likely to consume foods that are disproportionately contaminated with harmful pollutants, are in poorer health than the general population, or have jobs that disproportionately expose them to contact with soil or groundwater containing harmful pollutants.¹⁶⁸

Although more research is needed both about the synergistic effects of various pollutants and about their impact on different subpopulation groups,¹⁶⁹ some studies suggest that combinations of two or three chemicals can dramatically increase their effects a thousandfold or more. Yet current environmental statutes and regulations usually fail to address such multiple and cumulative exposures because they typically govern only one medium (i.e., air, water, or land).¹⁷⁰ Additionally, EPA has traditionally avoided questions of cumulative or synergistic impacts because data about such impacts is lacking or more difficult and costly to develop.¹⁷¹ EPA has slowly begun to conduct more research about the impacts of pollution on minority and low-income groups. In 1992, EPA's Environmental Equity Work Group issued the agency's first major report

substantial evidence that commercial hazardous waste facilities that began operating between 1970 and 1990 were sited in areas that were disproportionately African American or Hispanic, but did find evidence that such facilities were disproportionately located in areas of poverty).

165. See Marianne Lavelle & Marcia Coyle, *Unequal Protection*, NAT'L L.J., Sept. 21, 1992, at S2; Richard J. Lazarus, Essay, *Fairness in Environmental Law*, 27 ENVTL. L. 705, 713 (1997); Mank, *Environmental Justice*, *supra* note 157, at 12B-7. *But see* FOREMAN, *supra* note 15, at 23-27 (arguing studies showing disproportionate enforcement of environmental laws harming minority groups are seriously flawed).

166. See Robert W. Collin & Robin Morris Collin, *The Role of Communities in Environmental Decisions: Communities Speaking for Themselves*, 13 J. ENVTL. L. & LITIG. 37, 55-57 (1998); Hird & Reese, *supra* note 157, at 709-10.

167. See Hamilton & Viscusi, *The Benefits and Costs of Regulatory Reforms for Superfund*, *supra* note 113, at 180.

168. See Lazarus, *supra* note 165, at 712-13. *But see* Vicki Ferstel, *Scholar Urges More Debate*, BATON ROUGE ADVOCATE, Jan. 6, 1999, at 1B-2B (reporting that Christopher H. Foreman, Jr., senior fellow at Brookings Institution, argues there is no proof different pollutants interact to create multiple, cumulative and synergistic risk).

169. See Collin & Collin, *supra* note 166, at 55-56.

170. See Lazarus, *supra* note 165, at 712-13; Bradford C. Mank, *The Environmental Protection Agency's Project XL and Other Regulatory Reform Initiatives: The Need for Legislative Authorization*, 25 ECOLOGY L.Q. 1, 6 (1998).

171. See Kuehn, *supra* note 142, at 117-23, 151-53; *see also* Lazarus, *supra* note 165, at 712-13. *But see* Ferstel, *supra* note 168, at 1B-2B.

on environmental justice issues,¹⁷² and the agency created the Office of Environmental Equity (now the Office of Environmental Justice) to investigate this problem.¹⁷³ On February 11, 1994, President Clinton issued Executive Order 12,898.¹⁷⁴ Section 3-3 of this Order mandates all federal agencies to collect data about the health and environmental impact of their actions on minority groups and low-income populations, and to develop policies to avoid adverse impacts on these groups.¹⁷⁵ The Order also requires federal agencies to develop environmental justice strategies¹⁷⁶ and achieve environmental justice goals “[t]o the greatest extent practicable and permitted by law.”¹⁷⁷ In its 1994 Environmental Justice Strategy, EPA pledged to increase its research of disproportionate, cumulative, and synergistic impacts on minority groups.¹⁷⁸

Furthermore, EPA has finally begun to take into account exposure to multiple sources of pollution.¹⁷⁹ However, the complexity of measuring cumulative and synergistic impacts has caused serious problems for the agency.¹⁸⁰ EPA is working on a guidance document for assessing the health effects of mixed chemicals, but it is not known when the agency will actually issue the guidance.¹⁸¹ Because brownfields may include

172. See EPA ENVIRONMENTAL EQUITY REPORT, *supra* note 162, at 2.

173. See James H. Colopy, Note, *The Road Less Traveled: Pursuing Environmental Justice Through Title VI of the Civil Rights Act of 1964*, 13 STAN. ENVTL. L.J. 125, 185-86 (1994).

174. Exec. Order No. 12,898, 18 C.F.R. § 380, reprinted in 42 U.S.C. § 4321 (1994); Bradford C. Mank, *Executive Order 12,898*, in ENVIRONMENTAL JUSTICE 103 (Michael Gerrard ed., forthcoming 1999).

175. See Exec. Order No. 12,898, *supra* note 174, at § 3-301; Department of Transportation Order to Address Environmental Justice in Minority Populations and Low-Income Populations, 62 Fed. Reg. 18,377 (1997); Major Willie A. Gunn, *From the Landfill to the Other Side of the Tracks: Developing Empowerment Strategies to Alleviate Environmental Injustice*, 22 OHIO N.U.L.REV. 1227, 1252-56 (1996); Mank, *Executive Order 12,898*, *supra* note 174, at 106.

176. See Exec. Order No. 12,898, *supra* note 174, at § 1-103(e); Land Use Directive, 60 Fed. Reg. 30,781 (1995); Mank, *Executive Order 12,898*, *supra* note 174, at 105, 107-23 (discussing the environmental justice strategies of several agencies).

177. Exec. Order No. 12,898, *supra* note 174, at § 1-101.

178. See Mank, *Executive Order 12,898*, *supra* note 174, at 109-14.

179. See Memorandum from Carol Browner, Administrator of U.S. EPA, to Assistant Administrators et al., Cumulative Risk Assessment Guidance-Phase I Planning and Scoping (July 3, 1997) (Guidance requires all EPA offices to consider impacts from multiple sources of chemicals “in all cases for which relevant data are available”); REPORT OF THE TITLE VI ADVISORY COMMITTEE, *supra* note 3, at 21 (EPA is conducting research on the cumulative risk of air toxins and helping states to assess cumulative risk in setting total maximum daily loads under the Clean Water Act).

180. Compare Ferstel, *supra* note 168, at 1B-2B (reporting that Christopher H. Foreman, Jr., senior fellow at Brookings Institution, argues there is no proof different pollutants interact to create multiple, cumulative and synergistic risk), with Kuehn, *supra* note 142, at 103, 117-23, 151-53 (arguing EPA should devote more resources to cumulative and multiple risk assessments).

181. See Sara Thurin Rollin, *Agency Guidance on Chemical Mixtures will be ‘Cornerstone’ of Cumulative Risk*, 30 Env’t Rep. (BNA) 218, 218-19 (June 4, 1999); Sara Thurin Rollin, *Mixtures Document Reflects Merger of Agency Views on Cancer, Noncancer Risk*, 30 Env’t Rep. (BNA) 220, 220-21 (June 4, 1999).

multiple chemicals and pose substantial risks, states need to revise their risk assessment policies to address such risks.

*B. Environmental Justice and Brownfields Redevelopment:
Conflicting or Complementary Goals?*

There is a serious question about whether brownfield projects to reuse abandoned industrial properties will benefit the community at large or expose the community to greater health risks. Such programs often provide for expedited approval of permits and lower cleanup standards as incentives for encouraging redevelopment in economically depressed areas.¹⁸² Minority communities are often divided about whether the economic benefits of brownfield redevelopment outweigh the health risks.¹⁸³

Environmental justice advocates worry that many brownfield projects will pose serious health risks because EPA or states will lower cleanup standards in an effort to attract industry.¹⁸⁴ Because urban brownfields are often located in high population areas, some argue that cleanup standards should be higher for these projects rather than lower.¹⁸⁵

Furthermore, environmental justice advocates are concerned about whether low-income and minority groups actually receive significant new jobs, tax revenues, or general economic benefits from most brownfield projects.¹⁸⁶ In reality, these projects often provide only a few jobs for local residents, who may lack the necessary job skills or may be the victims of discrimination.¹⁸⁷ The greatest benefits of new facilities in low-income and minority areas often go to skilled workers who live in surrounding areas or to middle-class property owners who do not live close

182. See Eileen Gauna, *The Environmental Justice Misfit: Public Participation and the Paradigm Paradox*, 17 STAN. ENVTL. L.J. 3, 54–57 (1998); Kibel, *supra* note 1, at 605–09; Wernstedt & Hersh, *supra* note 11, at 159–60; McWilliams, *supra* note 4, at 706–07.

183. See Mank, *Title VI*, *supra* note 16, at 47.

184. See Kibel, *supra* note 1, at 607–09; Julia Solo, Comment, *Urban Decay and the Role of Superfund: Legal Barriers to Redevelopment and Prospects for Change*, 43 BUFF. L. REV. 285, 308–11 (1995); Swanston, *supra* note 13, 568–72; Wernstedt & Hersh, *supra* note 11, at 161.

185. See Swanston, *supra* note 13, 568–72; Julia A. Solo, *supra* note 184, at 308–11.

186. See Kibel, *supra* note 1, at 607–09 (reporting proponents of environmental justice are concerned that brownfields redevelopment projects will increase health risks without providing many jobs in minority communities). *But see* Lynn E. Blais, *Environmental Racism Reconsidered*, 75 N.C. L. REV. 75, 82–83, 105–08 (1996) (arguing environmental justice policies may discourage economic development); Stephen C. Jones & Annap G. Shroff, *Balancing Growth and the Environment: Environmental Justice Concerns Delay Industrial Expansion*, 13 ENVTL. COMPLIANCE & LITIG. STRATEGY, 1 (Oct. 1997) (same).

187. See Kibel, *supra* note 1, at 607–09; Kuehn, *supra* note 142, at 162; McWilliams, *supra* note 4, at 707; *see also* FOREMAN, *supra* note 15, at 97–99 (arguing brownfields redevelopment projects often create a significant number of jobs, but acknowledging more evidence is needed regarding long-term employment impacts, and noting it is more difficult to create jobs for disadvantaged individuals lacking job skills).

to the facility.¹⁸⁸ For instance, in Louisiana's St. James Parish, near the town of Covent, which environmentalists have dubbed "Cancer Alley," there is a high minority unemployment rate despite the presence of twelve petrochemical, fertilizer, or other plants emitting 24 million pounds of toxins a year.¹⁸⁹ Even if a community negotiates a compensation package, which may include money, park land, emergency equipment, or specific job guarantees, from a developer, the benefits do not necessarily go to those residents who suffer the greatest risk from a project.¹⁹⁰ The tax proceeds usually go to the community at large rather than to the most immediate neighbors of a facility.¹⁹¹

Environmental justice advocates also have moral concerns about brownfields redevelopment. Some environmental justice advocates believe that the entire brownfields agenda stems from a conscious or unconscious desire to keep high-income, suburban areas clean at the expense of low-income and minority groups.¹⁹² Finally, advocates often believe that some developers are "bad actors" who will not keep their promises and that state (and sometimes federal) regulators often fail properly to oversee voluntary cleanup programs.¹⁹³

In contrast, brownfield advocates argue that the economic benefits of brownfield projects far outweigh any risks, which proponents claim environmentalists frequently exaggerate.¹⁹⁴ Brownfield projects can bring significant economic benefits to low-income and minority groups who suffer from poverty and high unemployment.¹⁹⁵ Furthermore, because unemployment and poverty can lead to health problems from inadequate nutrition and limited access to health care,¹⁹⁶ the economic benefits of

188. See Bradford C. Mank, *Environmental Justice and Discriminatory Siting: Risk-Based Representation and Equitable Compensation*, 56 OHIO ST. L.J. 329, 410-24 (1995) [hereinafter, Mank, *Environmental Justice and Discriminatory Siting*]; Wernstedt & Hersh, *supra* note 11, at 170-71.

189. See Alexander Cockburn, *Case Tests Clinton's Demand for "Environmental Justice,"* ARIZ. REPUBLIC, Aug. 28, 1997, at B7 (discussing opposition to siting Shintech chemical plant in St. James Parish, Louisiana); Marcia Coyle, *Governor v. Students in \$700M Plant Case*, NAT. L.J., Sept. 8, 1997, at A1, A26-A27 (same); Deborah Mathis, *Environmental Hazards Make Small Town Hellish Place to Live*, Gannett News Service, June 1, 1999, available in WESTLAW, Allnews database.

190. See Mank, *Environmental Justice and Discriminatory Siting*, *supra* note 188, at 357-68.

191. See *id.* at 401-19.

192. See Swanston, *supra* note 13, at 571-72. *But cf.* McWilliams, *supra* note 4, at 717-22 (avoiding brownfields redevelopment will likely spread industrial pollution to greenfields).

193. See Eisen, *supra* note 4, at 1024-25.

194. See CHRISTOPHER BOERNER & THOMAS LAMBERT, ENVIRONMENTAL JUSTICE? 6, 12-13 (1994); Nelson Smith & David Graham, *Brownfields, Environmental Justice, and Underlying Societal Problems*, LEGAL TIMES, reprinted in 2 BROWNFIELD REPORT, No.17, Sept. 4, 1997.

195. See David Friedman, *The "Environmental Racism" Hoax*, 9 AM. ENTERPRISE 75 (Nov. 1, 1998).

196. See BREYER, *supra* note 147, at 16-29; Frank B. Cross, *When Environmental Regulations Kill: The Role of Health/Health Analysis*, 22 ECOLOGY L.Q. 729, 730-40

brownfield projects may provide health benefits to an economically depressed community that outweigh any health risks from the project.¹⁹⁷ Thus, some proponents of brownfield projects believe that environmental justice advocates often harm minority and low-income communities by blocking projects that address real economic problems because of their obsession with remote risks.¹⁹⁸ Moreover, voluntary action programs promoting brownfield redevelopment can actually benefit the environment if they result in faster, but still safe, cleanups.

V. TITLE VI

Under Title VI, federal agencies and departments may not provide funding to programs that discriminate on the basis of race.¹⁹⁹ If any program of a state or local government agency receives any federal assistance, Title VI governs the entire agency.²⁰⁰

Since 1993, the Clinton Administration has enforced Title VI far more aggressively than previous administrations.²⁰¹ On February 11, 1994, President Clinton issued a presidential directive on environmental justice, accompanied by Executive Order 12,898, that requires agencies to use their existing legal authority to achieve the environmental justice goals in the Order.²⁰² In particular, the directive mandates that federal agencies providing funding to recipients with programs affecting human health or the environment confirm that their grant recipients comply with Title VI.²⁰³ In 1994, EPA created an Office of Civil Rights to handle Title

(1995). See generally Friedman, *supra* note 195 (reporting that a 1991 study by University of Pittsburgh physicist Bernard L. Cohen found that while hazardous waste and air pollution exposure reduces life expectancy by 3 to 40 days, poverty reduces life span by an average of 10 years).

197. See Mank, *Environmental Justice and Discriminatory Siting*, *supra* note 188, at 397.

198. See BOERNER & LAMBERT, *supra* note 194, at 12–13; Smith & Graham, *supra* note 194.

199. Section 601 of the statute provides that “[n]o person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance.” Civil Rights Act of 1964, Pub. L. No. 88-352, §§ 601–605, 78 Stat. 241, 252–53 (1964) codified as amended at 42 U.S.C. § 2000d (1988); see Mank, *Title VI*, *supra* note 16, at 23–25.

200. See Mank, *Title VI*, *supra* note 16, at 28. Title VI applies where federal funding is given to an intermediary non-federal entity that distributes this funding to ultimate beneficiaries, but does not apply to federal programs such as Social Security that pay benefits directly to individual beneficiaries. See Colopy, *supra* note 173, at 154.

201. See Mank, *Title VI*, *supra* note 16, at 26–27; Bradford C. Mank, *Is There a Private Right of Action Under EPA’s Title VI Regulations?*, 24 COLUM. J. ENVTL. L. 1, 18–20 (1999) [hereinafter Mank, *Private Right of Action*].

