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RESEARCH REPORT

Opportunities for Advancing Environmental Justice:

An Analysis of U.S. EPA
Statutory Authorities

November 2001

**Opportunities for Advancing Environmental Justice:
An Analysis of U.S. EPA Statutory Authorities**

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Acknowledgment

This research was supported by the Office of Environmental Justice and the Office of Civil Rights of the U.S. Environmental Protection Agency under Assistance Agreement No. CR82675501. The views expressed herein should not be attributed to EPA nor should any official endorsement be inferred.

Opportunities For Advancing Environmental Justice: An Analysis of U.S. EPA Statutory Authorities

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ISBN No. 1-58576-031-5. ELI Project No. 981623.

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INTRODUCTION

Over the past several years, the term “environmental justice” has become a part of our national vocabulary. This outcome follows decades of efforts by individuals and grassroots groups around the country to address a wide range of environmental and health threats to communities of color and low-income communities, and to call attention to the disparate impacts of environmental degradation on these communities. Environmental justice embodies a goal of achieving healthy, sustainable communities for all people. As part of this goal, environmental justice calls for equal protection for all people under the nation’s environmental laws.

In light of these aims, a significant focus of environmental justice efforts have been the activities of the Environmental Protection Agency (EPA), the central governmental office in the U.S. charged with protecting public health and the environment. While there are numerous public institutions whose activities bear directly on issues of environmental justice, EPA has jurisdiction over many of the core issues, especially the prevention and control of industrial pollution, that have given rise to the environmental justice movement.

In 1992, EPA created the Office of Environmental Justice to help integrate environmental justice issues throughout its programs. A key event in ongoing efforts to integrate environmental justice goals into EPA and other government agency programs occurred on February 11, 1994, with the signing of Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.” In addition to a number of specific directives to federal agencies regarding research, data collection and public participation activities, the Executive Order establishes generally that each federal agency must make environmental justice part of its mission and address disproportionate health and environmental impacts throughout its programs, policies and activities to the extent appropriate and permitted by law. Executive Order 12898 §1-101. The presidential memorandum accompanying the Order stated: “Application of . . . existing statutory provisions is an important part of this Administration’s efforts to prevent those minority communities and low-income communities from being subject to disproportionately high and adverse environmental effects.”

In 1995, EPA adopted a Strategy that establishes for the agency the sweeping goal of environmental justice, that “[n]o segment of the population, regardless of race, color, national origin, or income, as a result of EPA’s policies, programs, and activities, suffers disproportionately from adverse human health or environmental effects, and all people live in clean, healthy and sustainable communities.” U.S. EPA, *The Environmental Protection Agency’s Environmental Justice Strategy* (April 3, 1995).

The EPA Administrator reaffirmed this commitment in August 2001. In an agency-wide memorandum, Administrator Whitman stated that “environmental justice is the goal to be achieved for all communities and persons across this Nation. Environmental justice is achieved when everyone, regardless of race, culture, or income, enjoys the same degree of protection from environmental and health hazards and equal access to the decision-making process to have a healthy environment in which to live, learn, and work.” Memorandum from Christine Todd Whitman, Administrator, U.S. EPA, *EPA’s Commitment to Environmental Justice* (August 9, 2001).

Given the breadth and complexity of environmental and public health issues affecting communities of color and low-income communities in all parts of the United States, the pursuit of environmental justice at EPA involves a wide range of decisions made throughout the agency's regulatory programs, both at agency headquarters and in the regional offices – decisions about how to set standards and issue permits, as well as decisions about when to take enforcement action and what type of research projects to support. This report seeks to contribute to public understanding of the authorities and opportunities afforded by current federal environmental laws to address the disproportionate environmental harms and risks faced by communities of color and low-income communities.

SCOPE AND PURPOSE OF THIS REPORT

This report reviews the provisions contained in the principal federal environmental laws administered by EPA, in order to identify authorities that potentially could be used to advance a variety of environmental justice goals in the agency's programs. While there also are significant opportunities for action to be taken by other federal, state, tribal and local agencies, this report considers only EPA's authorities and actions.

The report aims to present an expansive view of the relevant statutory provisions, in order to further public understanding of the range of actions that can be considered. The report does not discuss all of the legal arguments that might be framed in support of or against the analysis presented in the following chapters, nor does the report attempt to predict how these arguments would be resolved in a particular case. Moreover, the report does not assess the practical viability of using these statutory authorities to address environmental justice issues. Implementation of any of the authorities discussed here will require consideration of a mix of scientific, political, financial and other factors, depending on the program and type of action involved. It is hoped that the discussion of authorities in this report can provide a starting point for such inquiry by individuals and groups, both public and private, interested in advancing environmental justice goals in specific areas of EPA regulatory activity.

Numerous existing EPA initiatives bear directly or indirectly on the goal of advancing environmental justice. The report does not seek to review these initiatives, but rather to provide to the public a foundation for further exploration of the extent to which EPA's current programs capture the potential reflected in existing statutory authority.

This report is written for the public. A fuller understanding of EPA's authorities to promote environmental justice is important because the public has a vital role to play in the effective implementation of EPA's environmental protection programs. A companion document to be published shortly by the Environmental Law Institute will seek to illuminate further the ways in which interested individuals and groups can help shape how EPA programs use these statutory authorities to promote environmental justice.

RESEARCH METHODOLOGY

1. Defining Activities that Further Environmental Justice Goals

This report identifies statutory authorities for furthering environmental justice goals in EPA's regulatory programs. Environmental justice is a broad term, encompassing far-reaching goals and principles. The research conducted for this report focused on three general goals that have been emphasized in the public discussion of EPA's role in advancing environmental justice: (1) identifying fully the impacts of agency actions and decisions on communities of color and low-income communities; (2) making agency decisions that are aimed at remedying and preventing disproportionate impacts; and (3) ensuring that affected communities have meaningful input in identifying impacts, making decisions and implementing environmental programs.

Identifying fully the impacts of agency actions and decisions on communities of color and low-income communities. One prominent issue in the national dialogue on environmental justice has been the need for EPA to consider adequately the environmental and health impacts of its decisions on communities that are already heavily burdened by polluting facilities and activities. Incinerators, waste and wastewater treatment facilities, transfer stations, refineries and factories are often disproportionately represented in these communities. As Richard Lazarus and Stephanie Tai have noted: "One of the major lessons of environmental justice is that EPA's past failure to account for aggregation of risks and cumulative impacts has caused EPA's existing standards to fail to protect human health and the environment in certain communities." Richard Lazarus & Stephanie Tai, *Integrating Environmental Justice into EPA Permitting Authority*, 26 *ECOLOGY L.Q.* 617, 642 (1999). Measuring the cumulative and synergistic impacts of multiple sources – and not simply the effects of individual pollutants or individual facilities – involves a host of technological and scientific complexities. A central goal of environmental justice has been to focus regulatory action on preventing and addressing these impacts.

Another important factor in the discussion of impacts of polluting activities on communities of color and low-income communities is the existence of sensitive populations that may be at heightened risk from exposure to pollutants. For example, children of color are especially likely to suffer from elevated blood lead levels, due in large part to their exposure to lead-based paint in older, substandard housing. The current asthma epidemic in the U.S. particularly affects urban communities of color, which are often exposed to numerous sources of air pollution. Low-income families may be more susceptible to adverse health effects from pollution, as a result of inadequate nutrition, limited access to health care, and other factors resulting in poorer general health. Moreover, unique exposure pathways may result from cultural or social practices, or economic circumstances – for example, exposure to pollutants through consumption of fish and other natural resources, or exposure to pesticides through farm work.

In addition, communities that are overburdened by industrial and commercial activity also potentially suffer a range of social and economic effects. Environmental justice advocates have urged EPA and other agencies to consider quality of life impacts such as noise, odors and traffic, as well as economic impacts including reduced property values, lost wages and medical bills.

Making agency decisions that are aimed at remedying and preventing disproportionate impacts. The reason for fuller consideration of impacts on communities of color and low-income communities is to provide a basis for making decisions that aim to protect the public health and environment in these communities. As reflected in EPA’s Environmental Justice Strategy, implementing regulatory programs so as to ensure environmental protection for all communities necessarily involves taking action to both eliminate disproportionate impacts and prevent them in the future. Where there is scientific or factual uncertainty regarding health and other impacts, environmental justice principles call for adopting a precautionary approach generally in these regulatory decisions. The range of EPA decisions that can further environmental justice includes setting standards that are protective of health and the environment, establishing permit conditions, and taking enforcement actions, as well as carrying out research, conducting monitoring and reporting, and providing financial assistance.

Ensuring that affected communities have meaningful input in identifying impacts, making decisions and implementing environmental programs. Even with the public participation reforms of recent decades, for those outside of government and professional advocacy groups, navigating the regulatory process remains a daunting task. For many communities of color and low-income communities, the economic, cultural, linguistic and other barriers are often substantial. The importance of enhancing participation in the regulatory process “early and often” has been a core element of discussions of how to achieve environmental justice. Such participation is a central component of any agency efforts to understand the full range of impacts on communities of color and to make regulatory decisions aimed at addressing those impacts. This goal, too, is reflected in EPA’s Environmental Justice Strategy, which states: “Those who live with environmental decisions . . . must have every opportunity for public participation in the making of those decisions.”

2. Review of Federal Environmental Statutes and Other Materials

This report covers ten federal environmental statutes implemented by EPA:

- The National Environmental Policy Act, 42 U.S.C. §§ 4321-4347 (“NEPA”);
- The Federal Water Pollution Control Act, 33 U.S.C. §§ 1251-1387 (“Clean Water Act” or “CWA”);
- The Clean Air Act, 42 U.S.C. §§7401-7671q (“CAA”);
- The Resource Conservation and Recovery Act, 42 U.S.C § 6901 *et seq* (“RCRA”);
- The Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9601-9675 (“CERCLA” or “Superfund”);
- The Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. §§ 136-136y (“FIFRA”);
- The Federal Food, Drug, and Cosmetic Act, 21 U.S.C. §§ 301-397 (“FFDCA”);
- The Safe Drinking Water Act, 42 U.S.C. §§ 300f - 300j-26 (“SDWA”);
- The Toxic Substances Control Act, 15 U.S.C. §§ 2601-2692 (“TSCA”); and
- The Emergency Planning and Community Right-to-Know Act, 42 U.S.C. §§ 11001-11050 (“EPCRA”).

Taken together, these statutes encompass most of EPA’s mandate to protect public health and the environment by controlling pollution and regulating the manufacture, use and disposal of specific substances. ELI reviewed each of these statutes, in order to identify provisions that give EPA authority to achieve environmental justice for all communities. While EPA’s implementing

regulations are a source of authority as well, the focus of this report is the enabling legislation. In certain areas, the report discusses regulations because of their particular importance in delineating the substance of EPA's implementation of a specific statutory provision.

This research did not include a review of EPA's authorities under Title VI of the Civil Rights Act of 1964, which prohibits discrimination on the basis of race, color, or national origin in all programs or activities receiving federal financial assistance. 42 U.S.C. §§2000d to 2000d-7; *see also* 40 C.F.R. Part 7. As noted in the following chapter, Title VI provides an additional source of authority for EPA to address environmental justice issues.

There is a rich literature on the subject of environmental justice, and numerous books, articles and reports provided background for this research. In addition, the analysis presented in the report has been informed by the work of previous authors who have examined the specific question of EPA's legal authorities to promote environmental justice. The most recent such work was produced by EPA's Office of General Counsel (OGC), in a December 2000 memorandum titled "EPA Statutory and Regulatory Authorities Under Which Environmental Justice Issues May Be Addressed in Permitting." This followed an earlier, less formal 1994 OGC memorandum titled "Environmental Justice Law Survey." In 1999, Richard Lazarus and Stephanie Tai published an influential law journal article on the subject, titled "Integrating Environmental Justice into EPA Permitting Authority." In addition, the National Environmental Justice Advisory Council has devoted considerable attention to the question of EPA's legal authorities in this area, as reflected in its July 2000 report, "Environmental Justice in the Permitting Process."

STRUCTURE OF THIS REPORT

This report is divided into two major sections. Section A highlights various EPA authorities by function. The Section begins with a brief description of the sources and limits of EPA's general discretion in implementing environmental laws. The remaining chapters in Section A address the following agency functions: standard setting and rule-making generally; permitting and other types of approvals; program delegation; enforcement; information gathering; financial assistance; and public participation. Section A reviews how EPA could utilize some of the authorities discussed in detail in Section B to advance specific environmental justice goals.

Section B provides a detailed statute-by-statute review of EPA's authorities that could potentially be used to further environmental justice. The federal laws included in the report are presented in nine chapters. Each chapter addresses the key statutory provisions, and is organized into parts according to the various functions of the agency included in Section A. An exception exists with respect to authorities to promote community participation, which are interwoven throughout the discussions of agency functions.

CHAPTER 1

SOURCES AND LIMITS OF AGENCY DISCRETION

Like other federal agencies, EPA's legal authority is grounded not only in the specific statutes entrusted to the agency to administer, but also in a thicket of general administrative laws and doctrines, cross-cutting federal statutes, and executive orders and policies. Full discussion of these authorities is beyond the scope of this report, but they form a backdrop to the analysis of individual statutes presented here. Particularly relevant to the agency's environmental justice authority are the National Environmental Policy Act (NEPA), 42 U.S.C §§ 4321-4347; Title VI of the Civil Rights Act of 1964, 42 U.S.C §§ 2000d *et seq.*, which prohibits discrimination in all programs or activities that receive federal financial assistance; and Executive Order 12898 on environmental justice, 59 Fed. Reg. 762 (Feb. 11, 1994). In addition, EPA possesses general discretionary authority to interpret and implement the statutes that define its missions. Taken together with EPA's pollution control statutes, these authorities define the scope of EPA's discretion and authorize the agency to exercise its discretion to consider and address environmental justice issues, even where such consideration is not directly compelled by the underlying statutes.

Indeed, NEPA – the original mission-expanding environmental law – speaks broadly to the goals of environmental justice. Section 102(1) “authorizes and directs” that “to the fullest extent possible” the “policies, regulations, and public laws of the United States shall be interpreted and administered in accordance with the policies set forth in [NEPA].” 42 U.S.C § 4332(1). The statute's policy objectives anticipate precisely the kind of concerns that are typically linked to environmental justice, including providing safe, healthy, and pleasing surroundings “for *all* Americans,” 42 U.S.C § 4331(b)(2) (emphasis added); attaining a wide range of beneficial uses of the environment without “undesirable and unintended consequences,” 42 U.S.C. § 4331(b)(3); maintaining an environment that supports “diversity and variety of individual choice,” 42 U.S.C. § 4331(b)(4); and achieving patterns of development and resource use that allow a “wide sharing of life's amenities.” 42 U.S.C. § 4331(b)(5). Current environmental justice efforts gain further support from NEPA's explicit congressional recognition that “each person should enjoy a healthful environment.” 42 U.S.C. § 4331(c).

While most NEPA case law has focused on the statute's procedural aspects and its requirement of environmental impact assessment, this does not diminish the force of its substantive mandate. The statutory language obliges EPA to administer *all* its programs in accordance with the national environmental policy to the fullest extent possible, regardless of whether the agency does so through environmental impact assessment or through other means. Expressly described as a policy directive “supplementary to” the ones imposed by other laws, 42 U.S.C. § 4335, NEPA is an integral part of EPA's mission. As the Environmental Law Institute noted six years ago, “[t]he understanding of NEPA as a grant of authority is liberating. It provides the discretion necessary to consider a broad array of relevant factors in decisionmaking.” Environmental Law Institute, *Rediscovering the National Environmental Policy Act: Back to the Future*, at 11 (1995). The agency's potential application of this discretion to environmental justice issues is discussed in detail in the NEPA chapter of this report.

Title VI provides another potential source of authority to promote environmental justice, through its government-wide directive to eliminate discrimination on the basis of race, color, or national origin in all programs or activities that receive federal financial assistance. 42 U.S.C. §§ 2000d to 2000d-7; *see also* 40 C.F.R. Part 7. An examination of EPA's authorities under Title VI is beyond the scope of this report, but the agency's responsibility to exercise ongoing oversight to ensure that state programs and other recipients of EPA financial assistance do not discriminate against people of color provides an important context for many of the agency activities described in this report. EPA has published two draft Title VI guidance documents, the first for state and local recipients of EPA financial assistance for environmental permitting programs, and the second establishing a framework for EPA's own consideration of administrative complaints alleging discrimination in environmental decisions. *See* 65 Fed. Reg. 39649 (June 27, 2000). It remains to be seen how EPA will implement its Title VI mandate, especially in light of the ongoing national dialogue about what approach the agency should take. *See generally* NATIONAL ADVISORY COUNCIL FOR ENVIRONMENTAL POLICY AND TECHNOLOGY, REPORT OF THE TITLE VI IMPLEMENTATION ADVISORY COMMITTEE: NEXT STEPS FOR EPA STATE AND LOCAL ENVIRONMENTAL JUSTICE PROGRAMS (U.S. Environmental Protection Agency, pub., EPA 100-R-99-004, April 1999).

Finally, although not a statutory authority, Executive Order 12898 directs each federal agency to "make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations" § 1-101 (Feb. 1994). Agencies must accomplish this goal "[t]o the greatest extent practicable and permitted by law." *Id.* The Executive Order further requires each agency to conduct its programs, policies, and activities in such a manner that they "do not have the effect of" discriminating against individuals or subpopulations based on their race, color, or national origin, *id.* § 2.2, and an accompanying memorandum directs federal agencies to assure that their programs do not run afoul of the anti-discrimination requirements of Title VI. The Executive Order represents a broad commitment by the executive branch to environmental justice goals, and provides EPA with a basis for expansive application of the agency's existing discretion to consider how the implementation of policies and programs affect low-income communities and communities of color, and to act accordingly.

Apart from these explicit sources of authority, EPA also possesses general or implied discretionary authority, which administrative agencies commonly exercise in areas that are not specifically addressed by Congress. *See* Daniel J. Gifford, *Discretionary Decisionmaking in the Regulatory Agencies: A Conceptual Framework*, 57 SO. CAL. L. REV. 101 (1983). Such implied or general discretion may provide EPA with some authority to address environmental justice issues even where the agency's actions are not founded on a particular statutory provision. In a series of cases challenging Clean Air Act prevention of significant deterioration (PSD) permits, EPA's Environmental Appeals Board (EAB) endorsed the agency's general discretion to promote environmental justice. Sheila R. Foster, *Meeting the Environmental Justice Challenge: Evolving Norms in Environmental Decisionmaking* 30 ELR 10992, nn. 32-33 and accompanying text (Nov. 2000). In each of these cases, the EAB reviewed environmental justice claims without directly basing its authority to do so on the text of the Clean Air Act, relying instead on the agency's general discretionary authority. According to Professor Foster, this was not for lack of authority under the Act, and indicated the extent to which "environmental justice is becoming part of the landscape of federal environmental law." *Id.* at 10993-

Administrative agencies are said to have discretionary authority whenever they have the freedom to choose among possible courses of action or inaction within the effective limits of their power. Kenneth Culp Davis, 2 ADMINISTRATIVE LAW TREATISE § 8:3 (1979). The Supreme Court's landmark decision in *Chevron U.S.A., Inc. v. Natural Resources Defense Council*, 467 U.S. 837 (1984), is the starting place for discussion of the boundaries of agency discretion. In that case, the Supreme Court created a two-part framework for reviewing agency interpretations of law. First, a reviewing court must decide whether Congress has directly spoken on the precise question at issue. If it has, the court "must give effect to the unambiguously expressed intent of Congress," and strike down any conflicting agency interpretation. If the relevant statutory terms do not unambiguously resolve the issue, however, courts must defer to the agency's interpretation as long as it is a "reasonable" one. This principle of deference to agency interpretations of law – the second part of the *Chevron* analysis – was at the time a controversial aspect of the case, because it seemed to circumscribe the traditional judicial function of interpreting the law.

Chevron appeared to usher in a new era of judicial deference to agencies, especially in the first years after it was handed down. See Peter Schuck & E. Donald Elliott, *To the Chevron Station: An Empirical Study of Federal Administrative Law*, 1990 DUKE L.J. 984. But recent decisions have thrown this assumption into doubt, as federal courts have shown a growing willingness to strike down agency interpretations of law as contrary to the ordinary, linguistic meaning of legislative terms. See, e.g., *Solid Waste Agency of N. Cook Co. v. U.S. Army Corps of Eng'rs*, 121 S. Ct. 675 (2001); *U.S. v. Mead Corp.*, S. Ct. Slip Opinion (June 18, 2001). In other cases, courts have struck down regulations by probing deeply into their basis in science and reason. See, e.g., *Corrosion Proof Fittings v. EPA*, 947 F.2d 1201 (1991). This recent trend in case law has led agencies to be somewhat cautious in construing their authorizing statutes, and is one of the factors that will have to be considered when evaluating the specific arguments made in the statutory chapters of this report. Nevertheless, the basic principle of *Chevron* deference to agency discretion still stands, and supports EPA's authority to incorporate environmental justice concerns into its decision-making in appropriate cases.

All of EPA's sources of authority – environmental statutes, mission-expanding and cross-cutting laws, and general discretion – give the agency substantial and wide-ranging powers to pursue environmental justice. Already the agency has made significant strides in this direction in its implementation of specific programs. See, e.g., U.S. EPA OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE, 1997-1998 WASTE PROGRAMS ENVIRONMENTAL JUSTICE ACCOMPLISHMENTS REPORT (EPA-500-R-00-003, May 2000); U.S. EPA, RCRA Expanded Public Participation Rule, 60 Fed. Reg. 63417 (Dec. 11, 1995). But opportunities for further progress remain. As noted in the Introduction to this report, constraints on the agency's use of its authority originate as much in resource considerations, political factors, and other matters both internal and external to the agency as they do in the law itself.

CHAPTER 2

STANDARD SETTING

Like other federal agencies, EPA has quasi-legislative power to issue rules and regulations that implement the statutory authority granted it by Congress. These rules add needed detail to broad statutory mandates, establish day-to-day operating procedures for programs created or authorized by statute, and otherwise interpret, reconcile, and fill gaps in the statutory language. In the case of EPA's highly complex pollution control programs, agency rule-making often takes the form of technical standards that govern the siting, design, and operation of regulated facilities, as well as the manner and amount of their discharges into the environment. Throughout these processes, EPA can promote environmental justice by ensuring that the agency takes account of the impacts on low-income communities and communities of color as it sets standards and thus determines acceptable thresholds of exposure and risk. This chapter highlights authorities for the agency to further this goal by exercising its discretion both in the rule-making process generally and in setting specific kinds of standards.