202. See *Presidential Memorandum Accompanying Executive Order 12898*, 30 WKLY COMP. PRES. DOC. 279, 280 (1994); Mank, *Executive Order 12,898*, *supra* note 174, at 103, 107.

203. See *Presidential Memorandum Accompanying Executive Order 12898*, 30

VI issues.²⁰⁴ Between September 1993 and July 1998, fifty-eight environmental justice complaints were filed with the agency, including fifty challenging state or local permit decisions,²⁰⁵ about half of which are still pending.²⁰⁶

A. Title VI: Sections 601 and 602

Title VI contains two major sections. Section 601 of Title VI prohibits federal grant recipients from engaging in discrimination.²⁰⁷ Section 602 requires every federal agency or department to promulgate regulations that specify how the agency will determine whether grant applicants or recipients are engaging in racially discriminatory practices, and to provide a process for investigating and reviewing complaints of racial discrimination filed with the agency.²⁰⁸ Since Congress enacted Title VI in 1964, all federal agencies have adopted Title VI regulations prohibiting disparate-impact discrimination.²⁰⁹ In *Guardians Association v. Civil Service Commission*, a deeply divided Supreme Court ruled that Section 601 of Title VI requires proof of intentional discrimination, but that federal grant agencies may promulgate regulations under Section 602 prohibiting recipient state or local agencies from engaging in practices resulting in discriminatory effects.²¹⁰

Because it addresses disparate impact discrimination, not just intentional discrimination, Section 602 has had a far greater impact on regulating recipient behavior than Section 601.²¹¹ Under Section 602, a citizen

Weekly Comp. Pres. Doc. 279, 280 (1994); Mank, *Executive Order 12,898*, *supra* note 174, at 103, 107.

204. See Natalie M. Hammer, Comment, *Title VI as a Means of Achieving Environmental Justice*, 16 N. ILL. U.L. REV. 693, 711 (1996); Mank, *Title VI*, *supra* note 16, at 26.

205. See Paul Connolly, *Environmental Justice: Mayors RAP EPA at Meeting with Browner for Failure to Consult on Interim Guidance*, 29 ENV'T REP. (BNA) 658 (July 24, 1998); Mank, *Private Right of Action*, *supra* note 201, at 18.

206. See Patrick Merkel, *Civil Rights and the Environment: EPA, States Creating Another Regulatory Burden*, METROPOLITAN CORPORATE COUNSEL-GREATER NEW YORK METRO EDITION, Mar. 1999.

207. "No Person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." 42 U.S.C. § 2000d (1994).

208. See *id.* § 2000d-1 (1994); Mank, *Title VI*, *supra* note 16, at 25; Mank, *Private Right of Action*, *supra* note 201, at 12-13.

209. See Sidney D. Watson, *Reinvigorating Title VI: Defending Health Care Discrimination—It Shouldn't Be So Easy*, 58 FORDHAM L. REV. 939, 947-48 (1990) (discussing how task force helped agencies develop similar disparate impact regulations under Title VI); Mank, *Private Right of Action*, *supra* note 201, at 14-16.

210. *Guardians Ass'n v. Civil Serv. Comm'n*, 463 U.S. 582 (1983). See also Mank, *Private Right of Action*, *supra* note 201, at 13-15.

211. See Mank, *Private Right of Action*, *supra* note 201, at 12-16.

may file an administrative complaint with EPA.²¹² However, it is unclear whether Section 602 allows a private right of action in federal court.²¹³

B. Burden of Proof under Title VI

To succeed in a disparate impact claim, a Title VI plaintiff must demonstrate by a preponderance of the evidence that a recipient agency has engaged in a practice that has a disproportionate impact on persons protected by the statute.²¹⁴ Further, the plaintiff must show that the identified practice is the cause in fact of the alleged discrimination.²¹⁵ To establish a prima facie case, a plaintiff must present evidence that a specific minority group experienced disproportionate impacts compared to a relevant comparison group and then persuade a court to infer that the recipient's practices caused those disproportionate impacts.²¹⁶ For instance, a Title VI plaintiff challenging the location of a highway or hospital might compare the racial demographics of the site with appropriate alternative sites.²¹⁷

After the plaintiff establishes a prima facie case, the burdens of production and persuasion shift to the defendant. The defendant must therefore either disprove the validity of the plaintiff's prima facie case or affirmatively demonstrate "evidence of a legitimate, nondiscriminatory reason for its action."²¹⁸ In other words, the defendant must show a legitimate reason of business or educational necessity for the actions causing a disparate impact. Even though EPA's Title VI regulations appear to prohibit any discriminatory effects, courts have generally interpreted Title VI implementing regulations to prohibit *unjustified* disparate impacts.²¹⁹ Title VI cases suggest that defendants may be able to justify

212. See Mank, *Title VI*, *supra* note 16, at 27–29; Bradford C. Mank, *Environmental Justice and Title VI*, 73 TUL. L. REV. 787, 795–98 (1999).

213. See Mank, *Private Right of Action*, *supra* note 201, at 3–6, 37–61.

214. See Mank, *Environmental Justice and Title VI*, *supra* note 212, at 799–800; see also *EEOC v. Steamship Clerks Union, Local 1066*, 48 F.3d 594, 600–02 (1st Cir. 1995) (discussing standard for prima facie case under Title VII).

215. See 48 F.3d at 600–02.

216. See, e.g., *Elston v. Talladega County Bd. of Educ.*, 997 F.2d 1394, 1407 (11th Cir. 1993) (discussing standard under Title VI for proving causation); Mank, *Environmental Justice and Title VI*, *supra* note 212, at 799–801.

217. See *Coalition of Concerned Citizens Against I-670 v. Damian*, 608 F. Supp. 110, 127–28 (S.D. Ohio 1984) (comparing racial demographics of highway site with other alternatives); Mank, *Environmental Justice and Title VI*, *supra* note 212, at 800–01.

218. *United States v. Lulac*, 793 F.2d 636, 649 (5th Cir. 1986) (determining that in Title VI cases, defendant has burden of production in showing business or educational necessity); *NAACP v. Med. Ctr., Inc.*, 657 F.2d 1322, 1333–34 (3d Cir. 1981) (*en banc*) (finding same); Mank, *Environmental Justice and Title VI*, *supra* note 212, at 801–02.

219. See *NAACP v. Med. Ctr., Inc.*, 657 F.2d at 1334 (stating “the challenged practice must not only affect disproportionately, it must do so unnecessarily”); *Concerned Citizens*, 608 F. Supp. at 127 (“[d]efendants are not per se prohibited from locating a highway where it will have differential impacts upon minorities. Rather, Title VI prohibits

disparate impacts through safety or efficiency justifications, significant cost savings, or the unavailability of physically suitable alternative sites.²²⁰ If the defendant meets its burden of production and persuasion, the ultimate burden of persuasion shifts back to the plaintiff, who then must prove either that the defendant's justification is a pretext for discrimination or that the defendant failed to adopt a less discriminatory alternative practice or location.²²¹

C. EPA's Regulations

EPA currently provides funding to all state environmental agencies as well as to virtually all state or regional siting and permitting agencies.²²² Therefore, almost all state permit decisions are potentially subject to Title VI.²²³ Further, state environmental agencies usually administer state voluntary cleanup programs, so these programs are also likely to be subject to Title VI.

EPA has promulgated regulations under Section 602 of Title VI that prohibit recipient agencies from engaging in practices creating discriminatory effects or from locating a facility where it will have discriminatory effects, including state agencies granting environmental permits.²²⁴ EPA's Title VI regulations state: "A recipient [of federal funds] shall not use criteria or methods of administering its program which have the effect of subjecting individuals to discrimination because of their race, color, [or] national origin."²²⁵ Furthermore, these regulations mandate that state recipients maintain Title VI compliance programs addressing both discrimination by the state and any beneficiaries of state-administered funds.²²⁶

EPA's mechanism for filing a Title VI complaint is relatively simple. First, a complainant must file a statement alleging that a federal funds recipient engages in discriminatory practices.²²⁷ Within twenty days of

taking actions with differential impacts without adequate justification"); Mank, *Environmental Justice and Title VI*, *supra* note 212, at 807.

220. See *Elston*, 997 F.2d at 1413 (holding that lack of land for expansion at only proposed alternative site is adequate justification); Mank, *Environmental Justice and Title VI*, *supra* note 212, at 806-07.

221. See *Elston*, 997 F.2d at 1407; Mank, *Environmental Justice and Title VI*, *supra* note 212, at 808.

222. See Mank, *Title VI*, *supra* note 16, at 25.

223. See *id.*

224. See 40 C.F.R. § 7.35(b) (1998) (prohibiting use of discriminatory program criteria); *id.* § 7.35(c) (prohibiting location of facility that has discriminatory effect); Mank, *Title VI*, *supra* note 16, at 25-26.

225. 40 C.F.R. § 7.35(b). See also 40 C.F.R. § 7.35(c) (prohibiting location of facility that has discriminatory effect).

226. See 28 C.F.R. § 42.410 (1998).

227. The complaint must be filed within 180 days of the alleged discriminatory action, but complainants can request waiver of this time limit for good cause. See 40 C.F.R.

receiving a complaint, EPA conducts a preliminary investigation to determine whether the complaint states a valid claim of discrimination and is within the agency's jurisdiction.²²⁸ If EPA accepts the complaint for investigation, the agency encourages the parties to reach an informal settlement.²²⁹ If a formal investigation of the allegations is necessary, EPA may request information from or conduct an on-site review of the recipient.²³⁰ Should EPA find that a recipient has engaged in discrimination, the agency's main remedy is termination of the recipient's funding.²³¹ The agency cannot provide any direct relief or attorneys' fees to the complainant.²³²

D. EPA's Interim Guidance for Investigating Title VI Administrative Complaints Challenging Permits

1. Introduction

There has been much controversy about the amount of evidence needed to prove disparate impact discrimination under Title VI. In February 1998, EPA promulgated a controversial Interim Guidance to help the agency's Office of Civil Rights resolve a number of pending Title VI complaints.²³³ This Subpart will briefly discuss the substance of the Interim Guidance, and Subpart E will explain the political controversy about how to revise the Interim Guidance so that it allows for reasonable economic development while protecting minority groups.

2. Disparate and Cumulative Impacts

While its main purpose is to define what types of environmental decisions cause impermissible disparate impacts, the Interim Guidance does not provide clear answers about how EPA will determine whether a recipient's action caused adverse disparate impacts against protected minority groups.²³⁴ The Interim Guidance states that the agency will not use a single methodol-

§ 7.120 (1998); Luke W. Cole, *Civil Rights, Environmental Justice and the EPA: A Brief History of Administrative Complaints Under Title VI of the Civil Rights Act of 1964*, 9 J. ENVTL. L. & LITIG. 309, 314-16, 319 (1994); Mank, *Title VI*, *supra* note 16, at 27.

228. See 40 C.F.R. § 7.120(d)(1) (1998); Mank, *Title VI*, *supra* note 16, at 27.

229. See 40 C.F.R. § 7.120(d)(2) (1998); Cole, *supra* note 227, at 316-17; Mank, *Title VI*, *supra* note 16, at 27.

230. See 40 C.F.R. § 7.115(a) (1998) (authorizing EPA's Office of Civil Rights to conduct compliance reviews); Mank, *Title VI*, *supra* note 16, at 27-28.

231. See 40 C.F.R. § 7.130 (1998); Mank, *Title VI*, *supra* note 16, at 28; Mank, *Private Right of Action*, *supra* note 201, at 22-24.

232. See 40 C.F.R. § 7.130(a) (1998); Mank, *Title VI*, *supra* note 16, at 29; Mank, *Private Right of Action*, *supra* note 201, at 22-24.

233. See EPA, INTERIM GUIDANCE, *supra* note 18, at 2; Mank, *Title VI*, *supra* note 16, at 40-45; Mank, *Environmental Justice and Title VI*, *supra* note 212, at 789, 809.

234. See Mank, *Title VI*, *supra* note 16, at 40-44; Mank, *Environmental Justice and Title VI*, *supra* note 212, at 810-14.

ogy for evaluating disparate impacts, but will employ several techniques to analyze the “totality of circumstances” in each case.²³⁵ The Interim Guidance explains that the agency is more likely to investigate and to find disparate impacts if a proposed facility will be located in a community that already has several polluting facilities and currently suffers from a disproportionate amount of pollution.²³⁶ Thus, the Interim Guidance indicates that the agency will consider not just impacts from a proposal, but will also assess the cumulative burden of surrounding facilities.²³⁷ However, the Interim Guidance does not provide a clear explanation of how the agency will measure the cumulative pollution burden.²³⁸

EPA’s independent Science Advisory Board (“SAB”) has examined EPA’s methods for measuring both disproportionate impact and cumulative effects in Title VI complaints.²³⁹ The SAB found that EPA’s new Cumulative Outdoors Air Toxics Concentration Exposure Methodology (“COATCEM”) is an improvement over previous methods and shows significant promise. Yet the SAB concluded that COATCEM’s application to Title VI analysis has not been fully developed and that it is not clear whether the approach can be applied within the normal 180-day time for responding to Title VI complaints.²⁴⁰ The SAB has also recommended that the agency examine the potential risk to all populations, whether significant or *de minimis*, before estimating the extent of any disproportionate impact.²⁴¹

a. Compliance with the Law

The Interim Guidance explicitly states that “merely demonstrating that the permit complies with applicable environmental regulations will not be considered a substantial, legitimate justification.”²⁴² The Interim Guidance suggests that even if a proposed facility complies with existing regulations, a recipient may not grant a permit that will cause unaccept-

235. EPA, INTERIM GUIDANCE, *supra* note 18, at 9; Mank, *Title VI*, *supra* note 16, at 42; Mank, *Environmental Justice and Title VI*, *supra* note 212, at 812.

236. See EPA, INTERIM GUIDANCE, *supra* note 18, at 10–11; Mank, *Environmental Justice and Title VI*, *supra* note 212, at 812.

237. See EPA, INTERIM GUIDANCE, *supra* note 18, at 10–11; Mank, *Title VI*, *supra* note 16, at 42–43; Mank, *Environmental Justice and Title VI*, *supra* note 212, at 812–13.

238. See Mank, *Environmental Justice and Title VI*, *supra* note 212, at 812–13. See generally EPA, INTERIM GUIDANCE, *supra* note 18, at 9–12.

239. See SCIENCE ADVISORY BOARD, U.S. EPA, AN SAB REPORT: REVIEW OF DISPROPORTIONATE IMPACT METHODOLOGIES, EPA-SAB-IHEC-99-007 (Dec. 1998) [hereinafter SAB Report]; see also Cheryl Hogue, *SAB Recommends Steps for EPA in Analyses of Disproportionate Impacts*, 29 *Env’t Rep. (BNA)* 1310, 1310–11 (Oct. 30, 1998).

240. See SAB Report, *supra* note 239, at 1–3. COATCEM evaluates the cumulative impacts of cancer and non-cancer risk separately, and the SAB found that such separate analysis was appropriate.

241. See *id.* at 3.

242. EPA, INTERIM GUIDANCE, *supra* note 18, at 12. See Mank, *Title VI*, *supra* note 16, at 43.

able disproportionate impacts in conjunction with the cumulative burden from existing facilities.²⁴³

However, in November 1998, EPA rejected a Title VI complaint challenging Select Steel's proposed construction of a steel plant in Flint, Michigan because the facility was in compliance with the Clean Air Act's health-based National Ambient Air Quality Standards for ozone and lead.²⁴⁴ Some commentators believe that *Select Steel* demonstrates that a permit's compliance with health-based standards will always satisfy Title VI.²⁴⁵ Whether compliance with technology-based or performance-based standards, as opposed to health-based standards, will defeat a Title VI claim also is unclear.²⁴⁶ Until EPA revises its Interim Guidance, when or whether a permit's compliance with existing regulatory standards is sufficient under the statute remains uncertain.²⁴⁷

b. Mitigation and Justification

The Interim Guidance strongly encourages recipients to mitigate any environmental harms that may cause disparate impacts in order to avoid Title VI violations.²⁴⁸ The Interim Guidance also requires recipients to select a less discriminatory alternative if it is equally effective in addressing the permit applicant's goals.²⁴⁹ However, EPA's restrictive "equally effective" standard for alternatives may allow recipients to use minor differences be-

243. See EPA, INTERIM GUIDANCE, *supra* note 18, at 10–11; Mank, *Environmental Justice and Title VI*, *supra* note 212, at 812–13.

244. See Letter from Ann E. Goode, Director, Office of Civil Rights, U.S. EPA, to St. Francis Prayer Center [Complainant] and Michigan Department of Environmental Quality [Recipient], RE: EPA File No. 5R-98-R5 (Select Steel Complaint) (Oct. 30, 1998) (dismissing Title VI complaint against Michigan Department of Environmental Quality) (on file with author); Mank, *Title VI*, *supra* note 16, at 48–50.

245. See Cheryl Hogue, *Environmental Justice: Draft Revision of Guidance for Processing Civil Rights Complaints Expected Mid-1999*, 29 ENV'T REP. (BNA) 1807 (Jan. 15, 1999) (reporting the opinion of Professor Richard Lazarus, a member of EPA's Title VI Implementation Advisory Committee, that *Select Steel* suggests compliance with appropriate health-based standards will usually defeat Title VI claim); Mank, *Title VI*, *supra* note 16, at 49–50.

246. See Hogue, *supra* note 245, at 1807 (explaining that Professor Richard Lazarus, a member of EPA's Title VI Implementation Advisory Committee, believes a permit's compliance with either technology-based or performance-based standards that do not specify at what level pollution will cause adverse health effects will not necessarily defeat a Title VI claim); Mank, *Title VI*, *supra* note 16, at 50.

247. See Mank, *Title VI*, *supra* note 16, at 44; see also Hogue, *supra* note 245, at 1807 (discussing when compliance with existing law will defeat a Title VI claim).

248. See EPA, INTERIM GUIDANCE, *supra* note 18, at 5, 11–12; Mank, *Environmental Justice and Title VI*, *supra* note 212, at 814.

249. See EPA, INTERIM GUIDANCE, *supra* note 18, at 5, 11–12. *But see* Mank, *Environmental Justice and Title VI*, *supra* note 212, at 822–23 (arguing EPA should use a "comparably effective" less discriminatory alternative standard in Title VI cases because its "equally effective" standard makes it too easy for recipients to use minor differences to reject a less discriminatory alternative).

tween sites to exclude sites that could achieve similar goals with fewer impacts on minorities.²⁵⁰

According to the Interim Guidance, if a facility poses a significant health risk to minorities despite mitigation efforts, the recipient may still provide a substantial, legitimate justification for why the benefits of the facility are sufficient to outweigh the cost of the disparate impacts.²⁵¹ In evaluating the proffered justification, EPA will consider the state or local government's interest in approving the project, the seriousness of the disparate impacts, whether the permit involves a renewal of an existing facility "with demonstrated benefits" or a new project with "more speculative benefits," and whether the project will provide employment or other benefits to the particular community that is the subject of the Title VI complaint.²⁵² It is at this stage that a brownfield redeveloper can emphasize the economic and environmental benefits of a project to the surrounding community. However, the Interim Guidance fails to provide any guidelines for balancing health risks against economic benefits.

E. EPA's Response to Controversy over Title VI and Brownfields

State and local regulators as well as industry representatives have strongly criticized the Interim Guidance for failing to define crucial issues, such as when a disparate impact constitutes impermissible discrimination.²⁵³ Many contend that uncertainty about how EPA will apply the Interim Guidance discourages business from locating in minority areas for fear that EPA will subsequently decide that a project in a minority community causes disparate impacts, and that this uncertainty will especially affect the redevelopment of brownfield properties.²⁵⁴ In July 1998, several mayors, including many Democratic mayors who usually support the Clinton Administration, met with EPA Administrator Carol Browner to argue that EPA's environmental justice policies, especially the Interim Guidance, could threaten their and the agency's efforts to redevelop contaminated brownfields.²⁵⁵ The mayors argued that the Interim Guidance's

250. See Mank, *Environmental Justice and Title VI*, *supra* note 212, at 823.

251. See EPA, INTERIM GUIDANCE, *supra* note 18, at 12.

252. See EPA, INTERIM GUIDANCE, *supra* note 18, at 12.

253. See FOREMAN, *supra* note 15, at 59; John H. Cushman, Jr., *Pollution Policy is Unfair Burden, States Tell EPA*, N.Y. TIMES, May 9, 1998, at 1; Mank, *Title VI*, *supra* note 16, at 40-44; Mank, *Environmental Justice and Title VI*, *supra* note 212, at 810.

254. See, e.g., Stephen Jones & Annap G. Shroff, *Environmental Justice Concerns Delay Industrial Expansion*, 13 ENVTL. COMPLIANCE & LITIG. STRATEGY 1 (Oct. 1997); Catherine M. Ward, *Environmental Justice for All: Why There Are Fewer Brownfields in White Neighborhoods?*, 154 N.J.L.J. 253 (Oct. 26, 1998).

255. See Letter from Carol Browner, Administrator, U.S. EPA, to U.S. Conference of Mayors (June 18, 1998) (on file with *Harvard Environmental Law Review*); Carol Browner, Administrator, U.S. EPA, Speech to Environmental Justice Roundtable, Detroit, Michigan (July 17, 1998); Connolly, *supra* note 205, at 658 (reporting that many mayors

vague and potentially open-ended definition of disparate impacts would lead developers to avoid brownfield redevelopment in minority areas because too much uncertainty remains as to which projects are acceptable.²⁵⁶ However, EPA has asserted that its Interim Guidance is unlikely to restrict brownfield development and observed that no citizen has yet filed a Title VI complaint against such a project.²⁵⁷ Similarly, many environmentalists and civil rights leaders believe that the Interim Guidance permits development in minority neighborhoods as long as reasonable efforts are taken to protect minority groups.²⁵⁸

As a result of this controversy, in October 1998, President Clinton signed a moratorium on EPA accepting new Title VI complaints until the agency issues a final guidance on Title VI.²⁵⁹ Congress drafted the moratorium to force EPA to revise the Interim Guidance so as to promulgate policies that are more favorable to economic development in minority communities, including brownfield redevelopment.²⁶⁰ For Fiscal Year 2000, President Clinton signed legislation retaining the moratorium for another year.²⁶¹ Despite the moratorium on new complaints, many state officials, including members of the National Governors Association, remain concerned that the Interim Guidance will discourage industry from

are concerned that EPA's Title VI policies will undermine brownfield redevelopment); Jones & Shroff, *supra* note 253, at 1 (arguing EPA's environmental justice and Title VI policies threaten to undermine its brownfield policies). *But see* Luke W. Cole & Richard Moore, *Attacks on EPA Unfair*, USA TODAY, July 20, 1998, at 14A (arguing EPA's environmental justice policies need not hinder brownfields' redevelopment).

256. *See* FOREMAN, *supra* note 15, at 59; Cushman, *supra* note 253, at 1; Mank, *Title VI*, *supra* note 16, at 40, 44; Mank, *Environmental Justice and Title VI*, *supra* note 212, at 810; *EPA Defends Environmental Justice Policy, Process to Bliley*, ENVTL. POL'Y ALERT, Dec. 30, 1998, at 30-31 (reporting that Congressman Thomas Bliley is concerned that Interim Guidance could interfere with brownfield projects).

257. *See* David Warner & James Worsham, *The EPA's New Reach*, NATION'S BUSINESS, Oct. 1, 1998, at 12, 17 (reporting interview with EPA Administrator Carol Browner); *EPA Defends Environmental Justice Policy, Process to Bliley*, *supra* note 256, at 30-31 (reporting that Ann Goode, director of EPA's Office of Civil Rights, contends that the Interim Guidance is unlikely to interfere with brownfield projects).

258. *See* Angela M. Baggetta, *Environmental Justice: Black Caucus, EPA to Meet on Shintech; Dispute May Be Test Case on Title VI Suits*, 139 DAILY ENV'T REP. (BNA), July 21, 1998, at A-1; Cole & Moore, *supra* note 255, at 14A; Mank, *Title VI*, *supra* note 16, at 40.

259. The legislation does not affect 15 ongoing investigations. *See* Appropriations Act for Departments of Veterans Affairs and Housing and Urban Development and Independent Agencies for Fiscal Year Ending Sept. 30, 1999, Pub. L. No. 105-276, 112 Stat. 2461 (1998); Mank, *Environmental Justice and Title VI*, *supra* note 212, at 810; Cindy Skrzycki, *The Regulators: With EPA as Judge-Up Against the Environmental Justice System*, WASH. POST, Oct. 23, 1998, at F1; Bill Walsh, *Law Puts EPA Bias Rules on Hold: Industry Targets Racism Probes*, NEW ORLEANS TIMES-PICAYUNE, Oct. 23, 1998, at A8.

260. *See* Skrzycki, *supra* note 259, at F1; Walsh, *supra* note 259, at A8.

261. *See* Departments of Veteran Affairs and Housing and Urban Development and Independent Agencies Appropriations Bill, 2000, H.R. 2684, 106th Cong. (1999); H.R. REP. NO. 106-286 (1999).

locating in minority areas because the moratorium will not last indefinitely.²⁶²

To address bipartisan concerns about the Interim Guidance's vague definitions and possible adverse consequences, EPA Administrator Carol Browner established a Title VI Implementation Advisory Committee to help the agency develop environmental justice policies that are protective of minority communities, yet allow for economic development.²⁶³ However, the Advisory Committee has failed to achieve a consensus about how to address many Title VI issues.²⁶⁴ Additionally, EPA is using brownfield sites in six cities as case studies to examine how the Title VI complaint process affects cleanup, economic redevelopment and permitting issues at such sites.²⁶⁵ In 1999, EPA, brownfield developers, environmentalists, and equity advocates finally began working together to create a sustainable redevelopment process that addresses growth, environmental quality, and equity issues.²⁶⁶

EPA has suggested that its revised Title VI policy will better address brownfield redevelopment issues.²⁶⁷ By the beginning of 2000, the agency intends to issue a draft revision of its Interim Guidance on how the agency will review Title VI complaints.²⁶⁸ Furthermore, during the fiscal year 2000, the agency may promulgate a separate draft guidance suggesting how state and local agencies can avoid such complaints.²⁶⁹ EPA plans to issue both guidances as draft documents and to take public comments on them before issuing final versions,²⁷⁰ but will not issue either as a formal rule.²⁷¹

262. See David Mastio, *EPA Rule Faces Challenge: Governors to Consider Request to Change Environmental Policy*, DETROIT NEWS, Feb. 23, 1999, at B1.

263. See Connolly, *supra* note 205, at 658; *EPA Bungling Leaves 'Environmental Justice' Elusive*, USA TODAY, July 20, 1998, at 14A. *But see* Cole & Moore, *supra* note 255, at 14A (arguing EPA's environmental justice policies need not hinder brownfields' redevelopment).

264. See REPORT OF THE TITLE VI ADVISORY COMMITTEE, *supra* note 3, at 5-10; Cheryl Hogue, *Environmental Justice: Title VI Advisory Panel Report Sets Out Issues, Gives No Recommendations*, 29 Env't Rep. (BNA) 2188 (Mar. 5, 1999).

265. *Fiscal 2000 Water and Env't Budget: Hearings Before the Subcomm. on Water Resources and Env't of the House Comm. on Transp. and Infrastructure*, 106th Cong. (Feb. 10, 1999) (Prepared Testimony of Timothy Fields, Acting Assistant Administrator, Office of Solid Waste and Emergency Response, U.S. EPA).

266. See EPA, *Stakeholder Group to Launch New Brownfields Redevelopment Program*, ENVTL. POL'Y ALERT, Mar. 24, 1999, at 9.

267. See David Sive & Lemuel M. Srolovic, *Environmental Justice Issues Develop; Facility Permits and Civil Rights*, N.Y.L.J., Oct. 26, 1998, at S1.

268. See Cheryl Hogue, *Environmental Justice: Agency Planning to Issue Draft of Revised Guidance in Late Summer*, 30 Env't Rep. (BNA) 178 (May 28, 1999).

269. See Hogue, *supra* note 245, at d11.

270. See *id.*

271. See EPA to Revise Title VI Guidance Under Rulemaking Procedures, ENVTL. POL'Y ALERT, May 5, 1999, at 31 (reporting EPA will follow rulemaking procedures for soliciting public comment in revising its interim policy on environmental justice, but will not make the guidance legally binding as a rule).

VI. PROBLEMS WITH STATE BROWNFIELD PROGRAMS

There are considerable uncertainties about how EPA will revise its Title VI policies. Nevertheless, states can implement several reforms now to insure that their brownfield programs comply with Title VI regardless of future EPA actions. Before discussing these reforms, it will be helpful to identify how brownfield programs typically fail to address discrimination concerns.

State brownfield programs typically commit errors of omission. First, they generally do not consider whether the approval of a project will create disproportionate impacts on minority groups. Second, state brownfield programs usually do not consider the cumulative burden of a project in conjunction with existing sources of pollution.

Provisions in state brownfield statutes or regulations that allow lower health standards in industrial areas or in areas projected to be non-residential are also a problem. In light of evidence that minority groups are significantly more likely to live in nonresidential areas,²⁷² state brownfield statutes or regulations that allow lower health standards in these areas raise serious questions under Title VI because such provisions may disproportionately increase health risks to protected minority groups.

A. *Errors of Omission*

State brownfield programs typically do not address whether projects will affect minority groups or examine whether the effects are disproportionate. State brownfield statutes and regulations implicitly assume that a project is acceptable if it meets all applicable federal or state permitting requirements. However, the Interim Guidance explicitly states that “merely demonstrating that the permit complies with applicable environmental regulations will not be considered a substantial, legitimate justification.”²⁷³ Even if it complies with existing regulations, a facility may cause unacceptable disproportionate impacts if its pollution is added to the cumulative burden from existing facilities.²⁷⁴ While there are still uncertainties about how EPA will evaluate cumulative and synergistic pollution impacts, states should revise their voluntary action programs now at least to examine the extent to which a project will add to existing pollution im-

272. See *supra* notes 23, 125 and accompanying text.

273. EPA, INTERIM GUIDANCE, *supra* note 18, at 12; Mank, *Title VI*, *supra* note 16, at 43; *supra* notes 242–247 and accompanying text.

274. See EPA, INTERIM GUIDANCE, *supra* note 18, at 10–11; Mank, *Title VI*, *supra* note 16, at 42–43; Mank, *Environmental Justice and Title VI*, *supra* note 212, at 812–13; *supra* notes 242–247 and accompanying text.

pacts in the surrounding area and whether increases in pollution will disproportionately affect minority populations.

Additionally, state brownfield programs typically focus on the safety of the proposed site and do not require the developer to assess alternative locations. Most state programs also do not mandate the use of mitigation. The Interim Guidance, however, requires recipients to take of all these steps. It states that the agency expects a recipient to mitigate any significant impacts against minorities.²⁷⁵ If a facility poses a significant health risk to minorities despite these mitigation efforts, the Interim Guidance requires the recipient to provide a substantial, legitimate justification for why the benefits of the facility are sufficient to outweigh the cost of the disparate impacts.²⁷⁶ The Interim Guidance also states that “a justification offered will not be considered acceptable if it is shown that a less discriminatory alternative exists” that is “equally effective in meeting the needs addressed by the challenged” proposal.²⁷⁷

Most states had enacted their voluntary action programs before EPA issued its Interim Guidance. Hence, it is not surprising that these programs do not address the Interim Guidance’s concerns about disparate impacts, cumulative pollution burdens, mitigation, cost-benefit analysis, or evaluation of less discriminatory alternatives. Understandably, states may hesitate to revise their programs until EPA issues a final Title VI guidance resolving a number of controversial issues. However, Part VII argues that states should implement as soon as possible many needed changes in their voluntary action programs, even before EPA issues its revised Title VI guidance.