I. RULE-MAKING IN GENERAL

Environmental statutes typically grant EPA broad powers to issue regulations “necessary” to carry out its functions under the statutes. *E.g.*, 7 U.S.C. § 136w(a)(1) (FIFRA); 33 U.S.C. § 1361(a) (Clean Water Act); 42 U.S.C. § 6912(a)(1) (RCRA); 42 U.S.C. § 9615 (CERCLA). The legislative conferral of power in such provisions gives the agency substantial discretion in exercising its core functions, particularly the protection of health and environmental quality; this discretion arguably extends to actions that are specifically designed to promote health and environmental quality in heavily burdened communities, low-income communities or communities of color. Thus, if the agency deems a specific measure necessary to protect human health or the environment in these communities, that decision likely will be upheld by courts.

For example, Section 2002(a)(1) of the Resource Conservation and Recovery Act (RCRA) empowers the Administrator to issue regulations “necessary to carry out his functions” under the Act. 42 U.S.C. § 6912(a)(1). Sections 3002 through 3004 direct EPA to issue such regulations applicable to generation, transport, and storage of hazardous waste “as may be necessary to protect human health and the environment,” and courts generally have deferred to the agency’s interpretation of this authority. 42 U.S.C. §§ 6922-6924; *see Chemical Manufacturers Ass’n v. U.S. EPA*, 919 F.2d 158, 164 (D.C. Cir. 1990). It has been argued that these sections provide the basis for a broad range of measures tailored to the specific concerns of low-income communities and communities of color that are affected by waste disposal activity, including reporting and record-keeping, waste reduction practices, and design and maintenance standards. Richard J. Lazarus & Stephanie Tai, *Integrating Environmental Justice into EPA Permitting Authority*, 26 *ECOL. L.Q.* 617, 642-46 (1999). These measures are discussed further in Chapter 12 of this report.

In *In re Chemical Waste Management of Indiana, Inc.*, 6 E.A.D. 66, 1995 WL 395962 (June 29, 1995), the Environmental Appeals Board interpreted EPA's authority to address environmental justice issues under the RCRA "omnibus clause," which likewise authorizes the agency to include in RCRA permits "such terms and conditions as the Administrator (or State) determines necessary to protect human health and the environment." 42 U.S.C. § 6925(c)(3). The Board held that the clause does not *require* EPA to consider environmental justice issues in permitting, but that it is well within the agency's discretion to do so, as long as it relates to the core function of protecting human health and the environment. *Id.* Although the *Chemical Waste Management* decision arose from a challenge to a permit, its analysis of language nearly identical to the language found in RCRA Sections 3002 through 3004 suggests that EPA possesses similar discretion to consider and address environmental justice concerns when setting RCRA standards. It may also give an indication of how the Board or courts would interpret the comparably broad grants of discretion found in EPA's other pollution control statutes, if the agency can sufficiently link its actions to public health and environmental quality.

At the same time, the Board noted that RCRA's omnibus clause, standing alone, might preclude EPA from redressing "impacts that are unrelated or only tenuously related to human health and the environment, such as disproportionate impacts on the economic well-being of a minority or low-income community." 1995 WL 395962 at 7. While this language might at first glance appear to constrain EPA in addressing environmental justice, the Board does not appear to be saying that economic and social impacts are beyond the scope of the agency's legislative authority in general, only that such impacts must remain linked to issues of health or environmental quality. *Lazarus & Tai* at 663. In actuality, these linkages are not as remote as they might first appear; the real problem is that the people pressing environmental justice claims before the agency rarely possess the technical and legal resources necessary to establish such linkages. The *Chemical Waste Management* decision suggests that the agency itself has discretion to investigate these linkages and act accordingly.

II. PARTICULAR KINDS OF STANDARDS

The statutes EPA administers prescribe a wide array of standards, reflecting historically different approaches to pollution control, different policy purposes, and different types of regulated substances and discharges affecting different media. Four broad categories of standards authorized by the statutes are: (1) technology-based performance standards, (2) design and practices standards, (3) harm-based standards, and (4) standards for regulating substances. Each type of standards presents opportunities for EPA to address environmental justice issues. The agency's ability to do so depends heavily on the specific statutory language, as discussed in the chapters on the individual statutes. Some common themes and highlights are discussed below.

A. Technology-Based Performance Standards

Technology-based performance standards limit the amount of pollution a source may emit or discharge into the environment. They are "technology-based" insofar as they are set according to the known capabilities of existing pollution control technologies; however, they differ from technology-based *design* standards in that they do not require sources actually to use the particular technologies on which the standards are based. Unlike harm-based standards, they do not stem from judgments about the ambient levels of pollution in the environment necessary to protect public health and other

values. Instead, they attempt to bring all sources in line with the best-performing sources in each industrial sector. Over time, such standards can be tightened to reflect advances in pollution control technology.

Technology-based effluent and emissions limitations under the Clean Water Act and the air toxics program of the Clean Air Act are classic illustrations of technology-based performance standards. EPA exercises considerable discretionary power at several stages of these programs, each of which presents an opportunity to consider and address environmental justice concerns. These include: (1) listing pollutants; (2) identifying pollution sources; (3) defining source categories; (4) setting standards; and (5) reviewing variances.

Listing Pollutants. Although the Clean Water Act specifically requires EPA to regulate certain pollutants, the agency is authorized to add and regulate new pollutants of concern, whether "conventional," toxic, or "nonconventional." See 33 U.S.C. § 1312(a)(4) (conventional pollutants include, "but not limited to," BOD, suspended solids, fecal coliform, and pH); 33 U.S.C. § 1317(a)(1) (EPA authorized to add to specified list of toxic pollutants); 33 U.S.C. § 1311(b)(1)(F) (EPA may regulate as nonconventional pollutants "all pollutants" not classified as conventional or toxic). In the 1990 amendments to the Clean Air Act, Congress listed 189 hazardous air pollutants (HAPs) to be regulated under Section 112. EPA is authorized to add to this list pollutants that present adverse public health and environmental effects through "ambient concentrations, bioaccumulation, deposition, or otherwise." 42 U.S.C. § 7412(b)(2). The agency also must publish a list of at least 30 HAPs emitted from area sources that pose the "greatest threat to public health in the largest number of urban areas." 42 U.S.C. § 7412(k)(3)(B)(i).

Identifying Pollution Sources. Technology-based effluent limitations under the Clean Water Act are applicable to "point sources," which are broadly defined to mean "any discernible, confined and discrete conveyance." 33 U.S.C. § 1362(14). EPA can by regulation include or exempt sources from coverage as point sources. Similarly, Section 112 of the Clean Air Act establishes separate regulatory programs for "major sources" and "area sources" of hazardous air pollutants. Although the statute provides a definition of "major source" based on the yearly quantity of emissions, EPA may at any time "establish a lesser quantity" for major source regulation based on such factors as persistence, bioaccumulative potential, and "other relevant factors." 42 U.S.C. § 7412(a)(1).

Defining Source Categories. Under the Clean Water Act, EPA develops effluent limitation guidelines for "classes and categories" of point sources. 33 U.S.C. § 1314. The classification typically is done by standard industrial code or other large groupings, but the agency has discretion to further refine the size and scope of these categories according to relevant factors. Likewise, under the air toxics program, EPA is required to list categories and subcategories of major and area sources emitting at least one HAP, and to revise the list at least once every eight years. 42 U.S.C. § 7412(c)(1). EPA "may at any time" list additional categories and subcategories of sources. 42 U.S.C. § 7412(c)(5).

Setting Standards. Under the Clean Water Act, EPA issues effluent limitations reflecting varying degrees of pollution control depending on the type of pollutant. The limitations are based on regulatory guidelines that specify factors the agency will take into account, including "such factors as the Administrator deems appropriate." 33 U.S.C. §§ 1314(b)(1)(B), 1314(b)(2)(B), 1314(b)(4)(B). EPA also can establish "any more stringent limitations, including those necessary to meet water quality standards, treatment standards, or schedules of compliance, established pursuant to any State

law or regulations . . . or any other Federal law or regulation” 33 U.S.C. § 1311(b)(1)(C). In the Clean Air Act toxics program, EPA must establish best technology performance standards for each category of source that take into account, among other things, “non-air quality health and environmental impacts.” 42 U.S.C. § 7412(d)(1). In setting regulatory priorities under the program, EPA must consider the “quantity and location” of emissions. 33 U.S.C. § 7412(e)(2)(B).

Reviewing Variances. Under the Clean Water Act, EPA may grant a “fundamentally different factors” variance from certain effluent limitations provided that the source demonstrates “to the satisfaction of the Administrator,” that, among other things, “the alternative requirement will not result in a non-water quality environmental impact which is markedly more adverse than the impact” considered in the original effluent limitation. 33 U.S.C. § 1311(n)(1)(D). Variances from secondary treatment standards for municipal waste treatment and from effluent limitations for dischargers of nonconventional pollutants are governed by similar discretionary language. 33 U.S.C. § 1311(g),(h). The Safe Drinking Water Act provides that EPA may only identify a variance technology if it “is protective of public health,” 42 U.S.C. § 300g-1(b)(15)(B), and any variance granted must “not result in an unreasonable risk to health.” 42 U.S.C. § 300g-4(a)(1)(A).

EPA can use its discretionary power to address impacts on communities of color and low-income communities at any of these stages. For example, pollutant listings could take into account cumulative and synergistic effects, impacts on sensitive populations, and other relevant concerns. Clean Water Act effluent limitation guidelines can be revised to address environmental justice considerations if EPA deems those considerations “appropriate,” a term that confers substantial discretion. The agency also can establish more stringent effluent limitations pursuant to “any” state or federal law or regulation, which presumably includes NEPA and Title VI of the Civil Rights Act. Environmental justice impacts also might be taken into account in decisions to grant or deny variances from technology-based standards.

The Clean Air Act toxics program likewise calls for EPA to make discretionary judgments in numerous areas relevant to low-income communities and communities of color. Similar opportunities exist under other environmental programs that authorize technology-based performance standards, such as New Source Performance Standards under the Clean Air Act and Maximum Contaminant Levels under the Safe Drinking Water Act. While each program has its own nuances, these kinds of technological performance standards are quite amenable to reconsideration and revision to address environmental justice issues.

B. Design and Practices Standards

A second class of standards actually requires the use of specified technologies or management practices to control pollution. RCRA, for example, requires those who manage hazardous waste to conform with a host of highly specific design and management standards for waste generation, transport, and disposal. Mobile source controls under the Clean Air Act are another example, enabling EPA to specify design standards for such things as fuel content and vehicle refueling practices.

Here, too, the agency has wide latitude to address environmental justice issues. Under the RCRA provisions discussed earlier, for instance, EPA is authorized to promulgate such generator, transporter, and treatment, storage, and disposal facilities (TSDF) standards “as may be necessary to

protect human health and the environment.” 42 U.S.C. §§ 6922(a), 6923(a), 6924(a). Of particular interest to low-income communities and communities of color, RCRA empowers EPA to establish specific design and management standards for “the location, design, and construction” of TSDFs. 42 U.S.C. § 6924(o)(7).

Similarly, Superfund's National Contingency Plan (NCP) can become another vehicle for promoting environmental justice through design and management standards. Section 105(a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) requires the NCP to include methods for discovering and investigating sites, evaluating and remediating releases, and determining the nature and extent of removal and remedial actions. 42 U.S.C. § 9605(a). The NCP also must include criteria for cleanup priorities that address the “relative risk or danger to the public health or welfare or the environment,” taking into account the “population at risk,” and other “appropriate factors.” *Id.*

C. Harm-Based Standards

Harm-based standards establish the allowable concentrations of pollution in the environment necessary to protect public health and environmental quality, typically with an “ample” or “adequate” margin of safety. *E.g.*, 42 U.S.C. § 7409(b)(1) (Clean Air Act); 33 U.S.C. § 1317(a)(4) (Clean Water Act). Regulators extrapolate from these levels of pollution to particular control measures for individual sources within an area. Harm-based standards accomplish the goals of environmental protection in a way that theoretically is the opposite of technology-based standards. Technology-based standards start with the capabilities of the best-performing sources, which are then applied universally in the hope that a healthy environment will result. Harm-based standards, by contrast, start with a desired endpoint measure of environmental quality, which is then translated into specific controls on pollution sources in the hope that such controls will produce the endpoint. The difficulties inherent in creating and implementing harm-based standards led to an apparent eclipse of this technique by technology-based standards from the mid-1970s through the early 1990s. Regulation of toxic water pollution and toxic air pollution, for example, both have shifted from a health-based system to a primarily technology-based regime. *See* 33 U.S.C. § 1317; 42 U.S.C. § 7412. But as systems of technology-based control reach their effective limits, harm-based regulation has returned as an essential component of second-generation environmental regulation.

For example, National Ambient Air Quality Standards (NAAQS) under the Clean Air Act apply to pollutants that, in EPA’s judgment, cause or contribute to air pollution that “may reasonably be anticipated to endanger public health and welfare,” and that are emitted “from numerous or diverse mobile or stationary sources.” 42 U.S.C. § 7408(a)(1). EPA has established NAAQS for six criteria air pollutants: particulate matter, sulfur dioxide, nitrogen oxides, carbon monoxide, ozone and its precursors, and lead. The agency has the authority to add more pollutants to this list. *Id.* For each such pollutant, EPA must establish primary and secondary NAAQS. 42 U.S.C. § 7409. Primary NAAQS are set at levels necessary to protect public health with “an adequate margin of safety.” Secondary NAAQS are set at levels necessary to protect the public welfare from adverse effects of pollutants. Welfare effects are broadly defined to include, among other things, effects on vegetation, man-made materials, economic values, and personal comfort and well-being. 42 U.S.C. § 7602(h).

The NAAQS program offers numerous opportunities to promote environmental justice. EPA has discretion, for example, to craft NAAQS that would be protective of sensitive

subpopulations, such as urban children. In fact, the agency's failure to adequately explain its decision not to issue a short-term sulfur dioxide NAAQS to protect asthmatic residents of urban areas led to a remand in *American Lung Ass'n v. EPA*, 134 F.3d 388, 389 (D.C. Cir. 1998). The court held that the standards "must protect not only average healthy individuals, but also 'sensitive citizens' – children, for example, or people with asthma, emphysema, or other conditions rendering them particularly vulnerable to air pollution." The "margin of safety" language applicable to primary NAAQS could support a decision to err on the side of caution when dealing with criteria pollutants in low-income communities and communities of color. Likewise, secondary NAAQS could potentially take into account economic impacts, as well as many of the less tangible impacts of air pollution on the "welfare" of these communities, such as noise, odors, and traffic.

The promulgation of water quality criteria and resulting effluent limitations under the Clean Water Act gives EPA further opportunities to use harm-based rules to address environmental justice issues. If, in EPA's judgment, application of technology-based effluent limits alone would not assure attainment or maintenance of at least the "fishable/swimmable" standard of water quality, the agency must issue more stringent limitations to meet that standard. 33 U.S.C. § 1312(a). Although EPA has yet to use this authority, it could do so in selected areas where fishing, for example, is an essential source of food or the object of cultural practices. Similarly, states have the primary authority to select designated uses for waters within their boundaries and to establish water quality standards necessary to meet the designated uses. 33 U.S.C. § 1313. EPA retains considerable power to guide, oversee, and if necessary, to take over these decisions. Federal water quality guidelines are a primary source for state action in this area, and the guidelines could be revised to address environmental justice concerns. EPA also has approval authority over state total maximum daily load (TMDL) allocations for impaired waters, and the agency may issue its own TMDLs if it disapproves a state's plan. As explained in greater detail in Chapter 10 of this report, the TMDL program is especially well-suited to address the distributional consequences of water pollution.

D. Standards for Regulating Substances

Finally, EPA has considerable discretion to regulate certain chemical substances under its pollution control authorities, even where the substances are not expressly designated in the statutes. As noted above, the agency may bring additional pollutants under the technology-based performance standards of the Clean Air Act and Clean Water Act. Similar authority for EPA to add to the number of substances it regulates is found in RCRA, which contains an expansive definition of "hazardous waste" and allows EPA to consider numerous factors in determining whether the definition is met, 42 U.S.C. §§ 6903(5), 6921. In addition, CERCLA provides the agency with authority to designate as hazardous any substances that "may present substantial danger to the public health or welfare or the environment." 42 U.S.C. 9602 (a). Each of these provisions afford discretion for the agency to consider cumulative and synergistic effects, impacts on sensitive populations, and other environmental justice issues when designating substances for regulation.

CHAPTER 3

PERMITTING AND OTHER APPROVALS

Permits and permitting procedures are at the core of EPA's authority under most major pollution control statutes. Siting permits or approvals help determine where industrial and waste disposal facilities may be located, and under what circumstances. Operating permits translate general environmental standards into specific discharge and emissions limitations, incorporate monitoring, reporting, and other related requirements, and provide a basis for subsequent enforcement actions. And "registrations" or "listings" of chemical substances regulate whether, how, and in what quantities those substances may be manufactured, distributed, and used. In addition, the various permit application and review processes offer perhaps the most important – and certainly the most immediate – opportunity for communities to participate in decisions that affect their health and environment.

For all these reasons, permitting has long been a focus of the environmental justice debate. Activists, regulators, and industry all agree that "EPA needs to address the issue of incorporating environmental justice considerations in permitting because communities increasingly are insisting upon a broader view of permitting and because neither companies nor permit writers know what is expected of them." NATIONAL ENVIRONMENTAL JUSTICE ADVISORY COUNCIL, ENVIRONMENTAL JUSTICE IN THE PERMITTING PROCESS App. A, "Pre-Meeting Report," at 3 (U.S. Environmental Protection Agency, pub., EPA 300-R-00-004, July 2000) [hereinafter "NEJAC Permitting Report"]. Previous studies have examined EPA's existing legal authority to incorporate environmental justice concerns into the permitting process. See Richard J. Lazarus & Stephanie Tai, *Integrating Environmental Justice into EPA Permitting Authority*, 26 ECOL. L.Q. 617 (1999) [hereinafter "Lazarus & Tai"]; Memorandum from Gary S. Guzy, U.S. EPA Office of General Counsel, EPA Statutory and Regulatory Authorities Under Which Environmental Justice Issues May Be Addressed in Permitting (Dec. 1, 2000) [hereinafter "OGC 2000 Memorandum"]. This report examines some of these ideas, and also includes an analysis of statutory provisions that have not previously been analyzed in the environmental justice context. The report makes it clear that ample opportunity exists for EPA to exercise its discretion to incorporate environmental justice considerations in the permitting process.

Much of the discussion of EPA's permitting authority centers on two related questions: (1) whether the agency may deny a permit on environmental justice grounds; and (2) whether it may place conditions on a permit that specifically address issues of concern to low-income communities and communities of color. Lazarus & Tai at 619. Arguments for taking such actions are based on the full range of environmental justice issues, including disproportionate impacts, cumulative or synergistic impacts, effects on sensitive populations, unique exposure pathways, and cultural and socio-economic considerations. Along with outright denial of permits or bans on particular substances or practices, the conditions that have been proposed as falling within EPA's authority include site-specific mitigation measures, heightened monitoring requirements, advanced pollution prevention and best management practices, specialized control technology, enhanced public participation procedures, information disclosure, and community inspections. NEJAC Permitting Report at 24-30.

These environmental justice issues, and their potential remedies, are rarely mentioned explicitly in the permitting provisions of a specific statute or regulation. Instead, EPA's authority to consider them generally is based on its broader statutory authority to "protect human health and the environment," or to take "appropriate" or "necessary" action to carry out a statute's purposes and goals. Thus, EPA's exercise of its discretion to consider environmental justice in permitting is subject to the same analysis as the permitting process generally – which in turn is similar to the analysis undertaken when EPA invokes these general statutory provisions to set standards or to take enforcement measures. As discussed in the preceding chapters of this report, EPA has great latitude to take a broad range of actions, provided: (1) the agency's action is not contrary to Congress's unambiguous intent, as expressed in the authorizing statute; and (2) the agency's interpretation of the statute as allowing consideration of environmental justice issues is a "reasonable" one.

If these legal standards are met, courts generally review EPA's issuance or refusal to issue a permit on a case-by-case basis using the "arbitrary, capricious, abuse of discretion, or otherwise not in accordance with law" standard given in the Administrative Procedure Act, 5 U.S.C. § 706(2)(A). *Mueller v. EPA*, 993 F.2d 1354, 1356 (8th Cir. 1993). As long as EPA considers all relevant factors and its decision contains no clear error of judgment, the court cannot substitute its judgment for the agency's. *Id.* (citing *Citizens to Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402, 410 (1971)). To determine if the agency's decision is arbitrary and capricious or an abuse of discretion, the court must look to the statute or regulations that EPA is attempting to implement, and much of the analysis will be based on specific arguments surrounding the issuance or denial of the permit. For example, in *Sur Contra La Contaminación v. EPA*, 202 F.3d 443 (1st Cir. 2000), an environmental group challenged EPA's issuance of a Clean Air Act "prevention of significant deterioration" (PSD) permit to a power plant. *Id.* at 445. The court examined the regulations governing PSD permits before determining that EPA had not abused its discretion in issuing the permit. Similarly, in *Defenders of Wildlife v. Browner*, 191 F.3d 1159 (9th Cir. 1999), an environmental group challenged EPA's decision to issue a Clean Water Act discharge permit to five municipalities, arguing that the permit was required to include numeric effluent limitations rather than best management practices. The court examined the statutory section at issue and found that it provided the agency with discretion to determine appropriate control measures. *Id.* at 1166. Accordingly, if EPA stays within the language of the statute and its regulations, courts will grant it broad discretion to fashion appropriate permit conditions.

The EPA Environmental Appeals Board (EAB) has addressed the specific issue of the agency's authority to consider environmental justice factors in the permitting process. As noted in the preceding chapter, in *In re Chemical Waste Management of Indiana, Inc.*, the Board interpreted the Resource Conservation and Recovery Act's (RCRA) "omnibus clause," which provides that RCRA permits "shall contain such terms and conditions as the Administrator (or the State) determines necessary to protect human health and the environment." 6 E.A.D. 66 (June 29, 1995); 42 U.S.C. § 6925(c)(3). The Board rejected claims that the clause *requires* EPA to include environmental-justice-related conditions in permits, but held that it is well within the agency's discretion to do so, as long as the conditions are related to the statutory goal of protecting health or the environment. 6 E.A.D. at 75. The Board concluded that the clause allows EPA to "tak[e] a more refined look" at adverse health and environmental impacts where claims of disparate impact on minority or low-income communities are present. *Id.*; Lazarus & Tai at 662-63. The EAB has reached similar results under a regulatory omnibus provision in the Safe Drinking Water Act and the PSD permitting provision of

the Clean Air Act. *In re Envotech, L.P.*, 6 E.A.D. 260, 281, 1996 WL 66307 (Feb. 15, 1996); *In re AES Puerto Rico, L.P.*, 8 E.A.D. ____, 1999 WL 345288 (May 27, 1999).