B. Lower Standards in Industrial and Nonresidential Areas

Since many state brownfield programs allow consideration of a site’s future use and some explicitly authorize lower health standards in nonresidential areas, their policies could violate Title VI if states are significantly more likely to approve high-risk projects in minority communities. Because members of at least some minority groups are more likely to live in nonresidential areas,²⁷⁸ an environmental justice complainant could argue that policies allowing lower standards in such areas constitute prima facie evidence of discrimination. The standard for

275. See EPA, INTERIM GUIDANCE, *supra* note 18, at 11; Mank, *Title VI*, *supra* note 16, at 43; Mank, *Environmental Justice and Title VI*, *supra* note 212, at 814; *supra* note 248 and accompanying text.

276. See EPA, INTERIM GUIDANCE, *supra* note 18, at 12; Mank, *Title VI*, *supra* note 16, at 43–44; *supra* notes 251–252 and accompanying text.

277. EPA, INTERIM GUIDANCE, *supra* note 18, at 5, 12; Mank, *Environmental Justice and Title VI*, *supra* note 212, at 814–28; *supra* note 249 and accompanying text.

278. See *supra* notes 23, 125 and accompanying text.

proving a prima facie case of discrimination under Title VI is relatively easy to meet because statistical evidence of significant disparities between a minority group and a relevant comparison group is often enough to raise an inference of causation.²⁷⁹ Hence, states need to reexamine the future use provisions in their voluntary action programs to explore whether they may cause adverse, disparate impacts to certain minority groups.

While consideration of a site's future use or nonresidential status does not inevitably violate Title VI, a state must ensure that voluntary action programs that allow lower health standards in nonresidential areas do not adversely affect a substantial number of people, including members of racial minority groups. Indeed, by ensuring that its future use or nonresidential policies do not disproportionately affect racial minority groups, a state will likely avoid adverse effects against all neighbors of such projects. Because voluntary action programs typically seek to promote brownfield redevelopment, states have glossed over some difficult issues, including alternatives, synergistic impacts, and long-term risks. By addressing the Title VI concerns, states are more likely to address the difficult issues affecting all populations.

VII. IMPROVING DATA COLLECTION AND PUBLIC PARTICIPATION IN STATE BROWNFIELD PROGRAMS: A FRAMEWORK FOR COMPLYING WITH TITLE VI

States should implement several reforms now to avoid Title VI complaints against brownfield projects. If states implement these reforms, EPA should give greater, but not automatic, deference to voluntary action programs.

First, to determine whether brownfield projects might create disparate impacts on minority groups, states should amend their voluntary action programs to require developers to collect data about the racial demographics and relative burden of pollution in several neighborhoods surrounding brownfield projects.²⁸⁰ States should require developers to prepare a community impact statement similar to the environmental impact statement required under the National Environmental Policy Act that addresses the environmental and social impacts of a brownfield project, as well as possible alternatives and mitigation measures.²⁸¹ Furthermore, states should require developers to consider whether their project will

279. See Mank, *Environmental Justice and Title VI*, *supra* note 212, at 799–801.

280. See REPORT OF THE TITLE VI ADVISORY COMMITTEE, *supra* note 3, at 30–31; EPA, SUSTAINABLE BROWNFIELDS, *supra* note 26, at 31–33, 96–102.

281. See Eisen, *supra* note 4, at 1015–16 (proposing CIS). See generally Mank, *Environmental Justice and Title VI*, *supra* note 212 (discussing consideration of alternatives and mitigation under Title VI, the Clean Water Act, and NEPA).

cause adverse disparate impacts on a minority group, including an individualized risk assessment that examines the specific risks of developing the proposed site. Additionally, state agencies should require a developer to consider less discriminatory alternatives to a project because that is potentially one of the most important ways to avoid harm to minority groups.²⁸² A finding of elevated pollution levels or disparate impacts in a minority area would not automatically preclude the siting of a project, but such evidence would place a greater burden on a developer and a permitting agency to justify such a project. Once such a finding has been made, a developer or permitting agency should have to show substantial need for the project, the unavailability of alternative sites, and strong community support.

While Title VI does not mandate public participation, emerging principles of environmental justice demand that the public have an opportunity to comment on a community impact statement. Because risk assessment is complex and experts often disagree, states should provide technical assistance, including grants, to citizen groups, minority groups, or local communities to enable them to conduct research to challenge any data submitted by industry supporting a brownfield proposal. Both EPA and states should fund community monitoring programs to ensure that a project complies with all applicable permits. Additionally, states and local governments should develop effective community monitoring programs both to gather data and to address community concerns.²⁸³ Finally, states should establish procedures for early and meaningful public participation in the process for approving a voluntary cleanup plan.²⁸⁴

While the agency must evaluate each Title VI complaint on its own merits, EPA should give greater deference to states that have strong data collection and public participation programs. In its revised Title VI guidance, EPA should explicitly encourage states to improve their data collection and public participation programs.

282. See Mank, *Environmental Justice and Title VI*, *supra* note 212, at 815–28 (discussing consideration of alternatives under Title VI and NEPA).

283. See REPORT OF THE TITLE VI ADVISORY COMMITTEE, *supra* note 3, at 55.

284. See Mank, *Environmental Justice and Title VI*, *supra* note 212, at 840–41; REPORT OF THE TITLE VI ADVISORY COMMITTEE, *supra* note 3, at 33 (stating “early intervention reduces the possibility that delays will cost industry time, money, and even a competitive advantage in the siting or expansion of new and existing facilities”); NATIONAL ENVIRONMENTAL JUSTICE ADVISORY COUNCIL (NEJAC), U.S. EPA, MODEL PLAN FOR PUBLIC PARTICIPATION 7 (Nov. 1996) [hereinafter NEJAC, MODEL PLAN] (proposing government agencies “[s]olicit stakeholder involvement early in the policy-making process, beginning in the planning and development stages and continuing through implementation and oversight”); NATIONAL ENVIRONMENTAL JUSTICE ADVISORY COUNCIL (NEJAC), U.S. EPA, ENVIRONMENTAL JUSTICE, URBAN REVITALIZATION, AND BROWNFIELDS: THE SEARCH FOR AUTHENTIC SIGNS OF HOPE 20–22 EPA 500-R-96-002 (1996) (stating “[e]arly, ongoing, and meaningful public participation is a hallmark of sound public policy and decision making”).

A. *Requiring Developers to Collect Data and Consider Possible Disparate Impacts on Minorities*

1. *State Mapping Programs for High-Risk Areas*

States should develop mapping programs to identify areas at high risk. EPA's Title VI Advisory Committee has encouraged states to develop a preventative "Track 1" program to identify areas in which there are disproportionate impacts and to develop mitigation plans to reduce such adverse effects; the agency is beginning to distinguish between preventative "Track 1" programs and "Track 2" programs that address actual complaints of discrimination.²⁸⁵ The Track 1 program is intended to identify areas with high levels of cumulative pollution and to redress such problems before a citizen files a Title VI complaint about an individual permit application. In particular, the Committee suggested that agencies at all levels of government examine the cumulative effects on human health and environment of all pollution sources without regard to whether such pollution is exempt from any applicable permitting process or law.²⁸⁶

a. *Identifying High-Risk Areas*

There have been several proposals to identify environmental high-impact areas, to require special data collection in such areas, and even to impose a moratorium on construction in such areas. In 1992, then-Senator Al Gore and Representative John Lewis introduced legislation in Congress that would have placed a moratorium on siting new facilities in "environmental high impact areas," which were defined as the 100 counties in the United States with the highest total weight of toxic chemicals in the air, water, and land.²⁸⁷ In 1995, an environmental justice bill in the Pennsylvania General Assembly would have required the state to list the 100 highest impact areas in the Commonwealth, to assess any adverse health impacts in those areas, to ensure that all groups or individuals in those areas were able to participate in the technical process for determining adverse impacts, to award technical assistance grants, and to promulgate regulations to address any significant adverse impacts.²⁸⁸ Unfortunately, none of this legislation ever became law.

285. See REPORT OF THE TITLE VI ADVISORY COMMITTEE, *supra* note 3, at 30–31.

286. See *id.* at 43–44.

287. See H.R. 5326, 102d Cong. (1992); S. 2806, 102d Cong. (1992); Mank, *Environmental Justice and Discriminatory Siting*, *supra* note 188, at 353–54.

288. See H.R. 2321, 180th Gen. Ass., 1995–96 Regular Sess. (Pa. 1995); Carolyn Graham & Jennifer B. Grills, Comment, *Environmental Justice: A Survey of Federal and State Responses*, 8 VILL. ENVTL. L.J. 237, 253–58 (1997).

In 1998 the Public Interest Law Center of Philadelphia proposed an "Environmental Justice Protocol" that would prohibit construction of new facilities in any "affected area" where the public health is "substandard." The proposal used a radius approach for determining the affected population. The proposal defined "affected area" to be a circle a half-mile in radius around the facility, but enlarged the circle if it did not contain at least one thousand residents.²⁸⁹ The Public Interest Law Center of Philadelphia has urged EPA to adopt its radius and public health approach because of the difficulties of determining cumulative and synergistic risks.²⁹⁰ However, there is considerable disagreement about the appropriate size of the radius. Industry prefers a smaller, "fence-line" approach that focuses only on those at greatest risk, those living closest to a plant's fence-line. There is some value to industry's preferred approach. Current siting schemes tend to give too much weight to existing political subdivisions and not enough attention to the concerns of those at greatest risk.²⁹¹ Conversely, environmentalists appropriately fear that a small radius will exclude larger population groups still at some risk. As a result, the Public Interest Law Center of Philadelphia withdrew its initial proposal and has solicited additional comments about a revised draft proposal suggesting a one-mile radius.²⁹²

While there are disagreements about how to define high-risk areas, an imperfect mapping program is likely to be better than none at all. Any program that seriously attempts to identify areas with high levels of pollution and tries to correlate them with minority populations will help states to determine if a proposed brownfield project should receive special scrutiny because it will be located in a high-risk neighborhood.

b. Will Mapping Prevent All Development?

A mapping program that identifies high-risk areas can help determine the extent of data collection needed for a project, yet mapping may have some undesirable effects. There is the danger that a mapping program will falsely identify some areas as high-risk that later turn out to be safe for development. Industry and state officials fear that programs to

289. See Public Interest Law Center of Philadelphia, "Environmental Justice Protocol" (proposed October 1, 1998) (on file with *Harvard Environmental Law Review*).

290. See Letter from Jerome Balter, Director of Environmental Justice Project, Public Interest Law Center of Philadelphia, to Elliot Laws, Chair, U.S. EPA Title VI Implementation Advisory Committee, and Ann E. Goode, Director, Office of Civil Rights, U.S. EPA, 2 (Apr. 29, 1999) (on file with *Harvard Environmental Law Review*).

291. See Mank, *Environmental Justice and Discriminatory Siting*, *supra* note 188, at 401-19.

292. See Public Interest Law Center of Philadelphia, Draft Environmental Justice Standard for the City of Philadelphia,"(May 4, 1999) (revised draft proposed one mile radius) (on file with *Harvard Environmental Law Review*); Public Interest Law Center of Philadelphia, "The EPA Needs a Workable Environmental Justice Protocol," (proposed Feb. 18, 1999) (on file with *Harvard Environmental Law Review*).

map, screen, or identify minority areas with high levels of pollution will discourage business development in minority neighborhoods and are especially concerned about the impact of mapping for brownfield redevelopment.²⁹³ Some industry representatives and state governments point out that mapping technology often simply identifies areas with large numbers of facilities or pollution, but does not measure actual exposure and risk levels in particular communities.²⁹⁴

Due to these risks, mapping should not be used to preclude all development in a community. Instead, identifying potentially high-risk areas should be the first step in a dialogue about what types of brownfield redevelopment are appropriate in a community that may suffer from both high levels of unemployment and cumulative impacts of pollution. A distinction should be made between brownfield redevelopment that carries high or low risk to a community.²⁹⁵ States should adopt special brownfield programs to examine potential low-polluting uses for brownfield properties and discuss which types of projects are appropriate in areas with already high levels of pollution.

States should not wait for EPA's revised Title VI guidance and should begin identifying areas with potentially high levels of cumulative pollution and disproportionate adverse impacts now. A state typically must collect demographic and cumulative burden data if a citizen files a plausible Title VI complaint. States probably can avoid many Title VI complaints if they know before approving a project whether a proposal is likely to have disproportionate impacts on minorities. In *Select Steel*, EPA reached a decision rejecting a Title VI complaint within two and one-half months because Michigan quickly provided a complete set of records justifying its decision and exerted political pressure for an early ruling.²⁹⁶ EPA's rapid resolution of the *Select Steel* Title VI complaint suggests that if a state already has data showing that a proposal is unlikely to have disproportionate impacts against minorities, EPA will quickly dismiss a complaint rather than conduct a time-consuming investigation.²⁹⁷

293. See REPORT OF THE TITLE VI ADVISORY COMMITTEE, *supra* note 3, at 68–69.

294. See *id.*

295. See *id.* at 69.

296. See Letter from Ann E. Goode, *supra* note 244 (noting that the U.S. EPA stated that it was able to reach a fast but thorough decision because Michigan officials had quickly provided the agency with complete records on the original state permit decision); Mank, *Title VI*, *supra* note 16, at 49.

297. Whether EPA's decision in *Select Steel* was biased by political factors is beyond the scope of this Article. See Mank, *Title VI*, *supra* note 16, at 49–50 for a discussion of *Select Steel*.

2. Developer Community Impact Statements

a. Writing Effective Community Impact Statements at Reasonable Cost

States should require developers to write a concise but thorough community impact statement ("CIS") about the health and economic impacts of their project, allow citizens to comment on that statement, and require a state environmental agency to approve it before the developers may undertake a voluntary cleanup. In preparing a CIS, states should require brownfield developers to collect information about the extent to which minorities are disproportionately located near brownfields. Additionally, if a statute or regulation authorizes lower health standards for nonresidential brownfield projects, states should require a developer that seeks to apply the lower standards to collect and evaluate information on the extent to which minorities are likely to live near such sites. States or developers also should collect data on the extent to which minority residents actually will benefit from new jobs or taxes resulting from redevelopment of a brownfield site.²⁹⁸ In addition, states should require a permit applicant's CIS to address mitigation measures, the possibility of less discriminatory alternatives to the project, and the costs and benefits of a project.

Developers are likely to argue that writing a CIS is too time-consuming and expensive, but many states already require the collection of some data to determine the overall risk to surrounding areas of proposed brownfield projects.²⁹⁹ Several state voluntary action programs already allow developers to use a site-specific risk assessment and thus there is some experience with such studies.³⁰⁰ A site-specific examination of a facility's individual and cumulative pollution burdens potentially provides a great deal of information about its risk to surrounding communities, including any special risks it may pose to minority communities.³⁰¹

Additionally, federal agencies routinely prepare environmental assessments. For major federal projects, the NEPA already requires federal agencies or states receiving substantial federal assistance to write an environmental assessment that considers a proposed project's environmental impacts and alternatives to the proposal.³⁰² Several states have mini-NEPAs

298. EPA's Interim Guidance explicitly considers economic benefits in evaluating whether a recipient agency's permit or other decisionmaking creates unacceptable, disparate impacts against a minority group. See EPA, INTERIM GUIDANCE, *supra* note 18, at 12; *supra* text accompanying notes 251-252.

299. See *supra* notes 100-101 and accompanying text.

300. See *supra* notes 94, 109-110 and accompanying text.

301. See, e.g., Mank, *What Comes After Technology*, *supra* note 140, at 334-38.

302. To determine whether a proposed action is a "major Federal action[]

or other statutes with similar requirements.³⁰³ In ninety-nine percent of the cases, the agency prepares a simple fifteen to twenty page environmental assessment and then a Finding of No Significant Impact (“FONSI”). Only a small number of projects have significant environmental impacts that require an agency to prepare a more elaborate environmental impact statement. Brownfield developers would normally only prepare a relatively short environmental assessment unless the project involves unusual risks. This Article proposes to extend the environmental assessment project to purely private brownfield projects that are not currently subject to these requirements. The special risks posed by brownfield projects justify the need for community impact statements in this area.