Using these cases as a starting point, this report analyzes these and other statutory and regulatory provisions that provide EPA with similar discretion and opportunities to address environmental justice issues in the permitting process. A detailed discussion of these provisions and their environmental justice implications is found in the individual chapters for each statute that contains permitting or permit-like provisions. Some cross-cutting themes, common language, and highlights of these chapters are discussed here, under three broad headings that correspond to different types of “permits”: siting permits or assessments, operating permits, and registration or listing of chemical substances.

I. SITING PERMITS OR ASSESSMENTS

Siting of industrial facilities and other potentially polluting activities raises important environmental justice questions. To the extent that claims of disproportionate impact rest upon the concentration of sources within a geographic area or their proximity to sensitive populations, siting decisions become crucial to ensuring that no single community bears more than its fair share of the impacts. Since most land-use and zoning decisions are made at the state and local levels, EPA has comparatively little opportunity to weigh in on siting issues generally. However, the agency has considerable authority over a number of important issues carved out by the federal environmental statutes. Specifically, the agency has authority to address siting decisions that involve: (1) geographic areas where the federal government has specialized jurisdiction, such as wetlands and coastal zones; (2) concentrations of pollutants, such as non-attainment areas under the Clean Air Act; (3) heavily regulated facilities, such as waste disposal sites and incinerators; and (4) the federal government’s own activities that impact the environment. Within these realms, EPA has broad discretion and numerous opportunities to consider and address environmental justice issues in siting decisions. Its authority to do so often is based on language that requires an “assessment” of the health or environmental impacts – which may include cumulative impacts – of siting an activity or facility, or an analysis of “alternatives” to a proposed project, which may include alternative sites or forgoing the project entirely.

A good example is federal dredge-and-fill permitting under Section 404 of the Clean Water Act. Dredge-and-fill activity can have considerable impact on low-income communities and communities of color, including health concerns from the disruption of toxic sediment, disturbance or destruction of fisheries and hunting habitat, and flooding of Native American tribal lands or cultural resources. See Barry E. Hill & Nicholas Targ, *The Link Between Protecting Natural Resources and the Issue of Environmental Justice*, 20 B.C. ENVTL. AFF. L. REV. 1, 33 (2000) [hereinafter “Hill & Targ”]. Although the Army Corps of Engineers has primary responsibility for administering the Section 404 permitting program, it must do so within environmental guidelines that are produced by EPA, and EPA retains veto authority over individual permits.

Through a detailed public notice-and-comment procedure, the Corps and EPA must consider whether a project has “practicable alternatives” that would have less adverse ecological impact; whether it would threaten water quality or endangered species, or cause “significant degradation” to drinking water supplies and fish and wildlife habitat; whether the proponent has taken all

“appropriate and practical steps” to minimize and mitigate impacts at the proposed site; and whether the project would contribute unacceptably to cumulative impacts in the surrounding area. 40 C.F.R. §§ 230.10, 230.11. This Section 404 process provides ample opportunity for considering and addressing disproportionate impacts and other environmental justice issues, as well as a public forum in which the affected communities can express their concerns. Hill & Targ at 27-36. Similar requirements govern EPA’s and the Corps’ determination of ocean dumping sites under the Marine Protection, Research, and Sanctuaries Act. OGC 2000 Memorandum at 9-10.

Likewise, the National Environmental Policy Act (NEPA) requires an environmental impact statement (EIS) or environmental assessment (EA) for “major federal actions significantly affecting the quality of the human environment.” 42 U.S.C. § 4332(2)(C). The EIS or EA usually is conducted by the federal agency that is proposing a project, under the oversight of the Council on Environmental Quality (CEQ). Where an EIS or EA is required, it must include an analysis of environmental, socio-economic, demographic and cultural impacts, alternatives to the proposed project (including the “no action” alternative), and minimization and mitigation measures. CEQ has issued guidance to federal agencies on including environmental justice considerations in their NEPA analyses, and EPA has issued its own guidance for the agency’s participation in NEPA procedures. U.S. EPA Office of Federal Activities, Final Guidance for Incorporating Environmental Justice Concerns in EPA’s NEPA Compliance Analyses (April 1998).

This participation takes three forms. First, like all federal agencies, EPA is required to interpret its authorities and carry out its activities, including permitting decisions, in conformance with NEPA goals “to the fullest extent possible,” whether or not a formal EIS or EA is required. 42 U.S.C. § 4332(1). Second, as discussed in the NEPA chapter of this report, EPA could voluntarily elect to submit more of its decisions to the EIS process, even decisions that might otherwise be exempt from NEPA. Third, EPA has special responsibility for ensuring that other federal agencies comply with NEPA. For example, under Section 309 of the Clean Air Act, the agency has authority to review and comment on the EISs of other agencies, and to refer issues to the CEQ for resolution. 42 U.S.C. § 7609. Even when implemented to their fullest extent, these NEPA requirements are largely procedural; they require review and discussion of potential environmental impacts, but do not directly lead to the issuance or denial of a permit. Nevertheless, their outcomes and factual findings can carry weight in substantive permitting decisions. They can lead to the redesign or relocation of projects, and influence public opinion about a proposed decision. EPA can use its role as the guardian of NEPA values to ensure that environmental justice issues are fully considered in federal siting decisions.

The major pollution control statutes also provide EPA with authority to address siting issues in heavily impacted areas. For example, in the Clean Air Act, new source review (NSR) permits under Section 173(a)(5) may only be issued if an “analysis of alternative sites, sizes, production processes, and environmental control techniques for the proposed sources demonstrates that the source’s benefits significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification.” 42 U.S.C. § 7503(a)(5). The analysis of “social costs” could include a wide variety of impacts on affected communities, and lead to a determination that alternative sites would be preferable from an environmental justice perspective. OGC 2000 Memorandum at 11. Likewise, prevention of significant deterioration permits under Section 165(a)(2) require analysis of “the air quality impact of the source, alternatives thereto, control technology requirements, and other appropriate considerations.” 42 U.S.C. § 7475(a)(2). Given the

broad wording of these provisions, EPA can exercise its discretion to consider environmental justice claims, including the possibility of alternative sites, in instances where it is administering the NSR or PSD program. *E.g., In re AES Puerto Rico*, 8 E.A.D. ___, 1999 WL 345288 (May 27, 1999). The agency also can contribute its analysis of environmental justice issues where the programs have been delegated to a state or tribal permitting agency.

Clean Water Act regulations provide that in impaired water basins, “no permit may be issued to a new source or a new discharger, if the discharge from its construction or operation will cause or contribute to the violation of water quality standards.” 40 C.F.R. § 122.4(i). At minimum, this requirement shifts the burden to permit applicants to show that construction or operation of their facility in a specific site will not further degrade water quality; carried further, the requirement could lead to a moratorium on siting or constructing any new sources in basins that are already impaired by multiple sources. Similarly, applications for RCRA land disposal permits must include detailed information about potential releases and exposure pathways at the proposed site – information that EPA can use to require a comprehensive health assessment if the agency determines that the proposed facility “poses a substantial risk to human health” at the proposed site. 42 U.S.C. § 6939a.

II. OPERATING PERMITS

EPA exercises even more substantial discretion when administering the operating permit programs that are at the heart of most major pollution control statutes. As discussed earlier, EPA’s grant of authority often takes the form of general or “omnibus” provisions that give the agency discretion to decide what measures are “necessary” or “appropriate” to protect health and the environment or otherwise to advance the purposes of a particular statute. In addition to the RCRA omnibus clause, which has been extensively analyzed by the Environmental Appeals Board and is discussed above, there are similar – and sometimes untested – provisions in each of EPA’s media-specific statutes. These provisions supply EPA with general authority to consider environmental justice issues when deciding whether to deny or to place conditions on operating permits. In addition, a number of specific statutory sections and regulations spell out in more detail the precise types of conditions that EPA may wish to place on permits, many of which are amenable to environmental justice goals.

RCRA’s omnibus provision has its counterparts in Clean Air Act Section 504(a), which provides that Title V operating permits “shall include . . . such other conditions as are necessary to assure compliance with applicable requirements of this chapter,” 42 U.S.C. § 7661c(a); in Clean Water Act Section 402(a)(1), which in certain circumstances allows EPA to impose on discharge permits “such conditions as the Administrator determines are necessary to carry out the provisions of [the Act],” 33 U.S.C. § 1342(a)(1); and in Safe Drinking Water Act regulations, which authorize underground injection permit conditions “necessary to prevent the migration of fluids into underground sources of drinking water,” 40 C.F.R. § 144.52(a)(9); *Envotech*, 6 E.A.D. at 281. Though similarly worded, each of these broad provisions must be interpreted in light of their respective statutory goals and framework, which are analyzed in the individual chapters. But as a general matter, the statutes’ common mandate for protecting human health and the environment, read with the discretion afforded by the *Chemical Waste Management* and *Envotech* decisions, gives EPA ample authority to consider in the permitting process cumulative impacts, sensitive populations, unique

exposure pathways, and other environmental justice concerns where the agency is the permitting authority.

Permitting provisions also give EPA broad authority to impose many different types of conditions in order to further statutory purposes and assist with enforcement. Most of these are routinely used in practice, and could be adapted to advance environmental justice goals. For example, Section 504(c) of the Clean Air Act requires permits to include inspection, entry, monitoring, compliance, certification, and reporting requirements, 42 U.S.C. § 7661c(c); Section 402(a)(2) of the Clean Water Act authorizes the Administrator to prescribe conditions to assure compliance with discharge permits, “including conditions on data and information collection, reporting, and such other requirements as he deems appropriate,” 33 U.S.C. § 1342(a)(2); any variances from the Safe Drinking Water Act regulations for public water systems “shall be conditioned on such monitoring and other requirements as the Administrator may prescribe,” 42 U.S.C. § 300g-4(a)(1)(B); and RCRA land disposal permits must include information that is useful for emergency planning and response, 42 U.S.C. § 6939a. Through careful case-by-case consideration of the factual circumstances surrounding specific permitting decisions, the agency could tailor each of these tools to improve the flow of information to low-income communities and communities of color, to enhance those communities’ capacity to ensure that facilities comply with operating permits, and to address other environmental justice concerns. *See Lazarus & Tai* at 631-648.

Operating permits also serve the function of translating general environmental standards into specific, often numerical, discharge or emissions limitations. They are “where the rubber hits the road” in implementing standards, and a crucial step in determining how the policy tradeoffs and risk calculations that are implicit in those standards will be borne by various populations or sub-populations. NEJAC Permitting Report, App. A, “Pre-Meeting Report,” at 3. In particular, ambient pollution standards, such as those found in the Clean Air and Clean Water Acts, present EPA and other permitting agencies with a great deal of flexibility to distribute environmental benefits and burdens across a given airshed, watershed, or political jurisdiction, or across different categories of pollution sources. This flexibility can create both equities and inequities, depending on how it is applied. For these same reasons, equity issues also are raised when implementing emissions trading programs, such as those created by the Clean Air Act. *Id.* at 31-32. EPA’s implementation of these permitting processes and its oversight of state implementation present potential opportunities for the agency to address environmental justice concerns.

For example, water quality standards established under Section 303 of the Clean Water Act may require a “total maximum daily load” (TMDL) to be set for specific pollutants within an impaired water body. 33 U.S.C. § 1313. This TMDL must then be allocated among all sources contributing to pollution in the water body, which may include both point sources regulated by discharge permits and presently unregulated nonpoint sources. *See OLIVER A. HOUCK, THE CLEAN WATER ACT TMDL PROGRAM: LAW, POLICY AND IMPLEMENTATION* (1999). Converting a TMDL into specific permit limits and other kinds of enforceable measures requires “a series of judgments with clearly distributional consequences,” which EPA has authority to ensure do not fall unfairly on low-income communities or communities of color. *Lazarus & Tai* at 640. Similarly, under the Clean Air Act, national ambient air quality standards are met through state implementation plans (SIPs) and federal implementation plans (FIPs) that allocate total pollutant loadings among permitted sources. 42 U.S.C. § 7410. In areas where EPA administers the Act through a FIP, the agency has authority to examine these allocations for their environmental justice implications, and it may also

have some ability to review or to influence state-administered allocations under a SIP. 42 U.S.C. § 7410(a)(2)(E); *see* Lazarus & Tai at 633.

III. REGISTRATION OR LISTING OF CHEMICAL SUBSTANCES

A final type of permit targets potentially polluting *substances* rather than pollution sources or releases into specific media. These “registrations” of pesticides under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), “tolerances” for pesticide residue under the Federal Food, Drug, and Cosmetic Act (FFDCA), and approvals of new manufactured chemical substances under the Toxic Substances Control Act (TSCA) govern the manufacture, processing, distribution, use, and disposal of chemicals within their purview. Their procedures largely presume that use of a substance will be approved unless EPA makes an affirmative finding that its use will adversely affect health or the environment. Nevertheless, EPA’s mandate under these statutes to collect comprehensive data to assess a substance’s health and environmental effects from a variety of possible uses, and its ability to prohibit or to condition certain uses, provides a preventative approach that the agency can use to address environmental justice concerns.

One such provision is Section 3(c) of FIFRA, which requires EPA to register a pesticide for use unless it is shown to cause “unreasonable adverse effects on the environment,” and to issue a conditional registration if there is insufficient data to make this determination. 7 U.S.C. § 136a(c). Similarly, TSCA Section 5 requires EPA to decide whether the proposed manufacture or use of a new chemical substance on the TSCA chemical inventory may pose an “unreasonable risk of injury to health or the environment,” and if necessary to prohibit or condition this activity while data on the substance’s effects are developed. 15 U.S.C. § 2604(e). The analysis of “unreasonable” adverse effects could include consideration of those effects on low-income communities and communities of color. In the case of FIFRA, for example, it encompasses “any unreasonable risk to man or the environment, taking into account the economic, social, and environmental costs and benefits of the use of any pesticide.” 7 U.S.C. § 136(bb).

In order to make these determinations, EPA is authorized to collect substantial amounts of data from the parties proposing to manufacture or use a chemical substance or pesticide. FIFRA applicants must supply detailed information about the pesticide’s chemical makeup and effects, and can be required to supplement this information even after registration through an EPA-initiated “data call-in.” 7 U.S.C. § 136a(c)(2)(B). TSCA pre-manufacture notices must be accompanied by any test data the party knows about or could reasonably ascertain. 15 U.S.C. § 2604(d)(1). Under either statute, EPA could consider the need to include data on a substance’s persistence in the environment and its cumulative and synergistic impacts, as well as demographic and other information useful for determining its impacts on low-income communities and communities of color. *See* Memorandum from Howard F. Corcoran, U.S. EPA Office of General Counsel, Environmental Justice Law Survey (Feb. 25, 1994) [hereinafter “OGC 1994 Memorandum”].

Once EPA has made its determination as to a chemical’s health and environmental effects, the agency may place restrictions on how the chemical is used. Under TSCA, EPA may prohibit or limit the manufacture, processing, distribution, use or disposal of a substance, or any combination of those activities while health and environmental data are being developed. 15 U.S.C. § 2604(e)(1)(A). Since these restrictions apply only to the party that submitted the notice, they may be tailored to the

particular circumstances of a manufacturer that may be located near low-income communities or communities of color, or that is producing a chemical that is of special concern to those communities. Similarly, under FIFRA, EPA may decide to classify a pesticide as “restricted use,” and impose specific conditions on its use. 7 U.S.C. § 136a(d). These conditions often include locale-specific restrictions that typically relate to geography, climate, or the presence of an endangered species. *See* OGC 1994 Memorandum. Similar restrictions could be imposed to take account of the presence of sensitive populations or multiple pollution sources at a specific site.

CHAPTER 4

DELEGATION OF PROGRAMS TO STATES AND TRIBES

Most major pollution control statutes authorize EPA to delegate significant programmatic responsibility for permitting, monitoring, and enforcement to state and tribal governments. Program delegation reflects a deliberate tension that is inherent in our federal system of laws, and the environmental laws are no exception. On the one hand, modern pollution control statutes are specifically designed to establish national standards and to provide for uniformity in their implementation and enforcement; in many cases, they were expressly enacted to supplant a patchwork of inconsistent and ineffective state laws. On the other hand, the statutes also reserve a large, and sometimes primary, role for state and tribal governments, for a variety of reasons: a policy preference for “states’ rights” and tribal sovereignty; the time-honored notion that diverse approaches create a “laboratory” for improving both state and federal law; and recognition that states and Tribes are more aware of, and better positioned to respond to, conditions in the field. The purpose of delegating EPA’s authority is to strike a balance between these two sets of goals, and to ensure that federal and state expertise and resources are put to their most effective uses. At the same time, federal law continues to be the ultimate source of authority for implementing these programs, and EPA retains an important oversight function in all of them.

Since many EPA programs have in fact been delegated to a large majority of the states, it is impossible to examine EPA’s authority for advancing environmental justice goals without also examining the role of delegation. Delegation forms the backdrop for much of the discussion of the standard setting, permitting, and enforcement provisions in this report, and it also raises environmental justice issues in its own right. Numerous practical and political issues complicate the exercise of federal oversight. This chapter discusses the statutory authorities that can potentially be used to address environmental justice issues at several key points in the delegation process: approval of delegated authority, ongoing oversight of state actions and review of state-issued permits, parallel enforcement action, and partial or total revocation of delegated authority.

I. APPROVAL OF DELEGATED AUTHORITY

With the exception of the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), which has no delegated programs, the delegation provisions of EPA’s major statutes are substantially similar. *See* 33 U.S.C. § 1342 (CWA National Pollutant Discharge Elimination System); 33 U.S.C. § 1344 (CWA dredge-and-fill permits); 42 U.S.C. § 300g-2 (SDWA public water systems regulation); 42 U.S.C. § 300h (SDWA underground injection control); 42 U.S.C. § 6926 (RCRA); 42 U.S.C. § 7410 (CAA state implementation plans (SIPs)); 15 U.S.C. § 2684 (TSCA lead programs); 7 U.S.C. § 136w (FIFRA pesticide use enforcement). Delegation generally begins with a formal application by the state or tribal government for federal authorization, which is reviewed by EPA through a public process. Most of the statutes require EPA to determine whether the state’s or Tribe’s laws and proposed measures provide adequate personnel, funding, and authority to carry out the federal program. Once these findings are made and other applicable requirements are met, EPA approves the program and cedes the appropriate elements of its authority within that

jurisdiction. Citizens generally will be given an opportunity to participate in EPA's decision. For example, the Clean Water Act regulations require EPA to hold a public hearing on the delegation decision "if interest is shown," and to consider and respond to comments received. 40 C.F.R. §§ 123.1(e), 123.61. Similarly, the Safe Drinking Water Act's Underground Injection Control program requires a public hearing and a "reasonable opportunity for presentation of views" before EPA may make a final decision on delegation. 42 U.S.C. §§ 300h(b)(2) & (4).

EPA has authority to consider environmental justice issues during this approval process. To begin with, individual states and Tribes generally may not propose environmental standards or requirements that are any less stringent than the federal requirements, though they may exceed them. *E.g.*, 33 U.S.C. § 1342(o)(1) (CWA); 42 U.S.C. § 300g-2(a) (SDWA); 42 U.S.C. § 6929 (RCRA). Thus, a broad EPA interpretation of the agency's own mandate to protect low-income communities or communities of color in implementing its programs could translate into additional requirements when those programs are delegated to the state or tribal level. Further, where the agency is authorized to examine in detail the state's or Tribe's capacity to actually carry out a program, that inquiry could include consideration of how the proposed allocation of budget, staff, and other resources may affect these communities. In some cases, EPA also may issue a partial approval of a state program, and require revisions to the remaining portions. *E.g.*, 42 U.S.C. §7410(k) (CAA SIPs).

Additional EPA authority is provided by specific provisions of the individual statutes. The Clean Air Act requires that states' proposals to carry out state implementation plans (SIPs) must not be "prohibited by any provision of Federal or State law," 42 U.S.C. § 7410(a)(2)(E). Some have argued that this condition includes the responsibility to ensure that SIPs comply with Title VI of the Civil Rights Act or other relevant laws. Richard J. Lazarus & Stephanie Tai, *Integrating Environmental Justice into EPA Permitting Authority*, 26 *ECOL. L.Q.* 617, 633 (1999) [hereinafter "Lazarus & Tai"]. Clean Water Act regulations specifically require state programs to provide for public participation, including judicial review of permit approvals, citizen intervention in enforcement actions, and state agency response to citizen complaints. 40 C.F.R. §§ 123.27(d), 123.30. These requirements could be reviewed or revised with special attention to whether the state program meets the needs and builds the capacity of low-income communities and communities of color. Section 4002 of the Resource Conservation and Recovery Act (RCRA), which authorizes consideration of "political" factors, may offer a similar opportunity for EPA to incorporate both substantive and procedural environmental justice measures into its guidelines for approving state solid waste management plans. 42 U.S.C. § 6942(c)(9); Lazarus & Tai at 646-47.

II. EPA OVERSIGHT AND PERMIT REVIEW

Even after a program has been delegated, EPA often retains oversight of various state actions and decisions. Since this oversight authority goes to the heart of federal-state relations, it can be politically sensitive and difficult for EPA to exercise, and the agency historically has been reluctant to do so. Nevertheless, it has an ample basis in the laws. For example, under the Clean Air Act, EPA has authority to impose discretionary sanctions against states, including withholding of federal highway funds, "at any time . . . the Administrator makes a finding, disapproval, or determination" that it is necessary for ensuring that any SIP or portion of a SIP meets the requirements of the Act. 42 U.S.C. 7410(m) (emphasis added). While drastic, such federal funding sanctions provide a powerful lever that has been used in a variety of other contexts; EPA could explore the possibility of

applying them to ensure uniform implementation of standards, site-specific permit conditions, or other policies that help promote environmental justice. Memorandum from Howard F. Corcoran, U.S. EPA Office of General Counsel, Environmental Justice Law Survey (Feb. 25, 1994) [hereinafter “OGC 1994 Memorandum”]. Similarly, the Clean Water Act authorizes EPA to make grants to assist states in administering programs, and requires the agency to withhold grant monies from states that fail to conduct adequate water quality monitoring and reporting. 33 U.S.C. § 1256. Although the Clean Water Act lacks financial leverage of the magnitude of federal highway funding under the Clean Air Act, this authority also could be directed to address environmental justice issues. Other funding provisions are discussed in Chapter 7 of this report.

In addition, some statutes give EPA specific authority to review proposed state permits, object to their issuance, and in some cases to exercise a veto. Under the Clean Air Act, EPA may review, comment on, and take any other necessary actions to ensure that draft new source review permits comply with EPA’s rules, the SIPs, and the Act. 42 U.S.C. § 7503; see Memorandum from Gary S. Guzy, U.S. EPA Office of General Counsel, EPA Statutory and Regulatory Authorities Under Which Environmental Justice Issues May Be Addressed in Permitting, at 10 (Dec. 1, 2000). Similarly, the Clean Water Act authorizes EPA to review state-issued discharge permits and dredge-and-fill permits, and to object in writing to the issuance of any permit “as being outside the guidelines and requirements of” the Act; if the state fails to address EPA’s objections following a public hearing, the agency may issue its own, federal version of the permit. 33 U.S.C. § 1342(d)(2)(B); 33 U.S.C. § 1344(j). Depending on the circumstances, such ongoing review processes may provide an additional opportunity, and an additional forum, for incorporating environmental justice concerns into operating permits.

Under RCRA, EPA is entitled to participate in the public notice-and-comment period on proposed state-issued permits. 40 C.F.R. § 271.19(a). If the state has been delegated EPA’s “omnibus authority” to protect human health and the environment, but fails to address factors identified by EPA as necessary for doing so, EPA can seek to enforce its comments and have the state include appropriate permit conditions; if the state has not been delegated omnibus authority, EPA can impose the conditions directly in the federal portion of the permit. 40 C.F.R. § 271.19(e); see OGC 1994 Memorandum. This authority could be used to address several environmental justice concerns in permitting, including the kind of disparate impact analysis expressly authorized by the *Chemical Waste Management* decision. Finally, although the Safe Drinking Water Act has no permitting program for public water systems, EPA is authorized to review state-issued variances from national primary drinking water regulations, and can revoke the variances if they are an abuse of discretion, or establish different schedules for compliance “or other requirements” as the agency deems appropriate. 40 C.F.R. § 142.23. This review also could include environmental justice considerations.

III. EPA PARALLEL ENFORCEMENT

In some statutes, even after enforcement authority has been delegated, EPA's power to enforce permits and other requirements operates in parallel with the state or tribal government's. Where parallel enforcement authority exists, it offers an independent basis for EPA to pursue environmental justice goals, through the types of measures discussed in the "Enforcement" chapter of this report. For example, the Clean Water Act expressly provides that nothing in its delegation provisions "shall be construed to limit the authority of the Administrator" to take enforcement action, 33 U.S.C. § 1342(i) (discharge permits); 33 U.S.C. § 1344(n) (dredge-and-fill permits). Identical language appears in the Clean Air Act. 42 U.S.C. 7413(a)(2). Each of these statutes provides EPA with authority either to "overfile" on state enforcement actions or to pursue an independent enforcement agenda that could include remedying historical disparities in enforcement and other environmental justice considerations.

In other statutes, EPA's handover of enforcement authority is more complete. Once a state RCRA program has been approved, it operates "in lieu of" the federal program, with state law essentially displacing federal law, and EPA may not overfile on a state action or file its own action without first giving notice to the state. 42 U.S.C. § 6926(b); *see Harmon Industries, Inc. v. Browner*, No. 98-3775 (8th Cir. 1999). Similarly, the pesticide use regime of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) presumes that the states will have "primary enforcement authority" once their programs have been approved, essentially limiting EPA's role to monitoring the program's implementation. 7 U.S.C. § 136w-1. However, the Safe Drinking Water Act's public water system and underground injection control programs, which also give primary enforcement authority to the states, grant EPA authority to take direct enforcement action against a violator if the state or Tribe does not do so within 30 days after EPA gives notice. 42 U.S.C. §§ 300g-3(a)(1)(B), 300h-2(a)(2). This intermediate level of EPA enforcement authority provides another powerful tool that the agency could use to redress disparate enforcement patterns that adversely affect low-income communities and communities of color.

IV. REVOCATION OF DELEGATED AUTHORITY

Finally, most of the statutes that authorize delegation of EPA authority to the states and Tribes also make some provision for its revocation and return to EPA if the authority is not being properly used. In practice, given political considerations, the statutes' strong policy preference for delegation, and EPA's scarce resources for assuming additional regulatory burdens, these provisions are not often invoked. Nevertheless, they are highly relevant for delineating the boundaries of EPA's relationship with states and Tribes, and remain a viable threat in extreme cases of state inaction. *See, e.g., Sierra Club v. Hankinson*, 939 F. Supp. 865 (N.D. Ga. 1996) (citing with approval EPA's authority to revoke a state program for failure to complete TMDLs). Further, the agency's power to completely revoke delegated authority implies a variety of lesser-included powers and sanctions, some of which are expressly granted by the statutory language. These include the ability to review and object to state-issued permits or to place conditions on federal funding, as discussed above; they also include other measures that fall short of total revocation of the delegated authority.

For example, the Clean Air Act authorizes an entire range of discretionary sanctions, not merely financial sanctions, where EPA finds that a permitting authority is not adequately

administering its program. 42 U.S.C. § 7509. FIFRA allows the agency, after it finds that a state's program is inadequate and gives notice, to rescind primary enforcement responsibility "in whole or in part." 7 U.S.C. § 136w-2(b). The Clean Water Act and Clean Air Act provide that if EPA finds violations of state-issued permits that "are so widespread that such violations appear to result from a failure of the State to enforce such permit conditions or limitations effectively," it must give the state notice, and if the situation goes uncorrected, temporarily assume federal enforcement authority until the state gives assurances that it will enforce its program. 33 U.S.C. § 1319(a)(2) (CWA); 42 U.S.C. § 7413(a)(2) (CAA). The Clean Water Act authorizes total revocation on a number of grounds, including inadequate permitting, inadequate public participation, or inadequate enforcement. 33 U.S.C. § 1342(c)(3); 40 C.F.R. §§ 123.63(a)(2) & (3). Similar revocation provisions and authorities are found in, or have been read into, the other statutes and programs. *See, e.g.*, 33 U.S.C. § 1344(i) (CWA dredge-and-fill permitting), 42 U.S.C. § 6926(e) (RCRA), 15 U.S.C. § 2684(c) (TSCA); *National Wildlife Federation v. EPA*, 980 F.2d 765 (D.C. Cir. 1992) (SDWA). All these authorities provide some leverage for EPA to ensure that environmental justice issues are considered in state programs as well as in federal programs.

CHAPTER 5

ENFORCEMENT

Enforcement is the process by which one party, usually a government agency, attempts to bring another party into compliance with established norms and rules by imposing one or more sanctions. Environmental norms and rules take many forms, from prescriptive, quantitative, or qualitative standards for behavior to descriptions of conditions that pose a threat to the general public health or welfare. Sanctions include any restrictions, limitations or requirements imposed on the party against whom enforcement is brought. Enforcement is different from standard setting and permitting, which attempt to regulate future behavior that may be expected to have adverse environmental consequences before it occurs. In contrast, enforcement follows or responds to behavior that has already failed to comply with prescribed standards. However, enforcement action also can be forward-looking: by imposing sanctions against those who have already violated established norms, enforcement also attempts to discourage and deter future violations by other members of the regulated community that are subject to the same norms and rules.

Enforcement often is described as deterring undesirable behavior in two separate ways. “Specific deterrence” acts to change the behavior of the party or facility that is the subject of the enforcement action. The cost, or discomfort, of the sanctions imposed is intended to be greater than the benefit derived from noncompliance, so that the party subject to the sanctions eventually returns to compliant behavior. “General deterrence” operates on the behavior of all other parties who are subject to the same regulatory controls. Knowing of the sanctions imposed on the original enforcement target, and imagining the impact of these sanctions on themselves, even parties not immediately affected by the enforcement action choose to conform their behavior to the established norms and rules.

The enforcement tools and discretion entrusted to the Environmental Protection Agency are broad enough for innovative and imaginative application of the enforcement process to environmental justice issues. This application can significantly advance the goal of ensuring fair and equal treatment for people of all races, cultures, and incomes regarding the development, implementation and enforcement of our environmental laws and policies.

I. EPA’S AUTHORITY AND DISCRETION

As shown in the individual chapters of this report, EPA has authority to regulate activity and safeguard the environment and human health across a breathtaking expanse of programs. Each of these programs is guided by enabling legislation that establishes basic objectives for EPA and provides tools for the agency to engage in enforcement activities. These tools include issuing an administrative order, seeking an administrative fine, revoking or withholding a permit, bringing a civil action in federal district court, or pursuing criminal charges through the U.S. Attorney’s office. The agency can take action against individuals, corporations, certain government entities, and other legal entities. While enforcement provisions vary from one environmental law to another, the fundamental concepts appear in similar guise in the different statutes.

These statutory enforcement provisions invest EPA with broad discretion to select enforcement cases in instances of violations of specific performance standards, permit conditions, or regulations, and to decide the type of enforcement action to pursue. EPA can consider a variety of factors in selecting which cases to bring, including geographic distribution, facility size and organizational sophistication, type of discharge, impact on the environment, and consequences for public health. Within the last of these factors, EPA can bring what might be regarded as traditional enforcement actions for violations of standards, permit conditions, or regulations in a manner that advances environmental justice goals. That is, EPA can give priority to actions that penalize, or halt, conduct that has a disproportionate impact upon communities of color and low income communities. Thus, EPA's traditional authorities provide opportunities for protecting public health and the environment in communities of color and low-income communities.

The National Environmental Policy Act lends additional support for EPA exercising its discretion to use these enforcement authorities to address environmental justice concerns. As discussed in Chapter Nine, NEPA creates a broad national charter for protection of the environment. Among other things, NEPA directs the federal government to use all practical means to "assure for all Americans safe, healthful, productive, and esthetically and culturally pleasing surroundings" and to "attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable or unintended consequences." 42 U.S.C. § 4331(b). NEPA requires federal agencies, including EPA, to carry out their functions in a manner that implements the purposes of the Act, and charges the agencies with specific procedures and considerations. For example, federal agencies are directed to use a "systematic, interdisciplinary approach which will assure the use of the natural and social sciences and the environmental design arts" in their decisions. 42 U.S.C. § 102(2)(A). Agencies also must "identify and develop methods and procedures . . . which will insure that presently unquantified environmental amenities and values" are considered in making decisions. 42 U.S.C. § 102(2)(B).

These directives to federal agencies apply to EPA as it decides which enforcement cases to pursue, and what relief to seek in those that it pursues. For example, the NEPA language requiring agencies to take "presently unquantified environmental amenities and values" into consideration provides a basis for the agency to fully examine the cumulative impacts of emissions on low-income communities and communities of color when prioritizing inspection and enforcement decisions. Similarly, the admonition to employ not only environmental sciences but also the social sciences in decision-making gives EPA a clear basis to examine the effect of existing emissions on members of identifiable groups and sub-populations, not just average healthy individuals. Going even further, EPA could consider the impact of emissions on the continuing integrity and vitality of these very groups, whose ability to survive as sustainable ethnic or cultural communities may be jeopardized by discharges that threaten their subsistence or the health of their members to such an extent that group identity and cohesion is lost. EPA can include all these factors as it decides the most effective use of its enforcement powers.

II. EXERCISING DISCRETION

Enforcement is a process with several different stages, decision points and tools available to EPA in addressing environmental justice issues. This Part presents an overview of how EPA can exercise its enforcement discretion in the various stages of enforcement and then discusses specific aspects of the process that have particular relevance for promoting environmental justice.

A. Generally

In most cases, the enforcement process begins with the *identification of facilities* to be subjected to inspection or other forms of monitoring. This selection can be effective in two ways. First, a higher frequency of inspections is itself seen by many facilities as undesirable and something to be avoided, if only because it disrupts normal business activities, and this perception often encourages greater attention to compliance. In addition, a higher inspection frequency is likely to detect actual violations and to provide an initial basis for an enforcement response. For both these reasons, EPA could target selected geographic areas or industrial sectors for inspection based on the agency's reasonable belief that a high proportion of facilities in that area or sector create or exacerbate health or environmental impacts for communities near their facilities. This approach can then be refined to prioritize inspections toward those facilities in the selected area or sector that have the highest probability of affecting low-income communities or communities of color.

The second phase of the enforcement process is *conducting inspections*. The manner in which inspections are conducted, and the identity and affiliation of the person conducting them, also offer opportunities to attain environmental justice goals. In carrying out targeted inspections, EPA might consider consulting and coordinating with local officials with ties to the affected communities. In some instances, local enforcement officials and agencies may have strong ties to the leaders of the affected community, will have a good sense of a facility's impact upon the community, and can be valuable allies in an EPA enforcement action. In other instances, local officials may simply be able to offer important information from official files and inspection records. In either situation, working with local officials as circumstances allow can enhance the effect, and perception, of EPA inspections designed to gather information about the source of environmental justice problems.

Next, the selection and inspection of many facilities often yields a list of violators that may be larger than agency resources can easily address through individual enforcement actions. This imbalance between targets and enforcement resources requires EPA or a state regulatory agency to establish enforcement priorities for *case selection*, and these priorities can be informed by policies designed to protect low-income communities and communities of color. For example, if faced with a choice between bringing an enforcement action against a facility whose wastewater may affect the water supply or food sources for a community versus bringing an action against a violator that discharges to a water body without comparable uses, the enforcement agency can give greater priority to the case with more immediate impacts on health and the environment.

Finally, the *conduct and resolution of the enforcement action* clearly raises environmental justice issues. The assessed gravity of the offense, the size of the financial penalty, the possibility of criminal penalties, and the nature of any additional compensatory or restorative sanctions all are determined by an analysis that could reflect the impact of the violation on low-income communities and communities of color. Moreover, the process by which penalties and settlements are arrived at is

frequently a subject about which such communities may feel strongly and have valuable suggestions or contributions to offer.

B. Case Selection

The most flexible stage in the enforcement process is the selection of cases for which to bring enforcement actions. While general deterrence presumes that future behavior of many actors will be guided by an enforcement action against a single violator, it is the conduct of the enforcement target itself that is most immediately and directly affected. It is the enforcement target whose behavioral changes are most readily confirmed through continuing inspection. Thus, it is changes in the behavior of the enforcement target that can have the most direct impact on activities or conditions that can cause, or exacerbate, environmental inequities

Most environmental laws contain broad public health protection goals that are implemented through specific standards and norms, as discussed in Chapter Two. Often these standards are reflected in the terms of a permit or other agency action. As noted above, EPA has considerable discretion in using its traditional enforcement authorities to ensure compliance with these standards in communities of color and low-income communities. In addition, other elements of EPA authority may give the agency additional opportunity to address environmental justice. For example, EPA could take advantage of the flexibility inherent in such broad statutory constructs as “imminent and substantial endangerment.”

A number of environmental laws contain such a provision. For example Section 303 of the Clean Air Act (CAA) authorizes EPA to bring suit or issue orders when it receives evidence that one or more pollution sources are presenting an “imminent and substantial endangerment to public health or the environment.” 42 U.S.C. § 7603. The early legislative history of the CAA suggests that a primary purpose of the Act was to ensure protection for those whose ability to resist the harmful effects of air pollution is already compromised. H. Rep. No. 728, 1967 U.S.C.C.A.N. 1938, 1941-43 (1967). In *American Lung Association v. EPA*, 134 F.3d 388 (D.C. Cir. 1998), the D.C. Circuit endorsed the view that Congress meant to define “public health” in the CAA broadly, finding that the National Ambient Air Quality Standards required by the Act “must protect not only average healthy individuals but also ‘sensitive citizens’ – children, for example, or people with asthma, emphysema or other conditions rendering them particularly vulnerable to air pollution.” 134 F.3d at 388-389. In light of this emphasis on protecting sensitive populations, the CAA Section 303 requirement for showing the existence of endangerment to public health can encompass risks to vulnerable subsets of the general population.

Similar statutory language is found in several other statutes. For example, Section 504 of the Clean Water Act provides that EPA can seek an injunction or pursue other appropriate action when it receives evidence that “a pollution source or combination of sources is presenting an immediate and substantial endangerment to the health of persons or to the welfare of persons where such endangerment is to the livelihood of such persons.” 33 U.S.C. § 1364. The Resource Conservation and Recovery Act similarly authorizes EPA to bring legal action against any person whose handling, storage, or disposal of hazardous waste presents an “imminent and substantial endangerment to health or the environment,” 42 U.S.C. § 6973, and EPA also may take “other actions necessary to protect public health and the environment,” 42 U.S.C. § 6973(a). In addition, the Safe Drinking Water Act provides that whenever EPA receives “information that a contaminant [that] is present in

or is likely to enter a public water system or an underground source of drinking water may present an imminent and substantial endangerment to the health of persons,” the Administrator is authorized to “take such actions as he may deem necessary to protect the health of such persons,” including issuing an order or bringing a civil action. 42 U.S.C. § 300i(a).

EPA can use these various “imminent and substantial endangerment” provisions in a variety of ways to advance environmental justice objectives. For example, in selecting from a large inventory of cases where the required showing of harm or danger can easily be made, EPA and other appropriate regulatory agencies could prioritize their enforcement choices based on those situations where the brunt of the impacts are being borne by low-income communities or communities of color.

Beyond the prioritizing of cases against known violators, it is also possible that EPA could initiate enforcement action based *primarily* on environmental justice considerations. Low-income communities and communities of color commonly include diverse segments with heightened risk factors: Native Americans and others who subsist on fish they catch locally; asthmatics; women at risk for low birthweight babies; children suffering from elevated blood lead levels; farmworkers subject to high pesticide levels through occupational exposure; and others. Examination of the risks presented to one or more of these sensitive groups by the emissions from a facility or from a contaminant plume might establish the necessary proof for a “substantial endangerment” case that would not exist if only the risks to an average healthy population were calculated. Targeting enforcement based on concerns for sensitive populations may not only serve to benefit those particular communities; it may also more generally enhance EPA’s ability to develop sophisticated evidence and advance the agency’s deterrence goals.

Another central issue is the cumulative or synergistic effects of exposure to a number of emissions from numerous facilities. EPA has authority to consider these cumulative effects in enforcement. As discussed above, Section 504 of the Clean Water Act authorizes EPA to take action “upon receipt of evidence that a pollution source *or combination of sources* is presenting an imminent and substantial endangerment to public health or welfare.” 33 U.S.C. § 1364 (emphasis added); similarly, CAA Section 303 provides that EPA may bring suit to immediately restrain any person causing *or contributing to* pollution that presents an imminent or substantial endangerment. 42 U.S.C. § 7603. This statutory authority to consider combined sources provides EPA with considerable flexibility in evaluating cases for enforcement action. For example, there may be only one or two facilities that are out of compliance but whose emissions, when added to those of complying facilities, may create conditions of endangerment. EPA could place a greater priority on bringing enforcement actions against the violators than would exist in the absence of cumulative impacts. EPA also could consider bringing action against a larger group of dischargers whose aggregate impact on ambient conditions endangers public health, even though no single facility exceeds regulatory standards. In such cases, EPA might seek a remedy that imposes requirements more restrictive than the standards that obtain in the absence of cumulative effects.

Since the proof required in “substantial endangerment” cases is generally much more difficult to obtain and more susceptible to challenge than the proof needed to demonstrate simple violations of standards, it is likely that EPA will resort to this approach only in unusual circumstances. These might include instances where a particular population is put at risk despite the absence of violations of standards at any contributing facilities. This approach might also be preferable where the relief

that EPA could obtain to address the harm might be broader and more responsive under a “substantial endangerment” standard than for a case based on a violation of a standard.

C. Case Resolution

1. Penalties

EPA has discretion to select what relief it will seek. This includes requiring or prohibiting specific actions by the entity being sued and seeking administrative, civil or criminal penalties. Here again, the broad sweep of much of EPA’s enabling legislation provides statutory authority that the agency can use when seeking penalties to address issues of concern to low-income communities and communities of color. And here again, the relevant provisions vary somewhat from statute to statute, but provide cross-cutting themes that can be applied in a number of different contexts.

For example, each statute authorizing imposition of penalties also contains provisions that establish factors or criteria to be used in determining appropriate penalty levels. In a number of statutes, the penalty provision contains what is sometimes called the “omnibus clause,” a clause that adds a more general and comprehensive basis for penalties in addition to the specific penalty considerations enumerated. Section 309(d) of the Clean Water Act requires that civil penalties be calculated based upon “the seriousness of the violation or violations, the economic benefit (if any) resulting from the violation, any history of such violations, any good-faith efforts to comply with the appropriate requirements, the economic impact of the penalty on the violator, *and such other matters as justice may require.*” 33 U.S.C. § 1319(d) (emphasis added). In almost the same words, the Clean Air Act omnibus clause authorizes EPA or a court to consider “such other factors as justice may require.” 42 U.S.C. § 7413.

The Toxic Substances Control Act likewise adds consideration of “such other matters as justice may require” to the extent and gravity of the violation in prescribing penalty calculations. 15 U.S.C. § 2615(a). The Comprehensive Environmental Response, Compensation, and Liability Act mandates consideration of the nature, circumstances, extent, and gravity of the violation as well as such other matters as justice may require. 42 U.S.C. § 9609(a). Most other relevant penalty provisions in EPA’s statutes include at least a requirement that the “nature,” “extent,” or “gravity” of the violation be considered in computing an appropriate financial sanction. *See, e.g.*, 7 U.S.C. § 1361(a)(4) (FIFRA); 42 U.S.C. § 6928(a)(3) (RCRA). EPA has developed penalty policies for most statutes, which provide a matrix and other mechanisms to calculate penalties. *See, e.g.*, RCRA Civil Penalty Policy (Oct. 1990). Following the statutes, these formulas take into account the gravity and duration of the violation, the violator’s history of noncompliance, good or bad faith, economic benefit gained by the violation, and ability to pay.

EPA’s broad authority to tailor penalties to fit a specific factual situation has several implications for incorporating environmental justice issues into penalty calculations. It is clear that the agency in administrative penalty actions, and the federal and state courts in formal civil penalty proceedings, have ample authority to define and consider the full cost of environmental violations to a community in deciding a penalty. For this reason, the “gravity” factor for an unpermitted wastewater discharge to a stream that does not support any human activities will be less substantial than the gravity factor for the exact same discharge to a stream that supports subsistence fishing. Similarly, hazardous waste storage or labeling violations may be subject to a lesser penalty for a

remote facility than for a facility located in an urban area where children playing are more likely to come into contact with the wastes.