While preparing an environmental assessment is costly, it often leads to substantial benefits. As a result of writing an impact statement, agencies often modify a proposed project to lessen environmental impacts, although they are less likely to cancel a project altogether.³⁰⁴ The benefits of conducting an environmental assessment can be greater if a developer is required to implement mitigation measures. Though NEPA merely requires that an agency evaluate mitigation measures,³⁰⁵ other statutes impose substantive mitigation requirements. For example, the Army Corps of Engineers frequently requires mitigation measures as a condition for obtaining a wetlands permit to achieve the Clean Water Act’s goal of “no net loss” of wetlands and also requires applicants to adopt practicable alternatives if they will cause less harm to wetlands.³⁰⁶

significantly affecting the quality of the human environment” requiring an EIS, agencies draft an Environmental Assessment (EA) that examines the need for the project, considers alternatives to the proposal, discusses the impacts of the proposal and any alternatives, and may discuss mitigation measures. *See* 42 U.S.C. § 4332(2)(C) (1994 & Supp. III 1999); 40 C.F.R. § 1502.14 (1998) (stating that NEPA requires an agency to consider alternatives to the proposed action); Valerie Fogelman, *Environmental Impact Statements*, in 1 ENVIRONMENTAL LAW PRACTICE GUIDE § 1.07 (Michael Gerrard ed., 1999); Stephen M. Johnson, *NEPA and SEPA’s in the Quest for Environmental Justice*, 30 LOY. L.A. L. REV. 565, 570 (1997); Mank, *Environmental Justice and Title VI*, *supra* note 212, at 819, 821–22, 829–31.

303. *See* Johnson, *supra* note 302, at 598–99; Alice Kaswan, *Environmental Justice: Bridging the Gap Between Environmental Laws and “Justice,”* 47 AM. U. L. REV. 221, 293 n.358 (1997) (listing 13 states and Puerto Rico as having state statutes or regulations based on NEPA that require an agency to consider alternatives); Mank, *Environmental Justice and Title VI*, *supra* note 212, at 819; *see, e.g.*, IOWA CODE ANN. § 455B.448(1)(k) (1997).

304. *See* Eisen, *supra* note 4, at 1016.

305. For instance, NEPA does not require that agencies or private applicants actually implement mitigation measures, but the lead agency must discuss how such measures could minimize any environmental impacts. *See* *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332 (1990); 40 C.F.R. § 1502.16(h) (1998); DANIEL R. MANDELKER, *NEPA LAW AND LITIGATION* § 8.08[10] (2d ed. 1999); Mank, *Environmental Justice and Title VI*, *supra* note 212, at 819, 821–22, 829–31.

306. *See* 40 C.F.R. § 230.10(d) (1998) (requiring compensatory mitigation in appropriate circumstances); 33 C.F.R. § 320.4(r) (1998) (same); 33 C.F.R. § 230.10(a) (1998) (requiring Army Corps of Engineers to reject wetlands permit if a practicable alternative exists that is less damaging to the aquatic ecosystem); Memorandum of Agreement between U.S. EPA and Department of Army Concerning the Determination of Mitigation Under Clean Water Act Section 404(b)(1) Guidelines, 55 Fed. Reg. 9210 (1990); Friends

Furthermore, some state statutes require state agencies to mitigate significant impacts.³⁰⁷

Although the evaluation of less discriminatory, rather than less environmentally harmful, alternatives raises different considerations, many state and local governments already consider alternatives as part of their siting process.³⁰⁸ Collecting additional information about the racial demographics of alternative sites to develop or redevelop should not prove difficult for recipients.

States can minimize the costs of data collection by authorizing a limited, preliminary inquiry before requiring more extensive data collection.³⁰⁹ EPA and states usually allow a potential purchaser of commercial property to conduct a limited Phase I audit of whether the property has been used before in such a way that contamination is likely.³¹⁰ Phase I audits usually involve the review of existing land use information, such as a title search or the examination of aerial photographs, to determine if a site was used for industrial purposes.³¹¹ Only if the Phase I audit suggests a significant possibility of contamination must a purchaser or developer conduct a Phase II audit, which usually involves testing soil or groundwater for contamination.³¹²

Similarly, states should require all brownfield developers to conduct a preliminary audit of existing census data on the demographic composition of the surrounding area and a limited examination of other major pollution sources in the area. Only if the quasi-Phase I audit indicates that significant minority populations or substantial cumulative pollution

of the Earth v. Hintz, 800 F.2d 822, 837-38 (9th Cir. 1986) (upholding mitigation through off-site purchase of wetlands); MANDELKER, NEPA LAW AND LITIGATION, *supra* note 305, § 8.08[10]; Marc R. Bulson, *Off-Site Mitigation and the EIS Threshold: NEPA's Faulty Framework*, 41 WASH. U. J. URB. & CONTEMP. L. 101 (1992).

307. See, e.g., CAL. PUB. RES. CODE § 21002.1(b) (West 1996) (requiring state agencies to mitigate or avoid significant environmental impacts when "feasible"); MINN. STAT. § 116D.04(6) (1998) (requiring the state to adopt a feasible and prudent alternative that is less environmentally destructive); N.Y. ENVTL. CONSERV. LAW § 8-0109(1) (McKinney 1997) (requiring mitigation to the maximum extent practicable); Johnson, *supra* note 302, at 598-99; Mank, *Environmental Justice and Title VI*, *supra* note 212, at 831.

308. See Mank, *Environmental Justice and Discriminatory Siting*, *supra* note 188, at 348-50 (discussing "super review" and "site designation" models of selecting sites for hazardous waste facilities; both models require either the state or developer to create an inventory of alternative sites); Mank, *Environmental Justice and Title VI*, *supra* note 212, at 819.

309. See generally Kuehn, *supra* note 142, at 170; Mank, *What Comes After Technology*, *supra* note 140, at 334-38.

310. See EPA, SUSTAINABLE BROWNFIELDS, *supra* note 26, at 98, 103-05 (describing Phase I audits in Baltimore, Maryland and Oregon); OHIO REV. CODE ANN. §§ 3746.04(B)(3), 3746.07(B) (West 1994); Eisen, *supra* note 4, at 931-32.

311. See Eisen, *supra* note 4, at 931-32; see, e.g., OHIO REV. CODE ANN. § 3746.04(B)(3), .07(B) (West 1994).

312. See, e.g., OHIO REV. CODE ANN. §§ 3746.04(B)(3)(g), 3746.07(B)-(C) (West 1994); Eisen, *supra* note 4, at 931-33.

exists near a site would a CIS need to include more extensive data collection.

b. Risk Assessments

If the proposed project in isolation poses a significant risk of, for instance, a greater than one-in-a-million excess cancer risk, the developer should conduct a limited risk assessment of the cumulative pollution burden from other sources in the area. If the preliminary data suggests a discrimination problem, a state agency could demand more extensive data collection and risk analysis. A risk assessment may be cost effective in the long run if it shows that additional cleanup is unnecessary.³¹³

Developers are likely to object to the cost of conducting a site-specific risk assessment that examines risks to significant subpopulation groups. Site-specific risk assessments are information intensive and hence expensive.³¹⁴ However, states could minimize risk assessment costs by requiring a full-scale risk assessment only if a preliminary assessment shows that a facility's lifetime cancer risk exceeds one in a million, the standard measure for safety.³¹⁵ States could adopt a sliding scale for data collection that requires more information about demographics or risk if, for instance, the facility's carcinogenic risk is greater than a one-in-one-hundred-thousand lifetime cancer risk. Because a risk assessment that examines the cumulative burden of existing sources is more complex and expensive than a risk assessment of the proposed facility by itself, states should only require a comprehensive examination of risk if the proposed facility poses a significant risk or the surrounding area is known to be of high risk.

A limited risk assessment conducted by a developer may miss or ignore significant risks. Site-specific risk estimates can differ by a hundred times or more, depending upon various assumptions.³¹⁶ Because of limitations in modeling and monitoring techniques, individualized risk assessments are often inaccurate and require additional monitoring to increase their accuracy.³¹⁷ While industry would likely criticize the expense of site-specific risk assessments, the very cost and complexity of such assessments actually would favor developers with extensive financial and technical resources. There is the danger that industry or recipients would use favorable assumptions that minimize a proposal's possible risk to

313. See Gargas & Long, *supra* note 108, at 226.

314. See, e.g., Mank, *What Comes After Technology*, *supra* note 140, at 334–38.

315. See *supra* note 145 and accompanying text.

316. See Applegate, *supra* note 141, at 265–70; Kuehn, *supra* note 142, at 133–39; Rosenthal et al., *supra* note 141, at 340–44 (looking at maximally exposed individual near a factory rather than a hypothetical maximally exposed individual can reduce estimated exposures by a factor of 100 at some sources).

317. See, e.g., Mank, *What Comes After Technology*, *supra* note 140, at 334–38; *infra* notes 334–339 and accompanying text.

minority groups or the public health in general.³¹⁸ Accordingly, states need to consider providing technical assistance to community groups to allow them to challenge industry data and promote community monitoring programs to ensure that projects are as safe as they are supposed to be. Alternatively, a state could pay for a limited risk assessment or could perform a risk assessment and have the developer compensate it. However, community monitoring provides both social and informational benefits because it increases the likelihood of adequate data collection by promoting public participation, which often encourages more effective monitoring by the affected community.

c. Technical Assistance

Community groups often lack the technical competence to challenge industry safety assumptions.³¹⁹ Environmental justice advocates argue that government should redress this imbalance by providing independent technical consultants or grants to community organizations for education, monitoring, or critical evaluation of existing data.³²⁰ They also have argued that technical assistance is especially necessary to enable community groups in poor or minority neighborhoods to challenge industry data.³²¹

On the other hand, industry and state representatives usually oppose such grants or assistance on a number of grounds. They fear such resources will be used for tort suits or other litigation against them.³²² Industry and state regulators often argue that it is inappropriate to fund such organizations because these grants give the misleading impression that the receiving group represents the public interest rather than being accountable only to the regulators' small constituencies.³²³ They also contend that government regulators already adequately protect the public health.³²⁴

At a minimum, states should provide funding for educational programs to help local communities understand the processes of public participation, environmental permitting, the basic elements of risk assess-

318. See Kuehn, *supra* note 142, at 133-39; Rosenthal et al., *supra* note 141, at 340-44.

319. See Kuehn, *supra* note 142, at 129-33, 144, 162-63; Mank, *Environmental Justice and Title VI*, *supra* note 212, at 834-39; Mank, *Project XL*, *supra* note 170, at 77-80.

320. See Mank, *Environmental Justice and Title VI*, *supra* note 212, at 834-39; Mank, *Project XL*, *supra* note 170, at 77-80; REPORT OF THE TITLE VI ADVISORY COMMITTEE, *supra* note 3, at 39-41.

321. See Kuehn, *supra* note 142, at 162-63; Mank, *Environmental Justice and Title VI*, *supra* note 212, at 834-39; *Environmental Justice Groups Form Brownfield Advisory Board*, ENVTL. POL'Y ALERT, Feb. 10, 1999, at 10.

322. See REPORT OF THE TITLE VI ADVISORY COMMITTEE, *supra* note 3, at 41.

323. See *id.*

324. See *id.*

ment, and community monitoring.³²⁵ Furthermore, despite likely opposition from industry, EPA or states should offer technical assistance to community groups or provide grants so community groups can hire their own technical experts to examine industry data.³²⁶

Technical assistance grants are currently too small to level the playing field. Congress, EPA, and states usually have provided only limited funding for technical assistance programs and grants.³²⁷ EPA has acknowledged that it takes too long for the agency to provide money to grant recipients. It has promised to amend its technical assistance program to provide small start-up grants of \$5,000 to allow recipients to initiate projects.³²⁸ Even with proposed reforms, EPA's technical assistance grants do not sufficiently level the playing field with industry.³²⁹ Both EPA and state agencies rely heavily on regulated industry for information about the risk of chemicals.³³⁰ Additionally, state agencies normally have greater financial and technical resources than community groups.³³¹ Accordingly, even if states provide some technical assistance to local community groups, such assistance by itself may not be enough to counterbalance the far greater technical and financial resources of industry and even state regulators.³³²

Yet environmental justice advocates argue that even small grants are valuable. First, they allow groups to develop computer software needed to collect and assess pollution data or to support travel to public meet-

325. See Mank, *Environmental Justice and Title VI*, *supra* note 212, at 834-39; Mank, *Project XL*, *supra* note 170, at 79; *Environmental Justice Groups Form Brownfield Advisory Board*, *supra* note 320, at 10.

326. See Mank, *Environmental Justice and Title VI*, *supra* note 212, at 834-39; Mank, *Project XL*, *supra* note 170, at 79.

327. See Mank, *Environmental Justice and Title VI*, *supra* note 212, at 835-36, 838; Mank, *Project XL*, *supra* note 170, at 78-79. Between 1988 and 1998, EPA awarded 202 technical assistance grants of up to \$50,000 to groups to allow them to comment on and participate in Superfund remedy decisions. See OFFICE OF EMERGENCY AND REMEDIAL RESPONSE, U.S. EPA, SUPERFUND REFORMS ANNUAL REPORT FY 1998 25, 43, EPA-540-R-99-002 (1999).

328. See Jennifer Silverman, *Top Superfund Issues of 1999*, 22 CHEM. REG. REP. (BNA) (Jan. 22, 1999) (quoting Stephen Luftig, director of EPA's Office of Emergency and Remedial Response); see also OFFICE OF EMERGENCY AND REMEDIAL RESPONSE, U.S. EPA, SUPERFUND REFORMS ANNUAL REPORT FY 1998, *supra* note 326, at 25, 43 (EPA plans to issue an amended rule in 1999 to simplify its technical assistance program for Superfund sites).

329. See Kuehn, *supra* note 142, at 144, 162-63; Mank, *Environmental Justice and Discriminatory Siting*, *supra* note 188, at 408; Mank, *Environmental Justice and Title VI*, *supra* note 212, at 836-38; Mank, *Project XL*, *supra* note 170, at 76.

330. See Donald T. Hornstein, *Lessons From Federal Pesticide Regulation on the Paradigms and Politics of Environmental Law Reform*, 10 YALE J. ON REG. 369, 436-37 (1993); Kuehn, *supra* note 142, at 144.

331. See Kuehn, *supra* note 142, at 162-63; Mank, *Environmental Justice and Title VI*, *supra* note 212, at 837.

332. See Mank, *Environmental Justice and Title VI*, *supra* note 212, at 835-36, 838; Mank, *Project XL*, *supra* note 170, at 78-79.

ings.³³³ Furthermore, providing technical assistance sends a message to community groups that their views are important. Thus, technical assistance grants are valuable both as a means for community groups to check the accuracy of industry or state data and to enhance their ability to participate in the environmental decision-making process by asking appropriate questions about technical issues.

d. Community Monitoring Programs

States should fund meaningful community monitoring programs. Community monitoring programs should be less controversial than technical assistance programs because they do not necessarily imply that industry data is biased, but simply that more information would be helpful. EPA should provide direct funding for pollution monitoring to local communities and encourage states to support local monitoring efforts by giving more favorable consideration to brownfield projects that include community monitoring. It is important to encourage grassroots monitoring programs because properly trained community residents can often collect data as well as professionals and can collect more data because they are not constrained by agencies' limited monitoring budgets.³³⁴ Improving the ability of communities to monitor compliance will provide additional information about the amount of pollution in the area. It would also allow communities to determine whether current mitigation measures are working effectively. Additionally, EPA has recently suggested that brownfield projects should be reevaluated every several years over a period of twenty or more years to determine if the projects meet their initial economic and pollution expectations.³³⁵

EPA and some states already provide some funding for community monitoring, but more needs to be done. EPA already has an Environmental Monitoring for Public Access and Community Tracking ("EMPACT") Grants Program that provides grants to local communities to establish community monitoring systems. In fiscal year 1998, the Office of Environmental Justice expected to award \$3.5 million to local governments to establish pilot programs for its enhanced EMPACT program.³³⁶

While financial constraints are likely to continue, new technology now allows for better and cheaper monitoring.³³⁷ For instance, EPA is developing computer programs such as LandView, a desktop mapping system that includes database extracts from the agency and can be

333. See REPORT OF THE TITLE VI ADVISORY COMMITTEE, *supra* note 3, at 40–41.

334. See Collin & Collin, *supra* note 166, at 82.

335. See EPA, SUSTAINABLE BROWNFIELDS, *supra* note 26, at 113.

336. See U.S. EPA, *Environmental Monitoring for Public Access and Community Tracking (EMPACT)* (last modified June 2, 1998) <<http://www.epa.gov/empact.htm>>.