Enhancing an individual penalty based up a fuller appreciation of the gravity of the impacts will not by itself lessen the consequences of the underlying violations on affected community residents. But at the very least, a penalty calculation that includes appropriate consideration of the gravity and severity factors will produce a truer, and therefore fairer, sanction for the violations. Beyond this benefit, imposition of the fuller penalty serves the essential function of providing for general deterrence across the broader regulated community. Other facilities committing similar violations – and imposing similar burdens on their surrounding communities – will discern that the costs of their conduct are greater than they initially thought, and this knowledge alone may impel them to alter their conduct. If penalties are calculated correctly, the cost of compliance will become less expensive than the cost of continued noncompliance.

2 Supplemental Environmental Projects

Under the language of EPA's statutes, the agency's civil penalty authority is limited to imposition of fines on a person or firm that has violated environmental laws or regulations. The fines collected generally go into the government treasury rather than back into the affected community. EPA also has broad authority under most of its statutes to compel facilities to take specific actions to comply with the law. These two forms of relief may not directly respond to the needs of low-income communities or communities of color, especially communities that have suffered from the accumulated impacts of a long-term or serious violation that has degraded the local environment. However, the vast majority of enforcement actions are resolved through settlement, which offers EPA greater latitude to fashion remedies. In the settlement context, EPA has broad discretion to seek actions beyond payment of a penalty or cessation of illegal conduct, actions that may more directly address the consequences of the original illegal conduct. The agency has developed a policy that promotes the incorporation of environmentally beneficial activities into settlement discussions, and prescribes a method for selecting and using these so-called Supplemental Environmental Projects (SEPs). See U.S. Environmental Protection Agency, Supplemental Environmental Projects Policy (May 1, 1998).

EPA has recognized the potential that the SEP program offers for helping to attain a variety of environmental justice goals. The agency's SEP policy expressly provides that "emphasizing SEPs in communities where environmental justice concerns are present helps ensure that persons who spend significant portions of their time in areas, or who depend on food and water sources located near where the violations occur, would be protected." *Id.* The policy also notes that promoting environmental justice is an overarching agency goal, not a specific kind of SEP. According to the policy, EPA encourages SEPs in communities where environmental justice issues have been raised in the course of an enforcement action.

Typically, for a proposed project to qualify as a SEP and offset some portion of the traditional penalty amount, it must be considered "environmentally beneficial." EPA defines environmentally beneficial to mean a project that improves, protects, or reduces risks to public health or to the environment at large. *Id.* EPA also provides a list of seven specific categories of projects that qualify as environmentally beneficial, two of which are of particular interest from an environmental justice perspective. The first category is "public health projects," described as projects

that provide diagnostic, preventative, and/or remedial components of human health care that are related to the actual or potential damage to human health caused by the violation. The EPA policy notes that public health SEPs are only acceptable where the primary benefit is to the population harmed or put at risk by the violations at issue. The second relevant category of SEPs is “environmental restoration and protection efforts.” The EPA policy explains that certain improvements to man-made environments may qualify as beneficial projects; these might include the removal or mitigation of dangerous materials, such as asbestos or lead paint in structures.

The flexibility inherent in the SEP program creates enormous opportunity for EPA enforcement actions to yield settlements that directly address environmental justice concerns in the affected community. For example, epidemiological studies could be conducted to evaluate whether populations suspected of being at risk actually exhibit higher incidences of illness. Individual screening and medical examinations for at-risk individuals could be mandated, along with follow-up monitoring and appropriate care. Environmental SEP projects could remove or mitigate contamination sources that would not otherwise be remedied in the near future. The agency could continue to make a concerted effort to include these and other kinds of SEPs in settling actions where environmental justice issues are present.

EPA also could use its authority to make the SEP program even more responsive to environmental justice issues. For one thing, it is not clear that there is an effective mechanism by which firms entering into settlement discussions can learn about possible SEPs, or by which affected low-income communities and communities of color can learn of ongoing settlement negotiations. A more recent EPA draft guidance document offers several suggestions that could be adopted to address these issues, for example through the concept of SEP “banks.” Draft EPA Guidance for Community Involvement in Supplemental Environmental Projects, 65 Fed. Reg. 40639 (June 30, 2000). These banks would be local repositories of ideas for environmentally beneficial projects, identified and considered by EPA in anticipation of future settlement discussions. The availability of projects in a SEP bank might help influence a defendant to consider a SEP as part of settlement discussions. Potential projects might be even more attractive to settling defendants if it were clear that they had already been evaluated, at least preliminarily. To test these concepts, the agency might ask one or more EPA Regions to develop pilot SEP banks consisting of projects designed to redress environmental injuries in low-income communities or communities of color. In developing these pilot banks, EPA could employ focused outreach techniques to solicit ideas for potential future projects directly from these communities. The experience of these Regions then could be used to evaluate and refine the SEP bank idea for general application.

EPA also could revise its existing policy to make more environmental justice projects eligible for consideration as SEPs and to make eligible projects more attractive for settling parties. For example, the policy for public health SEPs presently requires a clear nexus between the showing of harm from a violation and the population to be aided by the beneficial project. For communities facing a variety of environmental risks, identifying the harm from any individual violation may be virtually impossible, which could eliminate consideration of a public health SEP that might otherwise be funded. EPA could modify this policy to allow public health projects for low-income communities and communities of color to be considered as SEPs by a settling polluter even where the particular violation did not specifically contribute to general community conditions; under this revision, it would suffice to demonstrate that there were violations and that a community in the same area is under general environmental stress and needs preventive or responsive health care. Finally,

EPA also could revise its guidelines to allow SEPs that advance environmental justice objectives to offset a greater portion of the underlying penalty amount than other environmentally beneficial projects, which would have the effect of encouraging more environmental justice projects. Since the existing SEP policy is a legitimate exercise of EPA's enforcement discretion, these revisions also should be within the agency's authority.

3. Criminal Sanctions

Virtually every major environmental statute also provides criminal penalties for particularly egregious violations of its substantive provisions and standards. The initiation of a criminal action is perhaps the single most serious way in which government confronts one of its citizens. Thus, the criminal charging power is wielded with great care and appropriate caution for the civil and constitutional rights of those who might eventually be accused. In environmental cases, criminal charges generally are only brought in instances of extreme damage to the environment or public health (or serious threats of such damage), and in cases of intentional and knowing violation of well-established standards. In deciding whether to bring criminal charges, a prosecutor's examination of the harm caused or threatened by a particular incident can include evaluation of the harm inflicted upon or threatened to a community that is uniquely exposed due to its location, or its socioeconomic or racial composition. Recognizing these considerations is consistent with the criminal provisions of EPA's statutes and the discretion typically afforded to prosecutorial decisions.

In addition to the charging of criminal cases, environmental justice issues also can influence sentencing in criminal cases following a conviction. Most jurisdictions, including the federal government, have sentencing guidelines that provide a framework for imposition of a sentence within the bounds authorized by the criminal laws. Factual evaluation of the particular harm caused or threatened is a fundamental component of these guidelines. Thus, environmental violations whose harms are demonstrated to fall unequally on one particular group or class or community could be the basis for an appropriate sanction under the criminal laws; indeed, harm to a more sensitive or vulnerable group may be an enhancing factor in calculation of punishment. Federal and state prosecutors can use the sentencing guidelines as a basis for linking punishment to actual harms that are inflicted upon low-income communities and communities of color.

III. COMMUNITY INVOLVEMENT IN ENFORCEMENT

A. Community Involvement Throughout the Enforcement Process

Another concern for low-income communities and communities of color is how regulatory agencies can ensure meaningful local involvement in key phases of the enforcement process. The National Environmental Justice Advisory Council held a Roundtable that examined ways to enhance environmental enforcement efforts, and highlighted a number of continuing concerns. These included communities' frustration over their inability to review inspection reports and results from regulators; an accompanying desire to obtain raw analytical data as well as reports that summarize inspection and analytical information; and a feeling that communities are not adequately notified when enforcement actions are contemplated or commenced, and are not being afforded opportunity to participate in the decision-making process to resolve actions once they are started. NATIONAL

ENVIRONMENTAL JUSTICE ADVISORY COUNCIL, REPORT OF THE ENVIRONMENTAL JUSTICE ENFORCEMENT AND COMPLIANCE ASSISTANCE ROUNDTABLE (EPA pub., 1996).

These concerns present challenges for EPA and other environmental regulators. The easiest to address appears to be the issue of access to inspection reports and results. These documents generally are regarded as public records in many jurisdictions, and most EPA records are subject to disclosure under the federal Freedom of Information Act and EPA's information regulations. 5 U.S.C. § 552; *see* 42 C.F.R. Part 2. Nonetheless, the procedures to gain access to these public records are frequently cumbersome and lengthy. Delay in obtaining key documents may hinder the ability of a group or community to participate effectively at a critical stage of the enforcement process.

EPA may be able to develop expedited procedures for disclosing public information where environmental justice issues are raised. The kinds of analysis and evidence gathering suggested earlier – establishing the true gravity or severity of a violation on susceptible populations or confirming immediate and substantial endangerment of low-income communities or communities of color – would allow enforcement officials to recognize those cases where environmental justice interests may be involved. Except where disclosure is prohibited by law or regulation, EPA should have substantial latitude in identifying mechanisms to disseminate public information that are most responsive to local information requirements in a given case. For example, EPA could create and maintain a “shadow” case file at a local repository that is updated on a real-time basis with the publicly available information that is placed in the official file.

Keeping communities current about the actual progress of enforcement actions and of potential settlement discussions poses a more difficult challenge. Certain environmental statutes require a thirty-day period for public notice and comment prior to finalizing settlements. *E.g.*, 42 U.S.C. § 7413(g) (CAA); 42 U.S.C. § 9622(d)(2) (CERCLA). The Department of Justice also has a policy to provide public notice and comment for consent decrees with injunctive aspects for all environmental statutes. 28 C.F.R. § 50.7.

However, such notice-and-comment opportunities are of limited utility in protecting community interests; by their terms, they only apply to actions resolved through a formal consent decree in court. Many more cases are settled by EPA through administrative action that does not result in a consent decree and does not trigger these provisions, and the proportion of state enforcement actions resolved outside of court is even greater. Moreover, the thirty-day period is in practice a very brief time for communities to obtain, analyze, and comment on complex settlements. Most significantly, a notice-and-comment process that occurs immediately prior to finalization of a settlement runs into the possibility that the government and violator will have already reached agreement on all important issues before disclosing the proposed settlement to the public. This means that the community is largely precluded from influencing the overall shape and direction of the settlement discussion.

EPA's authority to tailor this process for low-income communities and communities of color comes as much from what the statutes do not prohibit as from what they expressly require. For instance, the public notice requirements described above stipulate a thirty-day *minimum* comment period, but do not prevent EPA from providing a longer period where an interested community has been identified. Further, the statutes do not prevent EPA from arranging a settlement strategy discussion with an affected community *prior* to the beginning of negotiations with the violator. At

such a discussion, the community could identify its key concerns and expectations, and EPA could identify the general areas the settlement might address. EPA then could consider giving some sense of the progress of the negotiations to the community at a point before complete agreement is reached. Concerns about confidentiality could be minimized by the provision of limited, and carefully worded, information; the agency also could identify the importance of community involvement to the violator early in negotiations and require its consent to a limited disclosure of information. Finally, EPA could preview the expected final settlement proposal to the community before committing to it and submitting it for publication.

B. Citizen Suits

Although enforcement traditionally is perceived as a government tool, Congress and most state legislatures have long recognized that the scope of our environmental regulatory system exceeds the governmental resources available to implement it. As a result, many environmental statutes contain provisions that allow private citizens to act, in effect, as attorneys general in bringing actions against violations of the environmental laws. *E.g.*, 42 U.S.C. § 9659 (CERCLA) 33 U.S.C. § 1364 (CWA); 15 U.S.C. § 2619 (TSCA). In addition, provisions such as RCRA Section 3008(d) allow the EPA Administrator to authorize “any person” to conduct monitoring, testing, analysis and reporting of any facility at which the storage or release of hazardous wastes presents a substantial hazard to human health or the environment and where the facility owner or operator fails to perform these actions satisfactorily. 42 U.S.C. § 6934(d). Such monitoring efforts could include appropriately qualified representatives of the affected community, and could yield information that becomes the basis for agency or citizen enforcement.

Citizen suits can be an effective vehicle for community participation, as well as for developing substantive legal theories of cumulative harm and protection of sensitive populations that are important for addressing environmental justice issues. In addition, community control of the legal action helps ensure that enforcement decisions, as well as settlement decisions, will be reviewed fully by those presumed to be best able to reflect the community’s goals and expectations. On the other hand, technical requirements and the need for expert witnesses may prove difficult challenges, and legal fees for long and hard-fought cases can be steep. EPA could support citizen suits by developing a program to provide assistance for those suits that are designed to advance issues of concern to low-income communities and communities of color. For example, EPA can support access to records and documents, access to its inspectors and experts and other litigation support, or even direct financial support of citizen plaintiffs. In appropriate cases, the agency can provide significant direct assistance by choosing to intervene in citizen suits using the authority provided in its statutes.

CHAPTER 6

INFORMATION GATHERING

The federal environmental statutes authorize EPA to undertake a wide array of information gathering activities. The scientific and technical nature of environmental regulation has led Congress to provide the agency with substantial research authority to inform its decision-making, both for broad pollution control activities and for specific health and environmental issues. The agency's authority to set standards and to issue permits with site-specific discharge limitations requires monitoring of actual emissions and discharges by regulated facilities, EPA, and the surrounding community to ensure compliance and to track the status of human health and the environment. EPA's ability to conduct enforcement and to continually evaluate and revise its programs necessitates the reporting of monitoring data and other information about health and environmental impacts of regulated entities. Statutory authorities and opportunities for making this information available to the public are discussed in Chapter 8.

Reliable and accurate information about the impact of regulated activities on communities of color and low-income communities is critical for ensuring that EPA decisions protect the health and environment of those communities. Environmental statutes provide broad authority for tailoring EPA's information gathering activities to promote environmental justice. First, EPA research can more clearly define the risks faced by communities of color and low-income communities and can include those communities in carrying out the research. Second, the agency can establish monitoring requirements for facilities in impacted communities, strengthen its own monitoring and inspection, and build the capacity of community groups to monitor the compliance of facilities within their communities. Finally, reporting requirements can be expanded to include information relevant to environmental justice issues, and information derived through these reporting requirements made readily available to the public.

This report analyzes statutory authorities that provide opportunities to address environmental justice issues in EPA's information gathering activities. A detailed discussion of these provisions and their potential environmental justice implications is found in the individual chapters of Section B. Some cross-cutting themes, common language, and highlights of these chapters are discussed below, under three broad headings: research, monitoring, and reporting.

I. RESEARCH

The need for research into health and environmental issues of concern to people of color and low-income communities has long been a focus of the national dialogue on environmental justice. Discussion about research to promote environmental justice issues has centered on both the substance of the research and the manner of conducting the research. It is widely believed that a greater understanding is needed of how to gauge the health effects of pollution on overburdened communities: cumulative and synergistic effects of pollutants, as well their effects on people who may be particularly sensitive because of underlying medical conditions such as asthma, or socio-economic conditions such as limited access to health care, poor nutrition, etc. In addition, research into

medical conditions that are more prevalent in communities of color, such as asthma or lead poisoning, can also further efforts to ensure environmental protection for those communities. The process for conducting research from the development of research projects to the research itself and the evaluation of the results has also been the subject of much discussion. Communities of color and low-income communities, which historically have had limited input into the regulatory decision-making process, have similarly been excluded from decisions about scientific and technical research priorities. *See generally*, NATIONAL ENVIRONMENTAL JUSTICE ADVISORY COUNCIL, ENVIRONMENTAL JUSTICE AND COMMUNITY-BASED HEALTH MODEL DISCUSSION (Meeting Report, May 2000).

Improving scientific knowledge of how regulated activities affect communities of color and low-income communities, and of how to make such determinations in the regulatory decision-making context, is an important short- and long-term goal of efforts to promote environmental justice. The federal environmental laws administered by EPA provide the agency with authority for its considerable work in conducting and supporting scientific research. Those laws also provide the agency with ample authority to pursue environmental justice goals in setting research agendas and carrying out research.

A. Setting the Research Agenda

Most statutes grant EPA broad discretion to conduct research necessary to meet the goals of the statute. EPA could use this discretionary authority to focus its research on environmental justice issues. Section 10 of the Toxic Substances Control Act (TSCA), which requires EPA to “conduct such research, development and monitoring *as is necessary to carry out the purposes of this chapter*,” typifies these general grants of research authority. 15 U.S.C. § 2609 (emphasis added). *See also* 7 U.S.C. § 136r(a) (requiring EPA to undertake research “as may be necessary to carry out the purposes of [the Federal Insecticide, Fungicide, and Rodenticide Act]”). The Clean Water Act requires EPA to “conduct and promote the coordination and acceleration of research . . . relating to the causes, effects, extent, prevention, reduction and elimination of water pollution.” 33 U.S.C. § 1254(a)(2). *See also* 42 U.S.C. § 7403(a)(1) (Clean Air Act provision requiring EPA to “conduct and promote the coordination and acceleration of research . . . relating to the causes, effects (including health and welfare effects), extent, prevention and control of air pollution”). Similarly, the Safe Drinking Water Act (SDWA) broadly authorizes EPA to conduct research “relating to the causes, diagnoses, treatment, control, and prevention of physical and mental diseases and other impairments of man resulting directly or indirectly from contaminants in the water, or to the provision of a dependably safe supply of drinking water.” 42 U.S.C. § 300j-1(a).

In addition to providing broad research authority, several statutes expressly authorize EPA to research specific issues relevant to environmental justice. For example, the Clean Water Act contains a number of provisions that authorize EPA to research health and environmental impacts on farm workers and agricultural communities, in particular the effects of pesticides and agricultural pollution. 33 U.S.C. § 1254(l) (requiring research on the health and welfare effects of pesticides); 33 U.S.C. § 1254(p) (requiring research on agricultural pollution, particularly on methods of “preventing, reducing and eliminating pollution from agriculture, including *the legal, economic and other implications of the use of such methods*”) (emphasis added). In addition, the Clean Air Act (CAA) authorizes EPA to research air pollution issues particularly relevant to communities of color and

low-income communities, such as risks from combinations of air pollutants, 42 U.S.C. § 7403(d)(2), and urban air toxics, 42 U.S.C. § 7412(p).

EPA also has authority to require regulated entities to undertake research. Perhaps the most prominent example is the chemical testing program under the Toxic Substances Control Act. 15 U.S.C. § 2603. EPA can take environmental justice concerns into account in determining which existing chemicals will be subject to testing by chemical manufacturers and processors. In addition, TSCA Section 4(b)(2), which sets out the types of effects for which EPA may prescribe testing standards, specifically includes “cumulative or synergistic effects, and any other effect which may present an unreasonable risk of injury to health or the environment,” giving EPA broad authority to research the types of health effects of concern to communities of color and low-income communities. 15 U.S.C. § 2603(b)(2).

The Clean Air Act also authorizes EPA to impose research requirements upon regulated entities. For example, CAA Section 211(b)(2) authorizes EPA to require the manufacturer of any fuel or fuel additive to research the potential health effects of the substance and provide “. . . such other information as is reasonable and necessary to determine . . . the extent to which . . . emissions [resulting from the use of the fuel additive] affect public health or welfare.” 42 U.S.C. § 7545(b)(2). This provides broad authority for EPA to research the health effects of fuel additives on communities of color and low-income communities. In addition, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) permits EPA to obtain payment for the costs of certain research programs from regulated entities. 42 U.S.C. § 9604(i)(5)(D).

B. Community Involvement in Research

Federal environmental laws support EPA efforts to establish community participation in agency research activities. A variety of provisions create mechanisms to facilitate this involvement. For example, numerous statutes authorize EPA to provide funding to private organizations and individuals. These provisions are described in the following chapter. A number of environmental laws establish formal advisory bodies to inform EPA’s research activities, and these can include individuals with expertise in environmental justice issues. Chapter 8 reviews these provisions in more detail. In addition, the Toxic Substances Control Act requires public input in the issuance of test rules. 15 U.S.C. § 2603(b)(5). Regulations issued under the law provide that prior to making a determination on the need for testing of a chemical, EPA will hold a public focus meeting to discuss comments on testing recommendations of an inter-agency testing committee and that EPA will hold a public meeting to announce preliminary testing determinations. 40 C.F.R. § 790.22(a).

EPA can also promote environmental justice by providing communities with research results and information necessary to facilitate community involvement and participation. Certain statutes explicitly authorize the sharing of research results with the public. For example, CERCLA Section 311(b)(8) requires EPA to maintain a publicly-available library of information on treatment technology. 42 U.S.C. § 9660(b)(8). CAA Section 103(b) authorizes the Administrator to collect and make available research results, 42 U.S.C. § 7403(b), and Section 112(l)(3) requires EPA to maintain a publicly-available air toxics clearinghouse containing research on preventing and controlling health risks. 42 U.S.C. § 7412(l)(3). In addition, Section 1442 (b)(1) of the Safe Drinking Water Act (SDWA) authorizes EPA to collect and make available information about the research,

demonstrations, and recommendations into providing a dependably safe supply of drinking water. 42 U.S.C. § 300j-1(b)(1).

II. MONITORING

Monitoring is a central component of EPA's information gathering activities. Monitoring of facility emissions and discharges is an important tool for ensuring compliance with permits and other pollution control requirements. Monitoring of pollutant levels also provides data needed to guide the development of agency standards and programs. National discussions on environmental justice issues have emphasized the need for more extensive monitoring in communities of color and low-income communities, both to improve understanding of the environmental and health conditions in the communities, and to increase agency and citizen capacity to identify facilities that are not in compliance with existing requirements. EPA has considerable statutory authority to tailor its monitoring activities to achieve these goals and to assist communities in conducting monitoring on their own.

A. Monitoring by Regulated Entities

EPA has extensive statutory authority to require monitoring and record-keeping by regulated facilities. EPA's discretion may be couched in broad language, enabling the agency to require monitoring "as reasonably required" to carry out the purposes of the particular statute. For example, under Section 308 of the Clean Water Act, the Administrator may, "[w]henver required to carry out the objective of this chapter," require the owner or operator of any point source to keep records; make reports; install, use and maintain monitoring equipment or methods; sample effluents; and provide any other such information "as he may reasonably require." 33 U.S.C. § 1318 (emphasis added); see also 42 U.S.C. § 7414(a)(1) (broad CAA authority to require monitoring, record-keeping and reporting); 42 U.S.C. § 7414(a)(3) (broad CAA authority to require enhanced monitoring and compliance certification submission); 42 U.S.C. § 9603(d) (broad CERCLA authority to require record-keeping); 42 U.S.C. §§ 6992, 6923, 6924 (broad RCRA authority to require record-keeping); and 7 U.S.C. § 136f (broad FIFRA authority to require record-keeping).

Certain statutes provide EPA with authority to require monitoring in specific circumstances, authority which EPA could use to address environmental justice concerns. For example, under RCRA Section 3013(a), EPA may require the owner or operator of a facility to conduct further monitoring upon a finding by EPA that the presence or release of waste from the facility presents a substantial hazard. 42 U.S.C. § 6932. See also 7 U.S.C. § 136i-1(a)(1) (FIFRA requirement that Secretary of Agriculture, in consultation with EPA, require pesticide applicators to maintain detailed records); 42 U.S.C. § 7429 (CAA provision requiring EPA to promulgate rules requiring monitoring and reporting by solid waste incineration units).

B. Monitoring by EPA

EPA's authority to require monitoring and record-keeping by regulated entities is often coupled with EPA's authority to conduct its own monitoring and sampling as necessary. For example, the Clean Water Act grants EPA the right of entry to access records, sample effluents, and inspect monitoring equipment. 33 U.S.C. § 1318(a); *see also* 7 U.S.C. § 136r(a) (authorizing EPA to conduct monitoring activities "as may be necessary" for the implementation of FIFRA); 42 U.S.C. § 6927(a) (providing that RCRA facilities must allow entry, inspection, and sampling by an agency representative); 42 U.S.C. § 9604(b) (authorizing EPA under CERCLA to undertake investigations, monitoring, surveys, testing and other information as deemed necessary and appropriate to identify the release, source and nature of the hazardous substance and the extent of the danger). EPA can promote environmental justice by using these authorities to target its monitoring and sampling activities in affected communities.

C. Community Involvement in Monitoring

Some environmental laws contain provisions that could be invoked to support EPA's authority to enhance the community's capacity to monitor the compliance of the facilities within the community. As discussed in Chapter 3, EPA can in many cases include conditions in permits that enhance citizen monitoring capacity. In addition, some statutes may authorize EPA to designate community residents as "authorized representatives" for conducting monitoring and inspection activities. *See* 33 U.S.C. § 1318(b) (CWA); 42 U.S.C. § 6934(d) (RCRA); *see also*, Richard Lazarus & Stephanie Tai, *Integrating Environmental Justice into EPA Permitting Authority*, 26 *ECOLOGY. L.Q.* 617, 641 (1999) [hereinafter: "Lazarus & Tai"].

In addition, because some communities of color and low-income communities lack the resources to engage in effective oversight, EPA can build community monitoring and enforcement capacity by providing the public with as much of the monitoring data and records as possible. Certain statutes designate material as publicly available absent any strong countervailing interest. For example, under RCRA, all reports or information obtained through EPA's Section 3007(a) monitoring and inspection powers must be available to the public, unless there is a showing of business confidentiality. 42 U.S.C. § 6927(b). Similarly, under the Clean Air Act, monitoring information must be publicly available, except where the material constitutes a trade secret. 42 U.S.C. § 7414(c). The Safe Drinking Water Act requires EPA to prepare and make available to the public an annual report summarizing and evaluating the reports submitted by the states on violations of national primary drinking water regulations, as well as notices of violations submitted by public water systems serving Tribes. 42 U.S.C. § 300g-3(c)(3)(B). EPA could use its authority to ensure that these materials are not just formally "available" but in fact *meaningfully* available – easily accessible, understandable by a layperson, and presented in multiple languages where necessary. *See* Lazarus & Tai at 645.

III. REPORTING

Federal environmental statutes typically require reporting of a wide array of information. EPA can use its authority to implement these reporting requirements to promote environmental justice. First, EPA plays a significant role in developing the nature and scope of these reporting

requirements, and can use this authority to expand their breadth and coverage to include information relevant to environmental justice. Second, to the extent that disclosure is authorized under the statutes, EPA can further environmental justice by making information from the reports widely available and easily understandable to the public. This information will enable affected communities to better safeguard their health and environment.

Reporting is often connected to monitoring, with statutes requiring facilities to provide reports to EPA on the data monitored. Because these two functions are so integrated in most statutes, these types of reporting requirements are discussed together with the monitoring requirements in the section above. This section covers other reporting provisions that authorize EPA to collect and to make readily available to communities information on toxic chemicals emissions and health effects.

Facility reporting is at the core of the Emergency Planning and Community Right-to-Know Act (EPCRA). One of EPCRA's central provisions is the requirement that facilities report the annual amount of toxic chemicals released into the environment to both EPA and certain designated state officials. 42 U.S.C. § 11023. EPA has substantial authority to shape the reporting requirement under this program to advance environmental justice. Under Section 313(b), EPA can add or delete Standard Industrial Classification codes, which determine in part the facilities that must file reports. Moreover, EPA can apply the toxic chemical release reporting requirements to any particular facility that uses a covered toxic chemical, when it finds that it is warranted based on "the toxicity of the toxic chemical, *proximity to other facilities* that release the toxic chemical or to population centers, the *history of releases* of such chemical at such facility or such other factors as EPA deems appropriate." 42 U.S.C. § 11023(b)(2) (emphasis added). In addition, EPA has authority to (1) increase the frequency of reporting; (2) add or delete chemicals from the list of covered toxic chemicals; and (3) modify threshold amounts for the purposes of reporting toxic chemicals. All of these authorities could be used to create more expansive reporting requirements for chemicals and facilities disproportionately affecting some communities. *See* 42 U.S.C. § 11023(i),(d),(f). EPA makes toxic chemical release reporting information available to the public in a variety of ways, and can continue to assist communities in obtaining and using the data.

TSCA provides EPA with broad authority to require reporting of information about the effects of chemicals on communities of color and low-income communities. TSCA Section 8(a) authorizes the agency to promulgate rules under which chemical manufacturers and producers "shall maintain such records, and shall submit to the Administrator such reports, *as the Administrator shall reasonably require.*" 15 U.S.C. § 2607(a) (emphasis added). TSCA Section 8(c) provides EPA with the authority to promulgate rules requiring chemical manufacturers to maintain records of any "significant adverse impacts to health or the environment *alleged* to have been caused by the substance." 15 U.S.C. § 2607(c) (emphasis added). In addition, under Section 8(c), chemical manufacturers, processors, and distributors are required to inform EPA if they obtain information that EPA does not have indicating a substantial risk of injury from the substance.

FIFRA also contains broad reporting provisions which could be utilized to promote environmental justice goals. FIFRA Section 6(a)(2) provides that if "after the registration of a pesticide, the registrant has additional factual information regarding unreasonable adverse effects on the environment of the pesticide, the registrant must submit such information to the Administrator." 7 U.S.C. § 136d(a)(2). In addition, the Administrator requires registrants to submit information

other than that explicitly set forth in the regulations “if the registrant knows, or reasonably should know, that if the information should prove to be correct, EPA might regard the information alone or in conjunction with other information about the pesticide as raising concerns.” 40 C.F.R. § 159.195.

Other statutes require EPA to make regular reports to Congress on the status of the agency’s research and regulatory efforts. For example, Section 301(h) of CERCLA requires EPA to submit to Congress an annual report on progress achieved in implementing the statute during the preceding year. 42 U.S.C. § 9651(h). Likewise, CERCLA Section 311 requires the agency to submit an annual progress report on the research, development, and demonstration programs authorized under that section. 42 U.S.C. § 9660(e). *See also*, 33 U.S.C. § 1315(b)(1)(D)(iii) (CWA requirement that EPA transmit to Congress an analysis of state biennial water quality reports, along with the reports themselves).

Finally, EPA can promote environmental justice by making information derived through statutory reporting requirements available and accessible to the public, to the extent permitted by law. This information can be used by community groups to assess risks, promote public participation in environmental decision-making, and to support enforcement actions where necessary. As discussed in Chapter 8, the public can obtain much of this information through the Freedom of Information Act, 5 U.S.C. §552, and many statutes authorize or require EPA to make specific types of information publicly available.

CHAPTER 7

FINANCIAL ASSISTANCE

Each year, EPA awards hundreds of millions of dollars in grants, contracts, and cooperative agreements. While state, tribal, and local governments account for most of the agency's assistance dollars, a wide range of non-governmental organizations receives significant funding to carry out activities to advance federal environmental protection goals. EPA has an important opportunity to further environmental justice when deciding who are the recipients of its funds, what are the issues addressed through funded activities, and how the benefits of funded activities reach affected communities.

Financial assistance can provide a mechanism for enhancing community involvement in EPA programs and decisions. EPA can actively seek to include in its financial assistance programs those institutions and communities that historically have been excluded from participation in governmental decisions, and those that are working directly on environmental justice issues. The agency can take steps to make low-income communities and communities of color more aware of these programs and to provide help in applying for assistance, where necessary.

Where EPA is in a position of selecting among various projects to fund, the agency can choose to make environmental justice issues a priority in the selection process. In appropriate circumstances, EPA also can further environmental justice goals by establishing conditions for the receipt of financial assistance – for example, by requiring that environmental justice issues be addressed in particular projects and programs or by ensuring that the activities and information produced by federally funded projects and programs are accessible to people of color and low-income communities. For example, EPA has taken steps to address the issue of accessibility to those who speak languages other than English, through implementation of Executive Order 13166, which, among other things, requires federal agencies to ensure that recipients of financial assistance provide meaningful access to those with limited English proficiency. Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency (August 11, 2000).

Moreover, federal financial assistance is the mechanism that triggers the requirements of federal civil rights legislation. Title VI of the Civil Rights Act of 1964 requires EPA to ensure that financial assistance recipients serve and protect people equally without regard to race, color, or national origin. As noted in the Introduction, a full discussion of EPA's authority under Title VI is outside the scope of this report; nevertheless, the statute provides an additional source of authority for EPA to ensure that the programs it funds address relevant environmental justice issues.

EPA's general grant-making regulations provide the agency with recourse against government agency recipients of federal funds who fail to comply with the terms of the awards. *See* 40 C.F.R. Part 31. Among the actions available to EPA are withholding payments, disallowing costs, suspending or terminating awards, and withholding future awards. 40 C.F.R. § 31.43. EPA regulations authorize similar sanctions against non-governmental recipients of federal funds. 40 C.F.R. § 30.62. In addition, EPA regulations provide for debarment and suspension of governmental or non-governmental recipients of federal funds. *See* 40 C.F.R. Part 32. Thus, independent of any sanctions

authorized under individual environmental statutes, the enforcement tools provided under EPA regulations can help the agency ensure compliance with terms or conditions relating to environmental justice that are included in its financial assistance awards.

This discussion focuses on statutory authority to provide financial assistance to states and Tribes for delegated programs, as well as financial assistance for research, community participation, and certain local government emergency projects. EPA can use its authority to provide financial assistance for these and other activities as a powerful tool in advancing the goals of environmental justice.

I. FINANCIAL ASSISTANCE TO STATES AND TRIBES FOR DELEGATED PROGRAMS

EPA authorizes states and Tribes to implement programs under a number of federal environmental laws. Along with this delegation of authority, EPA typically makes grants or other forms of payment to carry out the programs. As discussed in Chapter 4, EPA has authority to take environmental justice issues into account when making the initial determination whether to authorize state or tribal programs. EPA also has authority to impose conditions on the funding it provides to carry out those programs. In *Shanty Town Associates Ltd. Partnership v. EPA*, the Fourth Circuit Court of Appeals found that EPA had authority under the Clean Water Act (CWA) to place conditions on a grant for construction of a municipal sewage collection system, where the conditions related to the stated purpose of the grant program. 843 F. 2d 782, 792 (1988). The purpose of the CWA grant program at issue in *Shanty Town* is to encourage the construction of treatment facilities that will carry out the goals of the Act, namely to protect water quality from point and nonpoint sources of pollution. *Id.*; see generally Memorandum from Howard F. Corcoran, U.S. EPA Office of General Counsel, Environmental Justice Law Survey (Feb. 25, 1994).

EPA similarly can seek to advance the broad environmental and public health protection goals of a number of state and tribal grant programs by establishing grant conditions aimed at ensuring that delegated programs will adequately serve and protect communities of color and low-income communities. For example, Section 1452 of the Safe Drinking Water Act (SDWA) directs EPA to offer to enter into agreements with states to provide grants, including letters of credit, to the states to capitalize revolving loan funds to further the health protection objectives of the Act. 42 U.S.C. § 300j-12(a)(1)(A). Public water systems are allowed to use the assistance only for types of expenditures that EPA has determined through guidance will facilitate compliance with applicable national primary drinking water regulations or otherwise significantly further the health protection objectives of the Act. 42 U.S.C. § 300j-12(a)(2). This provision authorizes EPA to exercise substantial discretion in establishing the rules and guidelines states must follow in their loan programs using EPA grants, which EPA could use to promote environmental justice in a variety of ways. See also 33 U.S.C. § 1256(a), (b) (Clean Water Act provision allowing EPA to make grants to the states “to assist them in administering programs for the prevention, reduction, and elimination of pollution”); 42 U.S.C. § 7405(a) (Clean Air Act provision authorizing EPA to make grants to state air pollution control agencies to “implement programs for the prevention and control of air pollution or implementation of [National Ambient Air Quality Standards]”).

A number of environmental statutes provide EPA with authority to establish priorities

relating to environmental justice in awarding state program funding. Some statutes provide very broad discretion in this regard. Section 3011 of the Resource Conservation and Recovery Act (RCRA), which authorizes annual grants to states to help cover the costs of program implementation, establishes the factors for EPA to consider when allocating funds among states. These factors include the extent to which hazardous waste is managed within the state, the extent of human and environmental exposure in the state, and “such other factors as the Administrator deems appropriate.” 42 U.S.C. § 6931. Thus, EPA could give priority in allocating funds to states that address key environmental justice issues and concerns. The Clean Water Act also gives EPA wide latitude in addressing environmental justice issues when making grants for nonpoint source management programs, stating generally that EPA may give “priority to particularly serious nonpoint source pollution problems.” 33 U.S.C. § 1329(h)(5)(A).

The Toxic Substances Control Act (TSCA) is unusual in establishing directly a priority for activities benefitting low-income communities in the award of financial assistance to states. TSCA Subchapter III, which addresses radon exclusively, requires that state radon programs funded under the Act “make every effort . . . to give a preference to low income persons” in activities covered by the grant, including the purchase of radon measurement devices and the payment of costs of radon mitigation demonstration projects. 15 U.S.C. § 2666(c),(i). This provides EPA with a considerable opportunity to ensure that federal funding to reduce risks from a known carcinogen reach those least able to afford to take protective measures on their own.

Other statutes specifically authorize EPA to condition state and tribal program funds on the inclusion of certain program elements related to environmental justice concerns. For example, CWA Section 106 provides that program funding must be withheld from states that fail to create adequate water quality monitoring and reporting procedures. 33 U.S.C. § 1256(e)(1). EPA could define “adequate” monitoring and reporting to incorporate the generation and dissemination of information addressing issues of concern to affected communities.

Similarly, Section 105 of the Clean Air Act (CAA) requires that before EPA approves a planning grant to an air control agency, EPA must receive assurances that the recipient “has the capability of developing a comprehensive air quality plan for the air quality control region, which plan shall include (when appropriate) a recommended system of alerts to avert and reduce the risk of situations in which there may be imminent and serious danger to the public health or welfare from air pollutants and the various aspects relevant to the establishment of air quality standards for such air quality control region, including the concentration of industries, other commercial establishments, populations and naturally occurring factors which shall affect such standards.” 42 U.S.C. § 7405(a)(3). This provision presents EPA with an opportunity to condition grant assistance on the recipient agency’s consideration, when developing its air quality plan, of the extent to which communities of color and low-income communities are overburdened by industrial and commercial facilities, as well as consideration of demographic factors in developing the recommended system of alerts.

Under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), states and Tribes may apply to EPA to carry out certain actions authorized by the Act, including removal and remedial actions, investigations, monitoring, and information gathering. 42 U.S.C. § 9604(d). Prior to approving such actions, EPA must first determine whether the state or Tribe has the capability to carry out related enforcement actions. The statute states generally that

contracts and cooperative agreements relating to such actions are subject to the terms and conditions that EPA prescribes. *Id.* Thus, in determining whether to authorize and provide funding for state actions, EPA has authority to consider whether the state has a record of enforcing its environmental laws consistently among different communities. EPA could also consider whether a state is likely to set cleanup priorities in a manner that takes into account environmental justice concerns.

Finally, TSCA Section 28 authorizes EPA to make grants to states for programs that prevent or eliminate unreasonable health and environmental risks relating to a chemical substance, where EPA is “unable or not likely” to take such action itself. 15 U.S.C. § 2627(a). In considering whether states have demonstrated a “priority need” warranting federal assistance, EPA must consider the seriousness of the health effects, the extent of the exposure, and the extent to which chemicals substances are manufactured, processed, used, and disposed of in the state. 15 U.S.C. § 2627(b)(2). EPA thus can potentially incorporate environmental justice considerations in its evaluation of state grant proposals.

II. FINANCIAL ASSISTANCE FOR RESEARCH ACTIVITIES

The need for focused research activities has been a prominent part of the national dialogue on how EPA and other federal agencies can promote environmental justice. The National Environmental Justice Advisory Council, and a number of federal science and health bodies have contributed to identifying these needs. See, for example, NATIONAL ENVIRONMENTAL JUSTICE ADVISORY COUNCIL, ENVIRONMENTAL JUSTICE AND COMMUNITY BASED HEALTH MODEL DISCUSSION AND RECOMMENDATIONS REPORT (U.S. Environmental Protection Agency, pub., EPA 300-R-01-002, April 2001); INSTITUTE OF MEDICINE, TOWARD ENVIRONMENTAL JUSTICE: RESEARCH, EDUCATION AND HEALTH POLICY NEEDS (1999). EPA has authority to direct its considerable research funding to projects that will advance knowledge of health and environmental impacts on communities of color and low-income communities – knowledge that can strengthen the foundation for taking regulatory actions to improve environmental protection in those communities. EPA can do this by identifying specific projects that can address the most pressing risks to heavily impacted communities, and by ensuring that, where possible, basic research activities incorporate environmental justice considerations. Moreover, EPA can promote environmental justice by addressing the manner in which such research is carried out. Participation of affected communities, both in carrying out research and in providing input to researchers, can be essential in ensuring that a project will address core issues effectively.

Numerous federal environmental statutes give EPA authority to provide financial assistance for research activities. For the most part, these laws contain provisions that afford ample discretion for EPA to shape its research agenda in a way that will further environmental justice goals and to include impacted communities in developing and implementing the research programs.

For example, CAA Section 103(b) authorizes EPA to make grants to public or non-profit private agencies, institutions and organizations, and to individuals, to carry out research activities provided in the Act. 42 U.S.C. § 7403(b). Those activities include “research, investigations, experiments, demonstrations, surveys, and studies relating to the causes, effects (including health and welfare effects), extent, prevention, and control of air pollution.” 42 U.S.C. § 7403(a). *See also*, 7 U.S.C. § 136r(a) (EPA authority under the Federal Insecticide, Fungicide and Rodenticide Act to

provide grants and enter into contracts with federal agencies, universities, or others, “as may be necessary to carry out the purposes” of the Act); 15 U.S.C. § 2609(a) (EPA authority under TSCA to enter into contracts and make grants to conduct research “as is necessary to carry out the purposes of” the Act); 33 U.S.C. § 1255 (EPA authority under the Clean Water Act to make grants for research and development, including grants for demonstration projects).

CERCLA provides authority to award grants and other forms of financial assistance to address issues that have been of particular concern to environment justice communities. CERCLA Section 311(c) authorizes EPA to support research concerning the effects on and risks to health and environment of hazardous substances, as well as the detection of hazardous substances in the environment. 42 U.S.C. 9660(c). In addition, CERCLA Section 311(d) requires EPA to make grants to institutions of higher learning to establish and operate at least five hazardous substance research centers in the United States. 42 U.S.C. 9660(d). The Act further requires that grant recipients be located in an area that has experienced problems with hazardous substance management.

Finally, EPA can use the broad research assistance authority provided under these and other laws to fund community projects that will both advance understanding of environmental justice issues and address critical local problems. Indeed, EPA created the Environmental Justice Grants to Small Community Groups grant program based on general authority provided under several environmental statutes, including the Clean Water Act, 33 U.S.C. § 1254(b)(3); the Clean Air Act, 42 U.S.C. § 7403(b)(3), and the Safe Drinking Water Act, 42 U.S.C. § 300j-1(b)(3). These and other statutory provisions establish the basis for the agency’s Environmental Justice Through Pollution Prevention Grants program as well. EPA can use such general funding authorities to pursue the creation of other community funding programs, as well as to fund specific community environmental justice projects related to the goals of a particular statute.

III. GRANTS FOR COMMUNITY PARTICIPATION

One of the principal impediments to meaningful community participation in regulatory decision-making is the lack of resources. Federal environmental laws authorizing EPA to provide financial assistance for communities to participate in specific regulatory actions and decisions offer an important opportunity for achieving the goal of early and ongoing involvement of communities of color and low-income communities in EPA activities.

CERCLA’s technical assistance grants provide a well-known example. CERCLA Section 117(e) gives EPA authority to make \$50,000 grants available to any group of individuals that may be affected by a release or threatened release at any facility listed on the National Priority List. 42 U.S.C. § 9617(e). The grants may be used to obtain technical assistance in interpreting information with regard to the nature of a hazard, remedial investigation and feasibility study, record of decision, remedial design, selection and construction of remedial action, operation and maintenance, or the removal action at any NPL site. Grants are limited to \$50,000 for a single grant recipient but the limitation can be waived in certain circumstances. *Id.*

The Toxic Substances Control Act also provides authority for EPA to fund community participation in the regulatory process, albeit in the much less common Section 6 rule-making process for restricting the use of certain chemical substances. Under TSCA Section 6(c), EPA may

compensate any “person” for expert witness fees, attorneys’ fees, and other costs of participating, if the person “represents an interest which would substantially contribute to a fair determination of the issues to be resolved in the proceeding” and if they demonstrate that they lack sufficient resources to participate adequately. 15 U.S.C. § 2605(c)(4)(A). Moreover, the Act provides that not more than 25 percent of the total amount paid under this section may be paid to the regulated community or its representatives. 15 U.S.C. § 2605(c)(4)(B). While EPA does not currently make frequent use of rule-making under Section 6, this provision authorizes the agency to address directly a fundamental problem in effective community participation in such proceedings in the future.