337. See Collin & Collin, *supra* note 166, at 82.

downloaded from the Internet, that identify potential emission sources.³³⁸ Furthermore, the agency and many states are already beginning to make information about facilities available to the public through the Internet.³³⁹

EPA has recognized that more needs to be done to encourage community monitoring. The agency is considering including language in its forthcoming revised Title VI guidance that would instruct regional staff to provide enforcement training to citizens and environmental justice groups.³⁴⁰ However, industry opposes such community data collection efforts because amateur community groups may intentionally or accidentally obtain inaccurate data, money would be better spent on agency monitoring efforts, and such data could be used for litigation against industry.³⁴¹ While there are some risks that community monitoring data could be misused, community monitoring will both provide more information and give communities a greater sense of control over their health concerns.

EPA should provide greater direct funding for local monitoring programs because existing funding for EMPACT is inadequate. Additionally, the agency should encourage states and developers to establish and fund effective community monitoring programs by allowing brownfields projects near residential areas only if such monitoring is available. If they really believe their projects are safe, developers should welcome community monitoring projects that can confirm that their facilities pose no significant harm to surrounding populations.

B. Rebutting Discrimination Claims: States Need to Address the Gaps in EPA's Title VI Policies

Title VI allows states to give developers the opportunity to justify otherwise unacceptable impacts on a minority group. While some civil rights advocates might argue that adverse disparate impacts on protected minority groups should never be allowed, Title VI and VII cases suggest that defendants may be able to justify disparate impacts through safety or efficiency justifications, significant cost savings, or the unavailability of physically suitable alternative sites.³⁴² Accordingly, the Interim Guidance

338. See REPORT OF THE TITLE VI ADVISORY COMMITTEE, *supra* note 3, at 22; *LandView III Specialized Computer Mapping Application* (last modified July 7, 1999) <<http://www.census.gov/geo/www/tiger/landview.html>>.

339. See generally Stephen M. Johnson, *The Internet Changes Everything: Revolutionizing Public Participation and Access to Government Information Through the Internet*, 50 ADMIN. L. REV. 277 (1998).

340. See *Environmental Justice Guide Eyes Citizen Enforcement Training*, ENVTL. POL'Y ALERT, Nov. 3, 1999, at 33-34.

341. See *id.* at 33-34.

342. See Mank, *Environmental Justice and Title VI*, *supra* note 212, at 806-07, 823-28.

allows the construction of a facility if the federal grant recipient can provide a substantial, legitimate explanation of how the benefits of the facility sufficiently outweigh the cost of these disparate impacts.³⁴³

While civil rights advocates have criticized the use of cost as a justification for practices having discriminatory effects, courts have allowed cost to be used by defendants as a justification.³⁴⁴ Accordingly, EPA will probably allow states to use economic benefits to justify a project that meets minimum safety standards, such as a maximum one-in-ten-thousand lifetime cancer risk.

Additionally, a developer could argue that it chose a location in a minority neighborhood rather than an alternative site because technical or geological factors offered greater safety in the minority neighborhood.³⁴⁵ Courts have found that safety is a valid justification for a policy that affects a minority group disproportionately but incidentally. However, using geological or technical criteria should not in general adversely affect minorities because no evidence supports the proposition that minority areas are located in disproportionately safer locations than majority areas.³⁴⁶ A legitimate and neutrally administered policy focusing on technical criteria could even reduce the incidence of discriminatory siting.³⁴⁷

Nevertheless, to ensure that cost and safety justifications do not provide a pretext for discrimination, states should require developers offering a business justification to examine a project's economic benefits and risks to each significant subpopulation group. While brownfield projects are frequently located in minority neighborhoods, environmental justice advocates contend that these communities receive few economic benefits yet bear most of the risks. Accordingly, a developer should perform an analysis of the costs and safety of the project for each subpopulation to ensure that minorities do not disproportionately bear the burdens of a project while reaping few of the rewards. If a preliminary analysis suggests that a minority group bears a disproportionate share of the costs and health risks, a state should require a more detailed cost or safety justification.

Furthermore, a developer using an economic or safety justification ought to have the burden of demonstrating that no less discriminatory alternative brownfield sites would meet its business needs. A developer should be able to reject an alternative site that fails to meet the essential needs of its business, but should not be permitted to use insignificant differences to reject an alternative site that would cause substantially less harm to minority groups. Title VI and VII case law places the burden on

343. See EPA, INTERIM GUIDANCE, *supra* note 18, at 12; *supra* notes 251–252 and accompanying text.

344. See Mank, *Environmental Justice and Title VI*, *supra* note 212, at 806, 823–26.

345. See *id.* at 806–07, 826–28.

346. See *id.*

347. See *id.*

the plaintiff to rebut a defendant's legitimate business justification by demonstrating that it is a pretext for discrimination or that a less discriminatory alternative exists that would meet the defendant's legitimate business needs, including reasonable cost and safety goals.³⁴⁸ This shifting of burdens also makes sense because developers have the best information about alternatives.³⁴⁹ However, a state is free to place a greater burden on developers that seek to enjoy the advantages of a voluntary cleanup program by requiring them to show an absence of less discriminatory alternatives.

This proposal does not fully address the difficult issue of balancing the economic benefits of a project against its costs. Still, by requiring an analysis of the costs and benefits to each significant subpopulation, this proposal would expose projects that provide small benefits but a high burden of risk to a minority community. Once this information is available, the agency, developer, and community will have a better opportunity to engage in a public dialogue about weighing these risks and benefits.

C. Increasing Public Participation to Address Pretext and Less Discriminatory Alternatives

To avoid successful Title VI claims, a state must ensure that its siting and permitting processes do not exclude community input into the decision-making process. While brownfield locations already exist and are already polluted, a developer should have to explain why it is appropriate to redevelop that site rather than possible alternative sites. Accordingly, voluntary action programs should not ignore the need to consider alternative sites even though consideration of alternatives does involve some additional cost. State policies restricting public participation in environmental decision-making are short-sighted because they increase the likelihood that local residents will file a Title VI complaint.³⁵⁰ Instead, a state should require community involvement and public participation early in the permitting process to consider mitigation measures, the costs and benefits of a project, and especially any less discriminatory alternatives. States should create citizen advisory boards composed of a diverse range of stakeholders to facilitate early and meaningful public participation by a wide range of citizens.³⁵¹ Citizen groups,

348. See *Georgia St. Conf. of Branches of NAACP v. Georgia*, 775 F.2d 1403, 1417 (11th Cir. 1985) (stating that plaintiff must present "equally effective" alternative sites); *Coalition of Concerned Citizens Against I-670 v. Damian*, 608 F. Supp. at 128 (concluding that plaintiff failed to present specific alternative sites); Mank, *Environmental Justice and Title VI*, *supra* note 212, at 808-09, 822-23.

349. See Mank, *Environmental Justice and Title VI*, *supra* note 212, at 820-42.

350. See *id.* at 840-43.

351. See Gauna, *supra* note 182, at 57-65 (discussing use of advisory committees to

those neighbors most affected by a project, minority groups, and local community leaders should have the opportunity to offer suggestions for improving brownfield proposals to enable developers to fine-tune these projects so they produce greater benefits to the community at lower risk.³⁵² Even if EPA does not require early participation programs, states should adopt them as a matter of good policy.

Increasing public participation in the approval of brownfield projects ought to be a goal upon which everyone can agree. While its members have disagreed about many issues, EPA's Title VI Advisory Committee has encouraged states to adopt policies promoting early and meaningful participation by community groups.³⁵³ Community input can improve environmental decision-making by providing additional data about potential sources of contamination and likely exposure pathways, including sensitive subpopulations.³⁵⁴

However, there likely will be disagreement between environmental justice groups and developers over whether community groups should have an advisory role or an actual veto. Environmental justice groups believe that EPA or states should require developers to obtain approval from community groups to utilize lower standards for industrial level cleanups.³⁵⁵ Conversely, industry as well as most state and federal regulators would strongly oppose giving veto power to a single or even a majority of participating community groups. A possible solution would be to place a heightened burden of justification on a decision if a majority of community groups participating in a community advisory group oppose a project.³⁵⁶

Controversy also surrounds the issue of whether EPA should defer to states or local governments that have programs promoting early and meaningful public participation.³⁵⁷ State and industry members of EPA's

address environmental justice issues); John C. Duncan, *Multicultural Participation in the Public Hearing Process: Some Theoretical, Pragmatical, and Analytical Considerations*, 24 COLUM. J. ENVTL. L. 169, 238-41 (1999).

352. See Mank, *Environmental Justice and Title VI*, *supra* note 212, at 840-42; Mank, *Project XL*, *supra* note 170, at 73-77.

353. See REPORT OF THE TITLE VI ADVISORY COMMITTEE, *supra* note 3, at 11-13, 33; Cheryl Hogue, *Environmental Justice: Title VI Advisory Panel Report Sets Out Issues, Gives No Recommendations*, *supra* note 264, at 2188; see also EPA, SUSTAINABLE BROWNFIELDS, *supra* note 26, at 51 (recommending "early, adequate, and meaningful community involvement in the [brownfield] decision-making process").

354. See U.S. EPA, RISK ASSESSMENT GUIDANCE FOR SUPERFUND: VOLUME 1—HUMAN HEALTH EVALUATION MANUAL SUPPLEMENT TO PART A: COMMUNITY INVOLVEMENT IN SUPERFUND RISK ASSESSMENTS (1999).

355. See *Environmental Justice Groups Form Brownfield Advisory Board*, ENVTL. POL'Y ALERT, Feb. 10, 1999, at 10.

356. See Mank, *Project XL*, *supra* note 170, at 75-76 (proposing process for EPA's Project XL that allows stakeholders in public participation scheme to increase scrutiny of the proposal if a majority opposes project).

357. See Mank, *Environmental Justice and Title VI*, *supra* note 212, at 842; Kenneth Warren, *Environmental Justice Revisited*, LEGAL INTELLIGENCER, Sept. 17, 1998, at 7.

Title VI Advisory Committee have argued that EPA should give more deference to state decisions that include proactive public participation efforts such as early community involvement and a community impact statement. Environmental justice advocates, on the other hand, have questioned whether the agency should establish special incentives for state and local governments to comply with the law.³⁵⁸ However, a serious issue arises as to whether the agency has the legal authority to give such deference when a Title VI complaint alleges that a state or local agency has violated the civil rights of minority groups protected by Title VI.³⁵⁹ Furthermore, while the agency should give greater deference to a decision supported by broad popular involvement, EPA should not automatically defer to any state action that causes significant disparate impacts.

1. Brownfield Programs Often Limit Public Participation

Unfortunately, many states limit or do not require public participation in the approval of brownfield projects.³⁶⁰ They limit or preclude public participation to avoid lengthy public debates that may delay and increase the cost of brownfield projects.³⁶¹ For example, Ohio's voluntary action program virtually eliminates public participation in individual cleanup decisions on the theory that the public had the opportunity to participate in setting state cleanup standards.³⁶² Under Ohio's voluntary cleanup program, a certified professional may approve a cleanup plan and simply send notice to the state.³⁶³ The volunteer does not have to provide notice to the public until after the cleanup is completed.³⁶⁴ Furthermore, in Ohio, any reports or information about the investigation and cleanup of a site remain confidential and are not admissible or discoverable in a civil suit or administrative action against the volunteer unless the certified

358. See REPORT OF THE TITLE VI ADVISORY COMMITTEE, *supra* note 3, at 26–29; Mank, *Environmental Justice and Title VI*, *supra* note 212, at 842 (discussing proposals by state government officials for EPA to give greater deference in Title VI disputes to state agencies with programs that encourage public involvement in permitting process).

359. See REPORT OF THE TITLE VI ADVISORY COMMITTEE, *supra* note 3, at 27–28.

360. See Eisen, *supra* note 4, at 972 (listing several states not requiring any public participation); Bradford C. Mank, *Public Participation in the Cleanup and Redevelopment Process*, in 1 BROWNFIELDS LAW AND PRACTICE § 31.02[4] (Michael Gerrard ed., 1998).

361. See generally Eisen, *supra* note 4, at 972; Mank, *Public Participation in the Cleanup and Redevelopment Process*, *supra* note 360, § 31.02[4]; Sweeney, *supra* note 4, at 160.

362. See Eisen, *supra* note 4, at 972; Mank, *Public Participation in the Cleanup and Redevelopment Process*, *supra* note 360, § 31.02[4].

363. In Ohio, the state retains the authority to audit a cleanup, but does so in only 25% of sites participating. See OHIO REV. CODE ANN. § 3746.10 (1998); OHIO ADMIN. CODE § 3745-300-14(D) (1998) (providing for random audits of 25% of sites in which a certified professional has issued a no-action letter).

364. In Ohio, the public has a right to participate in the approval of a cleanup plan only if the volunteer applies for a variance from applicable cleanup standards. See OHIO ADMIN. CODE § 3745-300-12(H)(3) (1998); Eisen, *supra* note 3, at 972 n.384.

professional responsible for reviewing the cleanup finds a "threat or danger to public health or safety or the environment" or the state brings a criminal prosecution against the volunteer.³⁶⁵

In many states, the public has only limited rights to notice of a proposed cleanup plan under a voluntary action program. While the type of notice varies from state to state, a typical brownfield statute requires a developer to notify the state environmental agency and obtain its approval of the plan, provide a copy of the plan to the local government, and publish a short notice of the availability of the plan in a local newspaper of general circulation.³⁶⁶ Most states do not require individual notice to residents in the host community or even to contiguous property owners.³⁶⁷ Many states limit public participation to a short public comment period, often between fourteen and thirty days.³⁶⁸ Only a minority of states require a public hearing, and usually a hearing is required only if there is a written request.³⁶⁹

Many states provide for public participation only after the developer prepares a voluntary remedial work plan.³⁷⁰ For instance, Rhode Island encourages community involvement, but explicitly only requires additional notice to nearby residents when a site investigation is complete and does not give residents an opportunity to participate early in the planning process.³⁷¹ It is usually more difficult to challenge a completed work than

365. OHIO REV. CODE ANN. § 3746.28(C), (D) (1998) (stating information or documents produced in voluntary action program are not admissible or discoverable in any civil or administrative proceeding brought against the volunteer); *see also* Sweeney, *supra* note 4, at 127–28. *See generally* OHIO REV. CODE ANN. § 3746.071(B)(1)(c) (1998) (stating certified professional must notify Ohio EPA if voluntary cleanup threatens public safety, welfare, or health).

366. *See, e.g.*, PA. STAT. ANN. tit. 35, §§ 6026.302(e), 6026.303(h), 6026.304(n)(1)(i) (West 1999); Mank, *Public Participation in the Cleanup and Redevelopment Process*, *supra* note 360, § 31.02[1].

367. *See* Eisen, *supra* note 4, at 974; Mank, *Public Participation in the Cleanup and Redevelopment Process*, *supra* note 360, § 31.02[1].

368. *See, e.g.*, CAL. HEALTH & SAFETY CODE § 25398.6(i)(1),(2), .7(c)(2) (West 1999) (providing for 30-day notice and comment period); IND. CODE ANN. § 13-25-5-11(b) (West 1998) (providing for 30-day notice and comment period); MONT. CODE ANN. § 75-10-735 (1997) (providing for 30-day comment period); R.I. GEN. LAWS § 23-19.14-11(a) (1998) (providing for 14-day comment period); VT. STAT. ANN. tit. 10, § 6615a(h)(5) (1997) (providing for 15-day comment period); Eisen, *supra* note 4, at 973–74; Mank, *Public Participation in the Cleanup and Redevelopment Process*, *supra* note 360, § 31.02[2].

369. *See, e.g.*, CAL. HEALTH & SAFETY CODE § 25398.6(i)(3) (West 1999) (requiring one or more public meetings for information or comment); IND. CODE § 13-25-5-11(c) (1998) (providing for public hearing upon written request during notice and comment period); MASS. REGS. CODE tit. 310, § 40.1404 (1995) (providing 10 or more persons may request designation of site as "Public Involvement Plan" site); MONT. CODE ANN. § 75-10-735(2) (1997) (providing for 30-day comment period and for public hearing upon written request by "ten or more persons . . . or by a local governing body of a city, town, or county"); Eisen, *supra* note 4, at 974–75, 977; Mank, *Public Participation in the Cleanup and Redevelopment Process*, *supra* note 360, § 31.02[3].

370. *See, e.g.*, IND. CODE § 13-25-5-11(b) (1998); Eisen, *supra* note 4, at 1005–08.

371. *See* R.I. GEN. LAWS § 23-19.14-5, -11 (1998); Eisen, *supra* note 4, at 1007–08.

one in its early stages because the developer may have taken preliminary steps toward construction that make it more difficult to modify the project or move it to a different location.³⁷² In several states, the host municipality can demand a public hearing, but citizens do not have the right to require a hearing.³⁷³ Giving participation rights only to the host municipality is problematic because it may not protect the rights of all those affected by a proposal since elected officials may not truly represent certain potentially affected groups.³⁷⁴ Even the rights of host municipalities are limited in many states since they may not replace statewide generic cleanup standards with different cleanup standards.³⁷⁵ Only California gives local communities or counties the presumptive authority to determine a site's future use, subject to state approval at a hearing.³⁷⁶ Accordingly, local communities may not have sufficient authority to protect vulnerable minorities.

Current public participation procedures are inadequate because they provide no mechanisms for encouraging the poor and disempowered to participate. An active public participation policy that encourages dialogue by a wide range of citizens is needed. Several states require the state environmental agency that receives comments to consider and perhaps respond to any public comment that raises significant issues.³⁷⁷ However, no state requires an agency to reject a cleanup plan in the face of substantial public opposition.³⁷⁸ On the other hand, allowing local community groups veto authority over controversial projects may only increase the tendency of developers to avoid wealthy and politically powerful areas and to site undesirable facilities in poor, minority neighborhoods that are often politically powerless.³⁷⁹

372. See Eisen, *supra* note 4, at 1004–09; McWilliams, *supra* note 4, at 711.

373. See MICH. COMP. LAWS ANN. § 324.20120d(3)(c)(i)–(iii) (West 1999) (city, township, village, or local health department can demand a public hearing; state in its discretion may require public hearing if it believes significant public interest would benefit or if appropriate); PA. STAT. ANN. tit. 35, § 6026.304(o) (West 1999) (municipality can demand public hearing if developer elects site-specific cleanup criteria); Eisen, *supra* note 4, at 972.

374. See Eisen, *supra* note 4, at 1011.

375. See *id.* at 1004–09.

376. See CAL. HEALTH & SAFETY CODE § 25398(d)(2) (West 1999); Eisen, *supra* note 3, at 975 n.392, 1005.

377. See, e.g., CAL. HEALTH & SAFETY CODE § 25398.6(j) (West 1999); IND. CODE ANN. § 13-25-5-11(c) (West 1998); MICH. COMP. LAWS ANN. § 324.20120d(5)(e) (West 1999); MONT. CODE ANN. § 75-10-735(3) (1998); OR. REV. STAT. § 465.320(3), .325(4)(d) (1997); R.I. GEN. LAWS § 23-19.14-11(a) (1996); VT. STAT. ANN. tit. 10, § 6615a(h)(5) (1997); Eisen, *supra* note 4, at 975–76 n.393; Mank, *Public Participation in the Cleanup and Redevelopment Process*, *supra* note 360, § 31.02[2].

378. See Eisen, *supra* note 4, at 975–76; Mank, *Public Participation in the Cleanup and Redevelopment Process*, *supra* note 360, § 31.02[2].

379. See Arnold, *supra* note 23, at 27; Sheila Foster, *Justice from the Ground Up: Distributive Inequities, Grassroots Resistance, and the Transformative Politics of the Environmental Justice Movement*, 86 CAL. L. REV. 775, 833–37 (1998).

Instead, an intermediate policy is needed that actively promotes participation by a diverse range of voices without giving any one group veto power. One way to reduce the impact of wealth in siting decisions is to have an open process that requires the consideration of alternative sites and encourages a wide range of participants. Accordingly, public opposition ought to be considered when states and EPA review a proposed voluntary action project, but only if a wide range of voices are able to participate and alternative sites are considered.

Under a new brownfields act, North Carolina now provides a sixty-day notice and comment period in which members of the public can comment on a proposed brownfield project, "including methods and degree of remediation, future land uses and impact on local employment."³⁸⁰ Any member of the public may petition for a public hearing, but the North Carolina Department of Environment and Natural Resources has discretion to hold a hearing based on its assessment of whether "there is significant public interest in the proposed brownfields agreement."³⁸¹ The statute requires the Department to consider public comments received during the comment period or at a public meeting in approving a brownfield project, especially "written comment that is supported by valid scientific and technical information and analysis."³⁸² While North Carolina's procedures for ensuring public participation in the approval of brownfield projects are superior to most states, even these procedures do not guarantee early public involvement in formulating development and cleanup plans.³⁸³ States need to promote such early involvement.

2. *Promoting Early and Meaningful Participation: Creating a Partnership Between States and EPA*

Public participation is likely to be meaningful only if community groups may participate early in the process so they can influence a project's design and location.³⁸⁴ Environmental justice advocates therefore favor early participation in the decision-making process. EPA's revised Title VI guidance should encourage states to establish community advisory boards that participate early in the planning process for redeveloping brownfield projects. In its planned Guidance advising states on how to comply with Title VI, EPA should urge states to include a diverse

380. N.C. GEN. STAT. § 130A-310.34(b) (1997); *see also* Hawley, *supra* note 8, at 1035, 1044.

381. *See* N.C. GEN. STAT. § 130A-310.34(c) (1997); Hawley, *supra* note 8, at 1035, 1044 (stating North Carolina Department of Environment and Natural Resources must hold public hearing on brownfield project if agency considers it in public interest to hold such a hearing).

382. N.C. GEN. STAT. § 130A-310.34(d) (1997).

383. *See* Hawley, *supra* note 8, at 1045.

384. *See* Eisen, *supra* note 4, at 1004-09; McWilliams, *supra* note 4, at 711.

range of citizens on such advisory boards, especially members of minority groups and those at highest risk from the project.³⁸⁵

To encourage broad and early participation, states must engage in aggressive outreach to embrace a broad spectrum of the public. State statutes often only require developers to provide a short notice through general circulation newspapers, but most people never read such notices.³⁸⁶ States should require notification in utility bills, the use of community liaison staff, and notification in languages other than English where appropriate.³⁸⁷ Agencies should choose convenient meeting times and places for public meetings and conduct public education classes about both scientific issues and methods for effective participation in agency decisions.³⁸⁸

EPA and several states have recognized that early participation procedures can sometimes reduce conflict about and community opposition to certain projects. EPA's Advisory Committee on Title VI recommends that states include community members early in the decision-making process and attempt to resolve environmental justice issues before making permit decisions.³⁸⁹ EPA encourages states to create "three-legged" networks of governments, businesses, and minority communities to discuss the racial implications of siting decisions.³⁹⁰ To reduce the number of Title VI complaints and to gain favor with EPA, a few states have already implemented early participation procedures.³⁹¹ For instance, New York has created an environmental justice program and appointed a coordinator to promote community involvement in the state's environmental permitting process.³⁹² In November 1998, EPA awarded \$100,000 grants

385. Cf. Mank, *Environmental Justice and Discriminatory Siting*, *supra* note 188, at 401–19 (arguing that citizen advisory boards often do not include members of minority groups or those at highest risk from pollution).

386. See REPORT OF THE TITLE VI ADVISORY COMMITTEE, *supra* note 3, at 50–51.

387. See *id.*

388. See *id.*

389. See *id.* at 11–12, 33.

390. See Cheryl Hogue, *Environmental Justice: Permits Cited in Civil Rights Complaints Have Remained Valid*, 152 DAILY ENV'T REP. (BNA) A-9 (Aug. 7, 1998); Mank, *Environmental Justice and Title VI*, *supra* note 212, 840–42.

391. See *Pollution in Minority and Inner-City Neighborhoods: Hearings Before the House Subcomm. on Oversight and Investigations of the House Comm. on Commerce*, 105th Cong. (1998) (testimony of Michael Hogan, New Jersey Department of Environmental Protection) (indicating that New Jersey is adopting "inclusive collaborative process to address issues of environmental equity" and an "upfront/proactive environmental equity process" that allows local minority and low-income communities to have "input into the permitting process when it is most meaningful, before the permit is issued"); *Pollution in Minority and Inner-City Neighborhoods: Hearings Before the House Subcomm. on Oversight and Investigations of the House Comm. on Commerce*, 105th Cong. (1998) (testimony of Barry McBee, Chairman of Texas Natural Resource Conservation Commission) (indicating that Texas seeks to provide citizens with opportunities for early, meaningful input into permitting process); Hogue, *Permits Have Remained Valid*, *supra* note 390, at A-9; Mank, *Environmental Justice and Title VI*, *supra* note 212, 840–42.

392. See *New York: To Improve Input on Permits, State Creates Environmental Justice Program*, 30 Env't Rep.(BNA), 1114 (Oct. 15, 1999).

to four states and one Native American tribe to develop model programs promoting environmental justice.³⁹³ However, complaints have already been made that New Jersey's model program under the grant, the Advisory Council on Environmental Justice, has no real decision-making power.³⁹⁴

3. Community Advisory Boards

To facilitate early and meaningful community participation, states should create citizen advisory boards to provide advice on the siting of brownfield projects. A citizen advisory board potentially can provide ideas and suggestions about a broad range of issues, including possible alternative sites or proposals, community relations, monitoring, mitigation, and economic development. For example, in 1994, legislation was introduced in Congress that would have amended CERCLA to require EPA to establish a Community Working Group ("CWG") at each Superfund site whenever a state or fifty citizens requested the formation of such a group.³⁹⁵ The legislation would have required EPA to select at least fifty percent of the members of the CWG from local residents and also specified that the agency include particular health and technical experts.³⁹⁶ Most notably, the CWG could make recommendations to the agency about choice of cleanup standards, including the site's future land use and whether institutional controls should be used instead of permanent treatment methods.³⁹⁷ However, the proposal died when Congress failed to enact a comprehensive Superfund reform bill in 1994. States could create groups similar to CWGs to evaluate brownfield proposals.³⁹⁸ For instance, Pennsylvania authorizes, but does not require, the establishment of community-based advisory groups on brownfields.³⁹⁹

While the CWG proposal represented a step in the right direction, some environmental justice advocates have argued that it did not go far enough to guarantee adequate representation of minority groups or those at greatest risk from a facility.⁴⁰⁰ They suggested that the CWG membership could include facility owners, potentially responsible parties, workers at the facility, members of the local business community, and local

393. See Merkel, *supra* note 206.

394. See *Environmentalists Say Whitman Fails in Promise*, RECORD, Northern N.J., June 4, 1999, at L7.

395. Fewer than 50 citizens could demand a CWG if they represented at least 20% of the population of the locality in which an National Priority List site was located. See H.R. 3800, 103d Cong. § 102 (1994) (proposing to amend CERCLA § 117(g)(1)(A)).

396. See *id.* (proposing to amend CERCLA § 117(g)(5)).

397. See S. 1834, 103d Cong. § 103 (1994) (proposing to amend CERCLA § 117(i)); H.R. 3800 (proposing to amend CERCLA § 117(g); see also Foster, *supra* note 379, at 835-36 (discussing CWG proposal); Ayers, *supra* note 112, at 1511-12 (same).

398. See Eisen, *supra* note 4, at 1017-19.

399. See PA. STAT. ANN. tit. 35, § 6026.304(o) (1993).

400. See *infra* notes 401-404, 424 and accompanying text.

government officials who did not necessarily have the same interests as those at greatest risk.⁴⁰¹ There was a risk, however, that the presence of these groups might have prevented the achievement of consensus recommendations and thus weakened the value of any recommendations by the CWG to EPA.⁴⁰²

To avoid the limitations of the CWG scheme, some commentators have suggested that states should develop community-based advisory boards modeled after the Restoration Advisory Boards (“RABs”) that are used to solicit community views about military base closures.⁴⁰³ RABs have the advantage of a governing statute which requires public involvement throughout the closure process rather than at only one or two points in a long process.⁴⁰⁴

Whether such a board would have only an advisory function or genuine decision-making authority is an important question.⁴⁰⁵ EPA’s case studies of seven pilot projects involving twenty separate sites found that the level of decision-making authority given to community residents varied greatly. Their positions ranged from being voting members of a pilot project’s site-selection committee to being mere observers.⁴⁰⁶ The proposed Superfund legislation that created CWGs would have required EPA to give “substantial weight” to the CWG’s recommendations when the CWG achieved consensus regarding “the reasonably anticipated future use of the land at the facility.”⁴⁰⁷ However, the agency was not bound to follow the CWG’s proposals.⁴⁰⁸ If a board is reasonably large and sufficiently representative of the community, it may be appropriate to give it veto power. A state should at least require stronger justification for a project if there is significant public opposition.

4. How Much Deference Does Public Participation Deserve?

If states adopt proposals to increase public participation, one can argue that EPA should give greater deference to those states’ environ-

401. See S. 1834 (proposing to amend CERCLA § 117(i)); H.R. 3800 (proposing to amend CERCLA § 117(g)); see also Kathy Bunting, *Risk Assessment and Environmental Justice: A Critique of the Current Legal Framework and Suggestions for the Future*, 3 BUFF. ENVTL. L.J. 129, 157 (1995).

402. See Bunting, *supra* note 401, at 157.

403. See Eisen, *Brownfield Policies for Sustainable Cities*, *supra* note 1, at 226; Kibel, *supra* note 1, at 617–18.

404. See 10 U.S.C. § 2705(d)–(f)(1)–(5) (1994 & Supp. III 1997); Eisen, *Brownfield Policies for Sustainable Cities*, *supra* note 1, at 226–27 & n.209; Kibel, *supra* note 1, at 617–18.

405. See Foster, *supra* note 379, at 833–37; Mank, *Environmental Justice and Discriminatory Siting*, *supra* note 188, at 369–70, 401–19.

406. See OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE, U.S. EPA, BROWNFIELDS TITLE VI CASE STUDIES: SUMMARY REPORT 5, 10–11, 500-R-99-003 (1999).

407. H.R. 3800, § 117(g)(3); S. 1834, § 103 (Version 4, Oct. 3, 1994) (proposing to amend CERCLA § 117(1)(3)).

408. See H.R. 3800, § 117(g)(3); S. 1834, § 103.

mental decisions because they presumably enjoy broad public support. Some state officials want EPA to approve pre-licensing procedures that create a shield against any Title VI complaints, or that create a presumption that the complaints lack substance if a state allowed for ample community involvement.⁴⁰⁹

On October 3, 1999, Ann Goode, director of EPA's Office of Civil Rights, told a group of state environmental commissioners that the agency plans to give considerable deference to states with strong environmental justice programs if a Title VI complaint is filed against the state.⁴¹⁰ Although acknowledging that Title VI does not allow EPA to provide states with guaranteed immunity from Title VI complaints, Goode stated that the agency will be unlikely to pursue complaints brought against states that have a quality program that includes either a broad outreach program to identify and address environmental justice issues or a narrower public participation program that requires outreach to stakeholders affected by an individual permit application.⁴¹¹ While she declined to provide details until the agency's top officials reach consensus and issue a revised guidance, Goode also announced that the agency's forthcoming revised Title VI guidance will provide several factors that the agency will use to evaluate whether a state has a good program.⁴¹² In response to state concerns that it is unclear what sanctions EPA would impose if it finds a state in violation of Title VI, Goode stated that the agency almost always seeks to avoid the "nuclear option" of withdrawing a state's federal funding.⁴¹³

In a close Title VI case, EPA should give some deference to a state that is earnestly trying to encourage public participation by a wide range of stakeholders and to avoid disparate impacts. Because the agency has considerable discretion in what sanction it may impose for a violation and tries to avoid imposing sanctions against states that act in good faith, it makes sense for the agency to focus on states that do not have a good program for addressing Title VI problems or have a pattern of violations.⁴¹⁴

Nevertheless, EPA's proposal for strong deference goes too far. Title VI implies that federal funding agencies should evaluate each complaint on the merits. EPA should carefully evaluate each case to determine if a

409. See Mank, *Environmental Justice and Title VI*, *supra* note 212, at 840-42.

410. See *EPA Plans Strong Deference to State Environmental Justice Programs*, ENVTL. POL'Y ALERT, Oct. 20, 1999, at 31-32.