In addition, the Clean Air Act provides general authority to fund community groups that could be used to further participation in EPA activities. CAA Section 103(a)(2) requires EPA to “encourage, cooperate with, and render technical services and provide financial assistance to air pollution control agencies and other appropriate public or private agencies, institutions, and organizations, and individuals” in conducting activities for the prevention and control of air pollution. 42 U.S.C. § 7403(a)(2). This section authorizes EPA to provide technical and financial aid to affected community groups and individuals in any activity aimed at preventing and controlling air pollution, including participation in regulatory decision-making. Such assistance could be used by community groups in many different way, including hiring independent technical experts.

IV. FINANCIAL ASSISTANCE FOR LOCAL INFRASTRUCTURE AND EMERGENCY PROJECTS

One of EPA’s largest financial assistance programs falls under the Safe Drinking Water Act, which authorizes financial assistance to state drinking water treatment revolving loan funds; these state funds, in turn, provide assistance to community water systems and non-profit non-community water systems. 42 U.S.C. § 300j-12(a)(1)(B). Public water systems are allowed to use this assistance only for those types of expenditures that EPA has determined will facilitate compliance with applicable national primary drinking water regulations or otherwise significantly further the health protection objectives of the program. EPA thus has a significant opportunity to ensure that local public water systems address environmental justice concerns.

The Safe Drinking Water Act also provides EPA with authority to target financial assistance for drinking water systems to specific communities. SDWA Section 1456 authorizes EPA and other federal agencies to provide grants to the states of Arizona, California, New Mexico, and Texas for assistance to low-income communities known as *colonias*, which are located along the U.S.-Mexico border and lack a safe drinking water supply or adequate facilities for providing safe drinking water. The grants, which may cover up to 50 percent of the costs of carrying out the funded project, are to be used to facilitate compliance with national primary drinking water regulations or otherwise significantly further the health protection objectives of the Act. The grants are also required to be used to provide assistance to such communities where the “residents are subject to a significant health risk . . . attributable to the lack of access to an adequate and affordable drinking water supply.” 42 U.S.C. § 300j-16.

CERCLA authorizes a different type of financial assistance for local government environmental activities. CERCLA Section 123 allows EPA to reimburse local community authorities up to \$25,000 for expenses incurred in carrying out temporary emergency measures

necessary to prevent or mitigate injury to human health or the environment associated with a release or threatened release of a hazardous substance. 42 U.S.C. § 9623. Measures may include security fencing to limit access, response to fires and explosions, and other measures which require immediate response at the local level. This allows EPA to provide a potentially significant resource for addressing threats posed by hazardous substances in affected communities.

Finally, the Toxic Substances Control Act authorizes a form of “in-kind” assistance where a local government has failed to take appropriate action to protect public health. TSCA Section 208 provides EPA with authority to act to protect human health or the environment if the presence of asbestos in a school poses “an imminent and substantial endangerment to human health or the environment, and . . . the local educational agency is not taking sufficient action . . .” 15 U.S.C. § 2648(a). EPA can use this provision to target its resources to address asbestos exposure in low-income communities and other communities that lack resources to adequately maintain school facilities.

CHAPTER 8

PUBLIC PARTICIPATION

Meaningful public involvement in EPA activities is essential to achieving environmental justice goals. Participation by communities of color and by low-income communities helps ensure that core environmental justice issues, such as disproportionate exposure to environmental harms and risks, are raised and ultimately addressed. Indeed, some have suggested that the historic lack of participation by these communities in EPA activities may account, in part, for some of the substantive problems that environmental justice advocates are seeking to remedy. *E.g.*, John C. Duncan, *Multicultural Participation in the Public Hearing Process*, 24 COLUM. J. ENV'TL L. 169 (1999).

All of the major environmental statutes provide discretionary authority and, in many situations, explicitly require EPA to involve the public in some manner when implementing their mandates. The majority of the statutes rely on standard approaches to public involvement in government decision-making that were developed in the 1970s and 1980s. *See, e.g.*, U.S. EPA, Public Participation in Programs Under the Resource Conservation and Recovery Act, the Safe Drinking Water Act, and the Clean Water Act, 40 C.F.R. Part 25. These approaches focus primarily on providing notice and an opportunity to comment on proposed policies and activities, and on convening public meetings and hearings. In recent years, spurred in part by grassroots efforts, advances in information technology and changing political, and cultural values in both the agency and the general public, EPA's approach to involving the public in its activities has shifted to a more participatory approach. These activities are represented in initiatives such as EPA's Stakeholder Involvement Action Plan, the Community-Based Environmental Protection Program Initiative, and the agency's revisions to its long-standing public participation policy, which reaffirms the notice-and-comment approach while also expanding it and updating it to take account of new developments and technologies. *See* Draft Public Involvement Policy, 65 Fed. Reg. 82335 (Dec. 28, 2000).

EPA has considerable legal authority to involve low-income communities and communities of color in agency activities. In some cases, the statutes include specific tools for facilitating public involvement, such as financial assistance programs, citizen petitions, and information clearinghouses. In other cases, the statutory provisions are more generic and simply require notice and the opportunity for comment on certain EPA activities. In all of these cases, EPA has considerable discretion in how it actually implements the provisions. The agency's exercise of this discretion is crucial, because the same requirements can result in considerably different types of public involvement depending on how they are implemented. Proactive efforts by EPA can result in more meaningful public involvement, while perfunctory implementation may yield only superficial participation.

In navigating the complex regulatory processes that often accompany EPA's activities, communities of color and low-income communities not only face the same hurdles as all citizen stakeholders, but they also may face additional challenges due to limited resources, language barriers, and political or cultural differences in the way "participation" is defined in the first place. Both inside and outside of EPA, there have been a number of worthwhile efforts to identify these challenges and propose possible solutions. *See* U.S. EPA, RCRA Expanded Public Participation

Rule, 60 Fed. Reg. 63417 (Dec. 11, 1995); National Environmental Justice Advisory Council, The Model Plan for Public Participation (U.S. Environmental Protection Agency, pub., EPA-300-K-00-001, Feb. 2000) [hereinafter “NEJAC Plan”]; Duncan, 24 COLUM. J. ENV’T L. 169. The approaches being discussed and tried include publishing documents in local languages in addition to English, actively publicizing the availability of financial or technical assistance for community participation, and providing training about how EPA procedures and programs work. Under many of the statutory provisions, EPA already has the authority to take these and other steps to enhance public participation, as discussed below and in the individual chapters of this report.

Above all, EPA has general discretionary authority under most of the statutes to involve affected communities early in the decision-making process. When communities are brought in late in the process, it reduces the likelihood that they can shape the proposals under consideration or fundamentally influence EPA’s or the project proponent’s approach. The need for encouraging early community involvement is intensified by the perception that the regulated community has ample time and resources to influence EPA both early on and throughout the process.

Likewise, EPA has authority to implement the numerous existing notice-and-comment provisions in a more proactive manner. Increasingly, communities are pointing out that the traditional approach of posting notice in newspapers or the Federal Register is inadequate to prompt participation. Providing notice through avenues such as local newsletters and direct mailings to affected communities may be viewed as more effective; further, the use of non-technical, lay language in notices and in substantive background materials can be critical to fostering effective public participation by low-income communities and communities of color. Some statutes actually contain plain-language requirements for certain information that EPA makes available to the public, but even without specific statutory authority EPA can, and often already does, exercise its discretion to use plain language in public materials. And in implementing the many provisions that require documents to be made available to the public, EPA can make such information available in convenient locations and at convenient times, and also make information available on the Internet. Such approaches are incorporated directly into EPA’s Draft Public Involvement Policy, which specifically aims to “improve involvement opportunities for minority, low-income and underserved populations.” 65 Fed. Reg. at 82336; *see id.* at 82338-43. They also are being converted into practical checklists to sensitize agencies to the specific needs of these communities. *E.g.*, NEJAC Plan at 15-18.

In addition, in order to meaningfully involve low-income communities and communities of color in EPA activities, the agency has authority to foster approaches that allow for ongoing substantive participation, such as federal advisory committees, site-specific community advisory boards, and regulatory negotiations. Some of these approaches are provided for under specific statutes, but in other cases EPA could rely on more general provisions to use these mechanisms.

Finally, some of the most powerful public participation tools for low-income communities and communities of color are financial assistance programs. EPA has authority to implement its numerous financial assistance programs in a manner that encourages low-income communities and communities of color to seek funding and participate in EPA activities. For example, the agency can actively publicize these programs and explain them to potential community participants. Such funding programs are covered more fully in Chapter 7.

The remainder of this chapter outlines the principal types of statutory authorities for EPA to promote environmental justice through increased community participation in the regulatory process. While the approaches described above may be broader than specifically required by the statutes, both long-standing EPA practice and judicial interpretation appear to support agency efforts that could foster more meaningful and frequent involvement by low-income communities and communities of color. In all cases, the optimal approach to fostering involvement of affected communities in particular activities can best be determined by working with community residents to determine their needs and preferences.

I. GENERAL PUBLIC PARTICIPATION PROVISIONS

Several environmental statutes include broad policy statements that emphasize the importance of public participation. In some cases, these provisions are declarations that do not confer specific authority. For example, Section 101(e) of the Clean Water Act (CWA) contains broad language favoring public participation in the development, revision, and enforcement of any regulations, standards, effluent limitations, plans or programs established by EPA under the Act, and requires EPA to develop and publish regulations specifying minimum guidelines for public participation in such processes. 33 U.S.C. § 1251(e).

In other cases, these provisions impose specific obligations on EPA. For example, Section 113(k)(2) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) requires the agency to issue regulations establishing procedures for “appropriate participation of interested persons” in developing the administrative records on which EPA bases its selection of removal actions and on which judicial review of removal actions is based. 42 U.S.C. § 9613(k)(2). Similarly, CERCLA Section 113(k)(3) requires EPA to create procedures for participation of interested persons in developing the administrative records for the selection of remedial actions. The procedures must include, at a minimum: (1) notice to potentially affected persons, accompanied by a brief analysis of the plan and alternative plans that were considered; (2) a reasonable opportunity to comment and provide information regarding the plan; (3) an opportunity for a public meeting in the affected area; (4) a response to each of the significant comments, criticisms and new data submitted in written or oral presentations; and (5) a statement of the basis and purpose of the selected action. 42 U.S.C. § 9613(k)(3). The pesticide laws likewise contain broad public participation provisions. Section 21(c) of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) provides that in connection with the suspension or cancellation of a pesticide registration or any other actions authorized by the Act, EPA has discretion to solicit the views of “all interested persons” either orally or in writing. 7 U.S.C. § 136s(c).

As discussed earlier in Chapters 1 and 2, EPA has substantial discretion to interpret and implement such broad grants of statutory authority. Given consistently favorable policy statements throughout the agency’s statutes about the importance of public participation, the numerous provisions requiring participation at key points in the decision-making process, and long-standing agency practice, most types of agency initiative to expand public participation fall well within this discretionary authority. This likely would include most existing or proposed efforts to tailor participatory processes to the specific needs of communities of color and low-income communities.

II. NOTICE-AND-COMMENT PROCEDURES

The most common public participation provisions in EPA's environmental statutes are those that require notice to the public of proposed EPA actions and an opportunity for the public to submit comments on the proposed actions. The statutes often specifically provide an opportunity for a hearing in connection with notice-and-comment procedures. It should be noted that even when a statute does not specifically require notice-and-comment procedures, such procedures may be required under the Administrative Procedure Act (APA) if the EPA action constitutes an "informal rule-making" within the meaning of that statute. 5 U.S.C. § 553. EPA also has promulgated agency-wide public participation regulations that codify the requirements of both the APA and media-specific environmental statutes. *See* 40 C.F.R. Part 25 (RCRA, Clean Water Act, and Safe Drinking Water Act); 40 C.F.R. Part 124 (RCRA, SDWA UIC, CAA PSD and CWA NPDES permitting programs).

Because notice-and-comment requirements typically are quite general even where the statutes establish specific guidance, they provide considerable discretion to EPA in implementing them. If EPA merely follows the letter of the statutes and regulations, it is less likely that communities of color and low-income communities will participate. However, if EPA takes the initiative to notify affected communities of the opportunity to comment, uses non-technical language in its notices, arranges for convenient hearing locations and times, and generally makes the comment process understandable and accessible, it can facilitate more community involvement. Such measures are reflected in the agency's Draft Public Involvement Policy, which would allow the agency to:

- (a) increase efforts to identify groups or individuals interested in or affected by an issue and who represent a balance of views;
- (b) provide notices and outreach materials in 'plain English,' and in other languages when appropriate;
- (c) listen to, seek to understand, and involve stakeholders in issues of critical importance to them;
- (d) select the most appropriate level of effort and mechanisms for public involvement in any specific circumstance;
- (e) incorporate Environmental Justice (EJ) considerations;
- (f) inform and involve the public earlier; and
- (g) evaluate EPA public involvement policies and practices.

65 Fed. Reg. at 82335. Further, EPA in some cases already is using its discretion to involve low-income communities and communities of color in discussing proposals prior to initiating formal notice-and-comment procedures. RCRA Expanded Public Participation Rule, 60 Fed. Reg. 63417.

Most statutes authorize EPA to develop specific programs through regulations and, in doing so, to seek comment from the public. For example, Clean Water Act Section 304 requires EPA to promulgate detailed guidelines for the agency's adoption or revision of effluent limitations and to specify the factors that it will use in determining technology standards. These guidelines must be reviewed annually with public comment. 33 U.S.C. § 1314(m). Similarly, the Toxic Substances Control Act (TSCA) requires formal rule-making, including notice-and-comment requirements, for most actions authorized under the Act. For example, TSCA Section 4(b)(5) requires that test rules be issued in conformity with the Administrative Procedure Act, and specifies that EPA must provide an opportunity for interested persons to make written and oral presentations of information. 15 U.S.C. § 2603(b)(5). TSCA also requires notice and comment for rule-making activities under Section 6 of the Act that impose restrictions on chemical substances. 15 U.S.C. § 2605(c)(2)(C). In

place of formal hearing procedures under the APA, TSCA in such cases requires informal hearings and provides guidelines for conducting them. *Id.*

The National Environmental Policy Act (NEPA) environmental impact statement (EIS) process creates important opportunities for public participation. As discussed Chapter 10 of this report, the Council on Environmental Quality's (CEQ) NEPA regulations require each federal agency to make "diligent efforts" to include the public in EIS procedures, including notice, hearings, and provision and solicitation of information, 40 C.F.R. § 1506.6, and the CEQ has produced specific guidance for increasing participation by low-income communities and communities of color. Council on Environmental Quality, *Environmental Justice: Guidance under the National Environmental Policy Act* (Dec. 10, 1997). EPA likewise has acknowledged the importance of addressing environmental justice issues both in the substance of an EIS and in the public procedures that produce it. U.S. EPA Office of Federal Activities, *Final Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analyses* (April 1998). The agency has set the goal of having procedures that encourage active community participation, recognize community knowledge, and utilize cultural formats and exchanges. *Id.* at 4.2

Notice-and-comment procedures also are used for agency decisions in specific cases, such as permit decisions and other fact-specific situations. For example, under the CWA permitting programs, EPA is required to give an opportunity for public hearings before issuing permits for the discharge of any pollutant or for dredge-and-fill activity. 33 U.S.C. § 1342(a)(1); 33 U.S.C. § 1344(a). Similarly, FIFRA requires EPA to publish a notice of each application for registration of a pesticide, and must provide a thirty-day period for interested persons to comment. 7 U.S.C. § 136a(c)(4). The Clean Air Act (CAA) regulations also require that permit proceedings and renewals must provide adequate procedures for public notice, including opportunity for public comments and hearings on draft permits. 40 C.F.R. § 70.7(h). CERCLA Section 117(a) requires fairly extensive public notice and comment during the process of selecting remedial actions for the cleanup of Superfund sites. 42 U.S.C. § 9617(a). The Safe Drinking Water Act (SDWA) requires notice and an opportunity for a public hearing before the grant of any exemption to a public water supply system from any maximum contaminant level or treatment technique. 42 U.S.C. § 300g-5(f). TSCA Section 4(b)(5) requires that EPA must provide an opportunity for interested persons to make written and oral presentations of information on test rules, and related regulations require that prior to making a determination of the need for testing, EPA will hold a public "focus meeting" to discuss and obtain comments on the testing recommendation of the inter-agency testing committee. 15 U.S.C. § 2603(b)(5), 40 C.F.R. § 790.22(a).

Finally, notice-and-comment procedures also are used in settlements of enforcement actions. For example, CAA Section 113(g) requires that at least 30 days before a consent order or settlement agreement is final or filed in court, EPA must provide a "reasonable opportunity" by notice to persons who are not parties or interveners in the action to comment in writing. 42 U.S.C. § 7413(g). EPA is required to consider promptly any written comments, and may withdraw or withhold its consent to the proposed order or agreement if the comments disclose facts or considerations that indicate that consent is inappropriate, improper, inadequate or inconsistent with CAA requirements. *Id.* CERCLA contains similar provisions that require notice and comment prior to finalizing *de minimis* settlements and settlements of administrative orders for recovery of costs incurred by the government. 42 U.S.C. § 9622(i). As discussed more fully in Chapter 5, settlement discussions provide EPA with a great deal of flexibility to fashion remedies that are geared to a specific site and

nearby communities. By expanding the public proceedings associated with settlements, the agency can ensure that these communities' needs are expressed and reflected in the final order or agreement.

Some statutes provide very detailed direction as to the form of notice required and the type of accompanying documents. For example, CERCLA Section 117(a) states that the notice and brief analysis required for a proposed remedial action plan must include sufficient information to provide a reasonable explanation of the proposed plan and alternative proposals considered. 42 U.S.C. § 9617(a). CERCLA Section 117(b) requires that notice of a final remedial action plan must be published and the plan made available, and that the plan must be accompanied by a discussion of any significant changes and the reasons for such changes, including a response to each of the significant comments, criticisms, and new data submitted in written or oral presentations. 42 U.S.C. § 9617(b). Section 117(d) of CERCLA explains that "publication" includes, at minimum, publication in a major local newspaper of general circulation. 42 U.S.C. § 9617(d). The Safe Drinking Water Act likewise includes more detailed direction, requiring EPA when setting drinking water standards to present public health effects information to the public in a manner that is "comprehensive, informative, and understandable." 42 U.S.C. § 300g-1(b)(3)(B). Each of these provisions creates an opportunity for EPA to tailor documents and procedures to maximize community participation.

III. CITIZEN ADVISORY GROUPS AND PARTICIPATORY MECHANISMS

Several statutes establish mechanisms for involving the public in a more direct manner than standard notice-and-comment procedures. For example, the SDWA establishes a National Drinking Water Advisory Council, which includes members of the public who advise EPA about issues related to the agency's activities, functions, and policies under the Act. 42 U.S.C. § 300j-5. Clean Air Act Section 117(b) requires that EPA, "to the maximum extent practicable . . . consult with appropriate advisory committees, independent experts," and others prior to issuing air quality criteria, hazardous air pollutant lists, standards, or regulations. 42 U.S.C. § 7417(b). Section 117(a) states that members of these EPA advisory committees "shall include, but not be limited to, persons who are knowledgeable concerning air quality from the standpoint of health, welfare, economics or technology." 42 U.S.C. § 7416(a). The Act also requires each state implementation plan to contain requirements that any board or body that approves permits or enforcement orders must have at least a majority of members who represent the public interest. 42 U.S.C. § 7428(a)(1).

Such advisory committee mechanisms have the potential to lead to more meaningful and direct involvement of low-income communities and communities of color in EPA activities. Again, the agency's approach to implementing these mechanisms is crucial. EPA can use its discretion to actively recruit advisory committee members who are representative of these communities or well-versed in their concerns, assist them in participating and understanding agency processes, and make efforts to ensure that barriers to participation are reduced. The agency already has taken steps in this direction. For example, in response to a request from the EPA Region 2 office, the agency's Community Outreach and Involvement Office created a Spanish-language version of its "Superfund Community Advisory Group" toolkit, which is intended to give Spanish-speaking communities in Puerto Rico and throughout the United States a greater opportunity to participate in citizen advisory groups under CERCLA. *See* U.S. EPA, 1998 Environmental Justice Biennial Report: Working Towards Collaborative Problem-Solving (June 1999) at 2.7.

IV. CITIZEN PETITIONS

Several statutes provide authority for citizens to petition EPA to take specific action. These provisions potentially are powerful mechanisms for involving low-income communities and communities of color in policing facilities in their area and in other EPA activities. Moreover, the statutes do not appear to preclude EPA from actively publicizing the availability of these tools and assisting communities in how to use them.

For example, Section 313(e) of the Emergency Planning and Community Right-to-Know Act (EPCRA) provides that any person may petition EPA to add or delete a chemical from the list of toxic chemicals subject to the Act's release reporting requirements. 42 U.S.C. § 11023(e). Section 408(d) of the Federal Food and Drug Control Act (FFDCA) provides that any person may file with EPA a petition proposing the issuance of a regulation that establishes, modifies, or revokes a pesticide tolerance or an exemption, or to file objections to the issuance of a regulation or order concerning pesticide tolerances or exemptions. 21 U.S.C. § 346a(d)(1); 21 U.S.C. § 346a(g)(2)(B). EPA, on its own initiative or upon request of an interested person, after due notice, must hold a public evidentiary hearing and receive factual evidence relevant to material issues of fact raised by the objections. 21 U.S.C. § 346a(g)(2)(B).

Similarly, CERCLA Section 105(d) provides that any person who is affected by an actual or threatened release of a hazardous substance may petition EPA for a preliminary assessment of the hazard to public health and environment. The agency is required to perform the assessment within twelve months or explain why such an assessment would not be appropriate. 42 U.S.C. § 9605(d). TSCA Section 21 establishes a mechanism through which citizens may petition EPA to issue, amend, or repeal a rule or to take a number of different types of regulatory actions relating to chemical substances. 15 U.S.C. § 2620(b)(1). EPA may then hold a public hearing upon receipt of a petition. A TSCA Section 21 petition filed by community groups in the U.S.-Mexico border region led EPA in 1994 to issue subpoenas to U.S. companies for information concerning toxic chemical releases to the New River.

V. INFORMATION AVAILABILITY, CLEARINGHOUSES, AND DATABASES

Accurate, timely generation and disclosure of information is essential for meaningful public participation. A community's ability to engage in decision-making procedures depends directly on the quality of information available to it. EPA has considerable authority to require information from pollution sources, to disclose it to the public upon request, and to proactively interpret, disseminate, and translate it into forms that will be most accessible to affected communities.