411. See *id.* at 32.

412. See *id.*

413. See *id.*

414. For example, EPA, on at least two occasions, has considered a statewide review of whether Louisiana's Department of Environmental Quality systematically discriminated against minorities, but EPA has not chosen to proceed with such a contentious review. See *EPA Moving Toward Statewide Environmental Equity Review in Louisiana*, ENVTL. POL'Y ALERT, Dec. 30, 1998, at 3.

state environmental agency's approval of a brownfield project causes disparate impacts to a protected minority group. In contrast, EPA plans to take into account the quality of a state environmental justice program, especially the extent to which a state actively encourages the participation of minorities in the early decisions about where to site a project.

a. Public Participation Does Not Guarantee Fairness

The availability of public participation arguably lessens, but does not eliminate the possibility of discriminatory decision-making for several reasons. First, it cannot be assumed that procedures for increased public participation will necessarily address the fundamental differences in expertise and resources between minority communities and industry.⁴¹⁵ Environmental agencies may ignore or discount the comments of community members because of subtle biases against members of minority groups or in favor of industry experts with advanced degrees.⁴¹⁶ Existing public participation practices often ignore the fact that different cultural and ethnic groups have different ways of participating or communicating that may hinder them in engaging in environmental decision-making.⁴¹⁷ Furthermore, temporal, financial, educational, or language barriers may make it more difficult for minorities to participate in such decisions.⁴¹⁸ Because high-income whites may use the political process more effectively than low-income minorities, developers may steer controversial projects to poorer communities.⁴¹⁹ Second, community advisory groups may not be sufficiently representative of the community at large. It is important that these boards include a significant percentage of local residents. For example, proposed legislation that would have established CWG to evaluate Superfund cleanup proposals required that at least fifty percent of the members of the CWG be local residents.⁴²⁰

Third, even if there is a sufficient number of community representatives, the problem of who selects the community representatives remains.

415. See Kuehn, *supra* note 142, at 161–62; Gauna, *supra* note 182, at 31–36, 67–69 (arguing overemphasis on expertise leads decision makers to undervalue the contributions of community groups in proposing environmental ideas); Mank, *Project XL*, *supra* note 170, at 76–77.

416. See Duncan, *supra* note 351, at 188–93, 209–12 (discussing cultural barriers to participation in environmental decisions and arguing environmental agencies are biased in favor of so-called “experts”); Gauna, *supra* note 182, at 31–36, 67–69.

417. See Duncan, *supra* note 351, at 188–93.

418. See *id.* at 193–99.

419. See Foster, *supra* note 379, at 800–01, 830 (arguing the private sector singles out politically weak lower-class, minority neighborhoods for hazardous waste facilities); Mank, *Environmental Justice and Discriminatory Siting*, *supra* note 188, at 349–50, 368–69 (arguing that wealthy communities often use public participation procedures to block controversial or undesirable projects and therefore developers tend to steer unpopular projects to politically vulnerable poor and minority communities).

420. See H.R. 3800, § 102 (proposing to amend CERCLA § 117(g)(5)); Eisen, *supra* note 4, at 1018 n.629.

At one extreme, states could allow volunteers to select members of the advisory board. For instance, in Project XL, EPA allows the company proposing the project to choose stakeholders. The agency ultimately reviews the fairness of the selection process after the final proposal is submitted to the agency.⁴²¹ Such a procedure is unacceptable, however, because there is no guarantee that an applicant will pick a representative range of community leaders. It is more appropriate to have state environmental agencies choose members of advisory boards. State environmental agencies are at least somewhat accountable to the public because of the requirements for public hearings, public access to agency documents through state freedom of information laws, and the selection of agency heads by elected officials.

Fourth, the criteria for selection of appropriate community representatives usually represent the greatest challenge in establishing an effective citizen advisory board.⁴²² To assist agencies in choosing a diverse range of stakeholders, states should enact legislation or regulations that contain specific criteria for selection to prevent arbitrary decision-making. Selection procedures for community advisory boards usually require that a board include environmental scientists or engineers, health experts, elected officials, and some community representatives.⁴²³ Because members of minority groups are often poor and not involved in politics, many environmental justice advocates are skeptical about whether CWGs or similar community advisory boards will be sufficiently representative of the citizens at highest risk from a project.⁴²⁴

b. Title VI Provides No Support for Automatic Deference

Title VI provides no basis for EPA automatically to defer to states that have public participation programs. Under Title VI and the Administrative Procedure Act, EPA enjoys significant discretion in deciding Title VI complaints, but its decisions are subject to very limited judicial review to prevent arbitrary and capricious decisions.⁴²⁵ Title VI requires

421. See Regulatory Reinvention (XL) Pilot Projects: Notice of Modifications to Project XL, 62 Fed. Reg. 19,872, 19,878–79 (1997); Mank, *Project XL*, *supra* note 170, at 73–74.

422. See Foster, *supra* note 379, at 833–37; Mank, *Environmental Justice and Discriminatory Siting*, *supra* note 188, at 369–70, 401–19.

423. See Foster, *supra* note 379, at 833–37 (discussing selection and role of citizen advisory boards); Mank, *Environmental Justice and Discriminatory Siting*, *supra* note 188, at 401–19 (arguing community-based siting boards often do not adequately represent minority groups or those at highest risk, but should do so); Mata, *supra* note 303, at 450–51, 458 (proposing separate technical review board of technical experts and local review board of local citizens).

424. See Foster, *supra* note 379, at 833–37; Mank, *Environmental Justice and Discriminatory Siting*, *supra* note 188, at 401–19 (arguing community-based siting boards often do not adequately represent minority groups or those at highest risk).

425. See *Cannon v. University of Chicago*, 441 U.S. 677, 715 (1979) (suggesting

EPA to find a violation if a state makes a decision that causes significant disparate impact and lacks any legitimate justification.⁴²⁶

While some environmentalists want to give community groups veto power over proposals, such a grant of power should be approached with caution. Nothing in Title VI requires that states create a local community advisory group or give it such veto power as long as a project does not create a significant disparate impact. As a matter of policy, neither states nor EPA should give veto power to a single community group because it may not be representative of the entire community.⁴²⁷ At most, a citizen board should have a veto power only if it is broadly representative of a community. Even if a board is representative, it is probably better to allow a state environmental agency to review its decisions to ensure that it makes consistent determinations. Because they are subject to public scrutiny and supervision by elected officials, state environmental agencies are less likely to be corrupted by political influence than a relatively small community advisory board.

c. EPA Should Give Limited Deference to States with Good Public Participation Programs

If a state adopts effective and meaningful procedures encouraging early participation, EPA should take such participation into account when reviewing a Title VI complaint. Because the agency could presume that the complainant's views were considered by the state agency, it could place a higher burden on the complainant to demonstrate that the state or local agency unfairly ignored important evidence of discriminatory impact.⁴²⁸ For instance, if a state involves the public in decisions about a site's future use, then there should be a greater presumption that the site will be used for the agreed purpose.⁴²⁹ EPA should be careful, however, to insure that a state or local government considered the project's risks and benefits, not just to the general population, but also to each significant subpopulation that might be adversely affected.⁴³⁰

EPA could give more deference to decisions that include early community involvement by shifting the burdens of production and proof to the complainant to show that the state failed to consider or suitably

Title VI generally does not allow private suits against the federal government); Fisher, *supra* note 161, at 317 n.158 (arguing neither APA nor Title VI usually allow complainant to challenge EPA's dismissal of Title VI complaint); Mank, *Title VI, supra* note 16, at 29 (same).

426. See Mank, *Environmental Justice and Title VI, supra* note 212, at 795-96, 799-802, 807.

427. See Eisen, *supra* note 4, at 1019.

428. See generally REPORT OF THE TITLE VI ADVISORY COMMITTEE, *supra* note 3, at 36; Mank, *Environmental Justice and Title VI, supra* note 212, at 840-42.

429. See Ayers, *supra* note 112, at 1511-12. See generally Mank, *Environmental Justice and Title VI, supra* note 212, at 842.

430. See Mank, *Environmental Justice and Title VI, supra* note 212, at 842.

address significant disparate impacts despite the presence of a well-functioning public participation program. Conversely, if there is substantial opposition from the affected communities, especially those at greatest risk, EPA should place a greater burden of justification on the recipient. This type of burden-shifting was contemplated by the proposed legislation to create CWGs which would have required EPA to give "substantial weight" to the Group's recommendations, but would not have bound the agency to the CWG's proposals.⁴³¹ In a close case where evidence of disproportionate impact is disputed, EPA should consider whether a state consulted a wide range of stakeholders and especially whether the immediate community had a say in the decision-making process. If a state agency fairly considered alternatives proposed by the public, but concluded that cost, safety, or other valid non-discriminatory business justifications precluded the siting of the facility in the alternative location, then EPA should give some deference to the recipient's policy judgment.⁴³² While a brownfield is fixed at one location, the decision whether to redevelop it or redevelop an alternative location raises all of the issues that normally accompany siting decisions.

Additionally, rather than automatically deferring to states with good public participation programs, the agency could encourage states to promote public participation by expediting the agency review of a Title VI complaint if a state or local government has an effective public participation program. An expedited review can be justified by the presumption that a state or local government with an effective public participation program is more likely to create a well-developed public record, allowing for a decision without extensive investigation.⁴³³ For example, EPA justified its expedited review of the *Select Steel* complaint on the grounds that Michigan provided a detailed record that allowed the agency to reach a quick decision.⁴³⁴

VIII. CONCLUSION: STATES SHOULD TAKE THE INITIATIVE IN ADDRESSING TITLE VI CONCERNS ABOUT BROWNFIELD PROJECTS

The environmental justice movement has raised serious concerns about the redevelopment of brownfield sites. Environmental justice advocates fear that this redevelopment may disproportionately affect minority and low-income populations because most brownfields are concentrated in minority and lower-income neighborhoods. This problem is exacerbated by the fact that state brownfield programs typically do not consider whether a project will have a disproportionate impact on minority

431. See *supra* note 407 and accompanying text.

432. See Mank, *Environmental Justice and Title VI*, *supra* note 212, at 826, 828.

433. See REPORT OF THE TITLE VI ADVISORY COMMITTEE, *supra* note 3, at 35-36.

434. See Mank, *Title VI*, *supra* note 16, at 49.

groups. State brownfield programs also usually do not consider the cumulative burden of the project and existing sources of pollution. Furthermore, these programs are systemically flawed because they often allow lower health standards in industrial areas or in projected nonresidential areas. Because minorities are more likely to live in these areas, state brownfield programs may disproportionately increase health risks to minority groups, raising serious discrimination concerns under Title VI.

EPA is currently revising its Title VI policy, but states do not need to wait for the agency to finish this process before fixing their brownfield programs. First, when making a preliminary assessment of whether there is a prima facie case of discrimination, states must identify high-risk areas where both cumulative pollution burdens and minority populations are high. A state program that identifies high-risk minority areas would not prevent brownfield redevelopment in such communities if a developer could offer good reasons for a project.⁴³⁵ One way a developer could meet this requirement would be to prepare a community impact statement. In the impact statement, states should require the developer to examine mitigation measures, the costs and benefits of projects, and the existence of less discriminatory or environmentally damaging alternatives. States could minimize the cost of collecting demographic and cumulative pollution data by allowing brownfield developers to conduct a less expensive Phase I audit to determine if more extensive research is necessary. To help communities provide meaningful comments in response to a community impact statement, states could provide technical assistance to community groups. Furthermore, to ensure that developers fulfill their promises, states should provide funding to develop effective community monitoring programs.

Second, a Title VI defendant may refute a prima facie case of disparate impact by proffering a legitimate non-discriminatory business justification for a practice causing an adverse impact. In response to this part of the statute, states should amend their voluntary action programs to require a developer to explain the economic and safety justifications for the project and how it affects each significant minority subpopulation. An analysis of the project's benefits and risks to particular subpopulations will encourage developers to address the health and economic needs of all members of a community.

Finally, states should develop procedures to promote early and meaningful public participation in the approval of voluntary cleanups and brownfield projects. States have an incentive to adopt public participation procedures because citizens that have the opportunity to participate in a meaningful decision-making process may be less likely to file a Title VI complaint.⁴³⁶ To encourage public participation, states should establish

435. See *supra* notes 251–252, 295, 342–349 and accompanying text.

436. See Mank, *Environmental Justice and Title VI*, *supra* note 212, at 840–42; *su-*

programs to form citizen advisory boards composed of a diverse range of stakeholders. These boards would facilitate public evaluation of the suitability of projects by a wide range of citizens. A diverse group of citizens should have either the opportunity to serve on a board or to comment on proposals. Even if EPA does not encourage such early participation programs, states should adopt them.

When evaluating a Title VI complaint against a state or local government, EPA should examine whether the state or local government considered community views about a project's risks and benefits to different subpopulations. EPA should give more deference to decisions that had early community involvement and a community impact statement. If the public had a reasonable opportunity to participate in the selection and approval of a project, EPA could increase the burden on the complainant to explain why the project creates unacceptable disparate impacts in spite of that participation. However, while increasing public participation is highly desirable, EPA should not automatically dismiss Title VI complaints against states with public participation programs, because such participation does not necessarily prevent disparate impacts against minorities.

Together, the proposals outlined above would reduce the chances that a brownfield project would disproportionately harm racial minority groups. Minority and low-income communities need more information and a greater opportunity for meaningful participation. While potentially costly in some instances, the proposals can be implemented in a cost-sensitive manner by EPA and states to allow reasonably safe brownfield projects to go forward. If developers provide comprehensive information about the risks and benefits of brownfield redevelopment and alternative projects, a local community can decide which types of projects will provide long-term benefits to that neighborhood.

Despite the advantages of reforming their brownfield programs, many states are likely to wait until EPA issues its long-delayed guidance on Title VI. It is important to address the likely advantages and shortcomings of the impending revised guidance. While some of the details remain secret, EPA has suggested that the revised guidance will encourage states to develop public participation programs that foster early participation, and that the agency will instruct its regional staff to train citizens in collecting community data. These proposals are a step in the right direction, but the agency should more aggressively push states to enhance opportunities for early and meaningful participation and to make community data collection an integral part of brownfield decisions. EPA's plans to give states strong deference if they have a good environmental justice program goes too far in putting administrative convenience ahead of the need to consider the merits of individual Title VI complaints. EPA

pra notes 284, 350 and accompanying text.

can take into account a state's overall record when it imposes sanctions, but it cannot ignore specific instances of disparate impact discrimination merely because a state's record is usually good. Finally, the revised guidance is unlikely to require states to impose specific procedural requirements such as a community impact statement. Nevertheless, a CIS is the most effective means of forcing applicants to address critical issues, such as the extent of any disproportionate impacts, the racial composition of surrounding neighborhoods, mitigation measures, or alternatives. To protect their vulnerable populations from the potential harms that may result from brownfield redevelopment, states will likely need to go beyond the letter of the revised guidance and to adopt the proposals in this Article.