The Freedom of Information Act (FOIA) is the primary federal statute governing agency information disclosure. 5 U.S.C. § 552. FOIA generally establishes categories of information that must be disclosed and exemptions for information that can be shielded from disclosure. EPA's FOIA regulations create general procedures to allow the agency to deal with the widest possible range of information requests. 40 C.F.R. Part 2. Beyond these, it may be possible for EPA to create special, accelerated procedures to assist in information disclosure where environmental justice concerns are implicated. These mechanisms could include, for example, more rapid processing of requests for information, automatic provision of new reports and data to previously identified community leaders, or other procedures that allow local residents the opportunity to learn of new developments promptly enough to absorb the information and make use of it in advancing community viewpoints.

Similarly, the National Environmental Policy Act provides that federal agencies must "make available to States, counties, municipalities, institutions, and individuals, advice and information useful in restoring, maintaining, and enhancing the quality of the environment." 42 U.S.C. § 102(2)(G). As the administering agency for most of the major federal environmental laws, EPA has numerous opportunities to gather and disseminate environmental information to the public, both within the context of environmental impact assessment and outside of it. This NEPA mandate provides additional support for the agency's authority to supply information in order to enhance the ability of low-income communities and communities of color to identify and address environmental and health risks.

Another statute directly administered by EPA, the Emergency Planning and Community Right-to-Know Act, is fundamentally a mechanism for providing to the public information about toxic chemical releases from specific facilities. Data produced by facility reporting on chemical releases and chemical inventories have been a powerful tool enabling community activities to address chemical risks ever since the Act's passage in 1986. As discussed in detail in Chapter 17, EPA has significant authority to set reporting requirements and to ensure that the information is made available to the public, including to low-income communities and communities of color. *E.g.*, 42 U.S.C. § 11023; 42 U.S.C. § 11002(a).

In addition to FOIA, NEPA, and EPCRA, most of the pollution control statutes EPA administers contain specific provisions that require the agency to make certain information or data available to the public. Typical of these provisions is Section 3(c) of FIFRA, which requires EPA, within thirty days after registration of a pesticide, to make available to the public the data given in the registration statement, along with any other scientific information EPA deems relevant to its decision whether to approve the registration. 7 U.S.C. § 136a(c)(2)(A). Similarly, CAA Section 114(c) requires EPA to make "any records, reports, or information" pertaining to compliance certifications

and monitoring data available to the public except where there is a showing that the information at issue is entitled to protection as a trade secret. 42 U.S.C. § 114(c). CWA Section 308(b) requires the agency to disclose effluent data. 33 U.S.C. § 1318(b).

Similarly, CERCLA Section 113(k)(1) requires EPA to make the administrative record for the selection of Superfund response actions available to the public at or near the Superfund facility, and the agency may also place duplicates of the records at any location. 42 U.S.C. § 9613(k)(1). CERCLA Section 117(a) requires that transcripts of all public meetings must be kept and made available to the public. In addition, each item received, developed, published or made available to the public must be made available for public inspection and copying at or near the facility, 42 U.S.C. § 9617(a), and CERCLA Section 117(b) requires that all final remedial action plans must be made available to the public before remedial actions are commenced. 42 U.S.C. § 9617(b).

When EPA adopts regulations for contaminants in public water systems, the agency is required under SDWA Section 1412(b)(3)(B) to present information on public health effects in a manner that is “comprehensive, informative, and understandable.” 42 U.S.C. § 300g-1(b)(3)(B). The statute sets out requirements for health effects information that must be included in the documents that EPA makes available to the public in support of the rule-making. The Clean Air Act also provides direct authority for EPA to help make regulatory information more understandable and useful to affected communities. CAA Section 103(a)(2) requires EPA to “encourage, cooperate with, and *render technical services* and provide financial assistance to air pollution control agencies and other appropriate public or private agencies, institutions, and organizations, and individuals” in carrying out activities to protect air quality. 42 U.S.C. § 7403(a)(2)(emphasis added). EPA therefore has authority to provide technical assistance to communities to facilitate their involvement in the regulatory process and support local projects to improve air quality.

In some cases, the duty to make information available to the public is imposed on the regulated community, and EPA is authorized to enforce this duty. CAA Section 129(c) requires solid waste incineration units to perform emissions monitoring and to make their monitoring results available for inspection and copying by interested members of the public. 42 U.S.C. § 7429(c). Section 1414(c)(4)(A) of the SDWA requires community water systems to mail to each customer at least annually a consumer confidence report on the level of contaminants in the system’s drinking water. 42 U.S.C. § 300g-3(c)(4)(A). Similarly, public water systems are required to provide notice of any failures to comply with national primary drinking water regulations, and the frequency, form, and content of these notices also is established by EPA. 42 U.S.C. § 300g-3(c)(1). The agency can use such authorities to ensure that the materials are easy to understand, multilingual where necessary, and include information on issues faced by low-income communities and communities of color, such as pollutants to which they may be particularly vulnerable.

Several of the statutes require EPA to develop databases and clearinghouses that can provide information to the public and help foster their involvement in EPA activities. EPCRA’s Section 313(j) requirement that EPA establish and maintain reported toxic chemical releases in a computer database is central to the Act’s information dissemination objectives. 42 U.S.C. § 11023(j). Section 405(e) of TSCA requires EPA to establish a National Clearinghouse on Childhood Lead Poisoning, which in addition to performing information-dissemination functions specified in the Act, is required to “perform any other duty that the Administrator determines necessary to achieve the purposes of this Act.” 15 U.S.C. § 2685(e)(1). CAA Section 108(h) requires EPA to make information regarding

emissions control technology available to the general public through a central database, including information derived from operating permits for existing sources. 42 U.S.C. § 7408(h). EPA can evaluate on an ongoing basis the extent to which these tools could be made more useful to low-income communities and communities of color.

VI. PUBLIC EDUCATION

Several statutes require that EPA undertake activities to increase public awareness of environmental and health issues addressed in the law, and EPA can ensure that these activities address the needs of impacted communities. For example, Clean Air Act Section 127(a) requires that each state implementation plan contain provisions to enhance public awareness of the measures that can be taken to prevent air quality standards from being exceeded and of the ways in which the public can participate in regulatory and other efforts to improve air quality. 42 U.S.C. § 127(a). TSCA Subchapter IV, which addresses lead hazard reduction, contains a number of important provisions. Section 405(d) requires EPA to sponsor public education and outreach activities to increase community awareness of potential exposures to lead, health impacts from exposure, and measures to reduce the risk of exposure, 15 U.S.C. § 2685(d)(1); while Section 406 requires the agency to publish, and periodically to revise, a lead hazard information pamphlet. 15 U.S.C. § 2686(a). The FFDCA directs EPA to publish and provide to large retail grocers for public display certain pesticide-related information in a format understandable to lay people. 21 U.S.C. § 346a(o).

VII. PUBLIC PARTICIPATION RELATED TO STATE PROGRAMS

As discussed in Chapter 4 of this report, EPA has some discretion to consider environmental justice issues when determining whether to delegate program authority to a state, including whether the state has sufficient public participation requirements in place that could involve traditionally disenfranchised communities.

For example, under the CAA Title V operating permit program, EPA sets minimum requirements for any permit program administered by a delegated state or local control agency. These requirements include public participation and information sharing. 40 C.F.R. § 70.4(b). CAA Section 110(a) requires each implementation plan submitted by a state to be adopted by the state after reasonable notice and a public hearing. 42 U.S.C. § 110(a)(2)(B). In addition, prior to redesignation of any “prevention of significant deterioration” areas in a state implementation plan, Section 164(b) states that notice shall be given and a public hearing conducted in the areas proposed to be redesignated and areas that may be affected by the proposed redesignation. 42 U.S.C. § 7474(b)(1)(A). Prior to the public hearing, a description and analysis of the health, environmental, economic, social and energy effects of the proposed redesignation must be prepared and made available for public inspection. *Id.* Similarly under the Clean Water Act, state programs must provide for public participation in their National Pollutant Discharge Elimination System permitting programs, including citizen intervention in enforcement actions and state agency response to citizen complaints. 40 C.F.R. §§ 123.30, 123.27 (d). EPA could consider the effectiveness of these procedures in achieving community participation, when granting or reviewing its delegation of program authority to a state.

CHAPTER 9

NATIONAL ENVIRONMENTAL POLICY ACT (“NEPA”)

42 U.S.C. §§ 4321-4347, NEPA §§ 2-209

42 U.S.C. § 7609, Clean Air Act § 309

Enacted in 1969, the National Environmental Policy Act (NEPA) is “our basic national charter for protection of the environment.” 40 C.F.R. § 1500.1. The Act sets forth a national environmental policy that is sweeping in scope, yet based on the achievement of clear objectives. To implement this policy, NEPA establishes the environmental impact statement procedure and a number of other administrative mechanisms.

NEPA creates opportunities for federal agencies to incorporate considerations of environmental justice into a vast range of their decision-making processes. NEPA authorizes agencies to analyze a very broad range of impacts on communities of color and low-income communities that are likely to result from proposed agency actions. The statute also allows federal agencies to ensure the meaningful involvement of affected communities, as well as state, local, and tribal governments, in agency decisions.

This chapter provides an overview of NEPA, and then describes the principal ways in which EPA could advance environmental justice goals using three areas of NEPA authority. First, EPA, like other federal agencies, can incorporate environmental justice into its decision-making under NEPA’s process for examining significant environmental impacts. Second, EPA has a special duty under Section 309 of the Clean Air Act to review the environmental impact statements of other agencies and, in certain circumstances, to refer unsatisfactory matters to the White House Council on Environmental Quality (CEQ). Through this power, EPA can ensure that other federal agencies have addressed environmental justice concerns in their decision-making processes. Third, EPA has authority to advance environmental justice in a wide variety of contexts pursuant to NEPA’s other, less well-known administrative mechanisms.

I. OVERVIEW OF NEPA

A. Statement of the National Environmental Policy

NEPA’s purposes, as set forth in **Section 2**, are “[t]o declare a national policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; to enrich the understanding of the ecological systems and natural resources important to the Nation; and to establish a Council on Environmental Quality.” 42 U.S.C. § 4321.

Section 101 directs the federal government “to use all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare, to create and maintain conditions under which man and nature can exist in productive

harmony, and *fulfill the social, economic, and other requirements* of present and future generations of Americans.” 42 U.S.C. § 4331(a) (emphasis added). According to **Section 101(b)**, “it is the continuing responsibility of the Federal Government to use all practical means . . . to improve and coordinate Federal plans, functions, programs, and resources” so that the nation may accomplish six specific goals:

- to “fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;”
- to “*assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings;*”
- to “attain the widest range of beneficial uses of the environment *without degradation, risk to health or safety, or other undesirable and unintended consequences;*”
- to “preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports *diversity and variety of individual choice;*”
- to “achieve a balance between population and resource use which will permit high standards of living and a *wide sharing of life's amenities;*” and
- to “enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.”

42 U.S.C. § 4331(b) (emphases added). Moreover, **Section 101(c)** confirms the right of each person to enjoy a healthful environment, as well as the responsibility of each person to contribute to the preservation and enhancement of the environment. 42 U.S.C. § 4331(c).

The national environmental policy articulated by NEPA, with its call for the government to fulfill the “social, economic, and other requirements” of present and future generations, speaks broadly to the goals of environmental justice. NEPA seeks to assure for “all Americans” a healthful environment, as well as aesthetically and culturally pleasing surroundings and a wide sharing of life’s amenities. These goals mean that having certain communities suffer disproportionate exposure to harmful environmental impacts is contrary to the national policy. NEPA requires the environment to be used “without risk to health or safety, or other undesirable consequences.” NEPA commands that the environment be maintained to support “diversity and a variety of individual choice.” Residents of communities of color and low-income communities may use their environment in certain ways, such as for subsistence hunting and fishing, that differ from the uses of other communities. NEPA seeks to protect and preserve these uses.

NEPA’s importance to the promotion of environmental justice was highlighted earlier this year by the EPA Administrator in an agency-wide memorandum issued to reaffirm the agency’s commitment to environmental justice. The Administrator noted that “[i]n the National Environmental Policy Act of 1969 (NEPA), Congress could not have been any clearer when it stated that it shall be the continuing responsibility of the Federal government to assure for all Americans ‘safe, healthful, productive and aesthetically and culturally pleasing surroundings.’” Memorandum from Christine Todd Whitman, Administrator, U.S. EPA, EPA’s Commitment to Environmental Justice (Aug. 9, 2001).

B. Implementation of the National Environmental Policy

1. The Environmental Impact Statement (EIS) Process

NEPA **Section 102(2)** directs all federal government agencies to perform a number of specific tasks. Of special significance is **Section 102(2)(C)**, which requires each federal agency to include in recommendations and reports on “proposals for legislation and other major Federal actions significantly affecting the quality of the human environment” a “detailed statement” covering the following: the environmental impact of the proposed action; any adverse environmental effects which cannot be avoided should the proposal be implemented; alternatives to the proposed action; the relationship between local short-term uses of the environment and the maintenance and enhancement of long-term productivity; and any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented. 42 U.S.C. § 4332(2)(C). This “detailed statement” has come to be known as an environmental impact statement, or EIS. 40 C.F.R. § 1508.11.

NEPA established the Council on Environmental Quality to carry out a variety of functions under the statute, including oversight of federal compliance with the Act. 42 U.S.C. §§ 4321-4347. In particular, CEQ has promulgated regulations that implement Section 102(2) of NEPA. See 40 C.F.R. Parts 1500-1508. These regulations are binding on federal agencies, including EPA. The CEQ regulations require federal agencies to adopt their own NEPA procedures. 40 C.F.R. § 1507.3. EPA’s regulations are located at 40 C.F.R. Part 6.

The Council on Environmental Quality oversees not only the federal government’s compliance with NEPA, but also federal agencies’ compliance with Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,” issued on February 11, 1994. As such, CEQ has issued a guidance document to assist federal agencies with their NEPA procedures to ensure that environmental justice concerns are both identified and addressed. See Council on Environmental Quality, *Environmental Justice: Guidance under the National Environmental Policy Act* (Dec. 10, 1997) [hereinafter “CEQ EJ Guidance”], available at <http://ceq.eh.doe.gov/nepa/regs/ej/ej.pdf> (last visited Nov. 13, 2001). In its guidance document, the CEQ suggests that federal agencies consider six principles as they incorporate environmental justice into the NEPA process.

- (1) Agencies should consider the composition of the area affected by the proposed action to ascertain whether low-income populations, people of color, or Tribes are present. If so, the agency should determine whether the action might result in disproportionately high and adverse human health or environmental effects on these populations.
- (2) Agencies should consider relevant public health and industry data concerning the potential for multiple exposures or cumulative exposure to human health or environmental hazards in the affected population, as well as historical patterns of exposure to environmental hazards, to the extent that such information is reasonably available.
- (3) Agencies should recognize “the interrelated cultural, social, occupational, historical, or economic factors that may amplify the natural and physical environmental effects of the proposed action.” These factors should include the physical sensitivity of the community or

population to particular impacts, the effect of any disruption of the community structure associated with the proposed action, and the nature and degree of the impact on the community's physical and social structure.

- (4) Agencies should develop effective public participation strategies.
- (5) Agencies should assure meaningful community representation in the process, beginning at the earliest possible time, while remaining aware of diverse constituencies within any community.
- (6) Agencies should seek tribal representation in the process.

CEQ EJ Guidance at 9. EPA has issued its own guidance document to assist the agency in incorporating environmental justice goals into the preparation of EISs and Environmental Assessments (EAs) under NEPA. See U.S. EPA Office of Federal Activities, Final Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analyses (April 1998) [hereinafter "EPA EJ Guidance"], available at <http://es.epa.gov/oeca/ofa/ejpa.html> (last visited Nov. 9, 2001).

Some administrative tribunals recently have incorporated environmental justice concerns into their review of agency actions under NEPA. In *In re Louisiana Energy Services*, 47 N.R.C. 77 (1998), for example, the Nuclear Regulatory Commission reversed in part and affirmed in part a determination by the Atomic Safety and Licensing Board that an EIS for a uranium enrichment facility failed to adequately consider disproportionate socio-economic impacts on affected low-income communities of color. In particular, the Commissioners noted the absence of discussion in the EIS of how pedestrian traffic would be impacted by the closing of an important local road connecting two African-American communities. The road represented a "vital and frequently used pedestrian link" between the two communities for many residents who had "no choice but to travel by foot." *Id.* See also *Southern Utah Wilderness Alliance*, 150 I.B.L.A. 158 (1999) (remanding Bureau of Land Management decision for failure to consider in an Environmental Assessment certain harm to natural and cultural resources resulting from construction of a visitor station).

EPA's statutory and regulatory authorities for addressing environmental justice concerns as a federal agency subject to the EIS process are described in detail in Part II, below. That Part also discusses the approach taken by the CEQ and EPA guidance documents for incorporating environmental justice into the EIS process.

2 Other Provisions in NEPA Section 102

Although most commentary and analysis of NEPA focuses on its EIS process, Section 102 contains a number of other directives to federal agencies in connection with the implementation of the nation's environmental policy. For example, **Section 102(1)** provides that "to the fullest extent possible" the "policies, regulations, and public laws of the United States shall be interpreted and administered in accordance with the policies set forth in [NEPA]." 42 U.S.C. § 4332(1). Additional

potential for EPA to promote environmental justice pursuant this and other provisions of NEPA Section 102 is discussed in Part IV, below.

3 Clean Air Act Section 309

Under **Section 309** of the Clean Air Act (CAA), EPA must review and comment publicly on the EISs of other federal agencies. 42 U.S.C. § 7609(a). Additionally, upon determining that the proposed activity of another federal agency is “unsatisfactory from the standpoint of public health or welfare or environmental quality,” the EPA Administrator is directed to publish this determination and refer the matter to CEQ. 42 U.S.C. § 7609(b). The memorandum accompanying Executive Order 12898 charged EPA with ensuring that each federal agency whose proposed action is under review has “fully analyzed environmental effects on minority communities and low income communities, including human health, social, and economic effects.” Memorandum for the Heads of All Departments and Agencies, accompanying Exec. Ord. 12898 (Feb. 11, 1994). Opportunities for EPA to promote environmental justice under its Section 309 authority are discussed in Part III, below.

II. OPPORTUNITIES FOR EPA TO PROMOTE ENVIRONMENTAL JUSTICE AS A FEDERAL AGENCY SUBJECT TO THE EIS PROCESS

The authority of EPA to promote environmental justice pursuant to NEPA has been discussed most often in the context of the administrative procedure established by Section 102(2)(C). **Section 102(2)(C)** directs each federal agency to include in recommendations and reports on “proposals for legislation and other major Federal actions significantly affecting the quality of the human environment” a “detailed statement” addressing the environmental impacts of the activity and alternatives to it. 42 U.S.C. § 4332(2)(C).

Although EPA is subject to EIS requirements, as a practical matter, EPA files very few EISs. For example, EPA filed seven total EISs in 1998, and only one each year in 1999 and 2000. See U.S. EPA Office of Enforcement and Compliance Assurance, Number of Environmental Impact Statements Filed by Selected Agencies for the Years 2000, 1999, and 1998, at <http://es.epa.gov/oeca/ofa/act2.html> (last modified Sept. 17, 2001). This results, in part, from the fact that Congress specifically exempts EPA from preparing EISs in certain instances. See, e.g., 33 U.S.C. § 1371(c) (exempting, pursuant to certain exceptions, EPA activities under the Clean Water Act from NEPA EIS requirements).

The small number of EPA EISs also results, however, from application of the judicially created “functional equivalence” doctrine. Under this doctrine, EPA is excused from complying with NEPA “in performing its environmental protection functions under ‘organic legislation [that] mandates specific procedures for considering the environment that are functional equivalents of the impact statement process.’” *Western Nebraska Resources Council v. EPA*, 943 F.2d 867, 871 (8th Cir. 1991). In other words, the procedures EPA must employ and the analysis it must undertake pursuant to the organic legislation are interpreted as addressing the “core” NEPA concerns. *Id.* at 872. As a result of the functional equivalence doctrine, EPA typically need not prepare NEPA documentation in connection with permitting or decision-making processes carried out under statutes such as the Resource Conservation and Recovery Act, the Clean Air Act, or the Federal Insecticide, Fungicide,

and Rodenticide Act. *See* THE NEPA LITIGATION GUIDE 152-53 (Karin P. Sheldon & Mark Squillace, eds., 1999).

EPA possesses the authority, under the clear language of both NEPA and the CEQ regulations, to subject to the rigors of NEPA analysis decision-making processes that currently are excused from NEPA review by the functional equivalence doctrine. EPA can promote environmental justice by increasing voluntary NEPA reviews, to ensure that more decisions benefit from a rigorous review from an environmental justice perspective. *See* NATIONAL ENVIRONMENTAL JUSTICE ADVISORY COUNCIL, ENVIRONMENTAL JUSTICE IN THE PERMITTING PROCESS I-293-297 (U.S. Environmental Protection Agency, pub. EPA 300-R-00-004, July 2000). There is existing agency guidance for subjecting decisions to NEPA voluntarily. *See* U.S. EPA Office of Federal Activities, Notice of Policies and Procedures for Voluntary Preparation of National Environmental Policy Act (NEPA) Documents (1998).

Following is a brief discussion of EPA's authority to promote environmental justice concerns in connection with various phases of the EIS process. Generally, these phases include (1) deciding whether or not a proposed action requires the preparation of an environmental impact statement; (2) conducting a scoping process; (3) preparing the draft environmental impact statement; (4) allowing for public comment; and (5) preparing a final environmental impact statement and issuing a decision. Because public involvement is not just critical to the success of the NEPA administrative process, but absolutely essential in an environmental justice context, a discussion of public involvement begins the analysis. Throughout this Part, a discussion of the relevant sections of the statute and regulations is followed by a brief description of CEQ and EPA guidance on incorporating environmental justice considerations in the EIS process.

A. Public Involvement

Meaningful public participation, while not itself an individual step in the NEPA administrative process, is important to the successful implementation of every step in the process. The CEQ regulations require every federal agency to make diligent efforts to involve the public in preparing and implementing their NEPA procedures. 40 C.F.R. § 1506.6(a). To this end, an agency must take the following steps: (1) provide public notice of NEPA-related hearings, public meetings, and the availability of environmental documents; (2) hold or sponsor public hearings or public meetings whenever appropriate or in accordance with statutory requirements – one criterion in this regard is the existence of substantial environmental controversy concerning the proposed action or substantial interest in holding the hearing; (3) solicit appropriate information from the public; (4) explain in its procedures where interested persons can obtain information or status reports; and (5) make materials available to the public pursuant to the Freedom of Information Act, without charge to the extent practicable (or at cost). 40 C.F.R. § 1506.6. EPA's own regulations also recognize the importance of public involvement in NEPA. 40 C.F.R. § 6.400.

Thus, EPA possesses ample authority under NEPA and its implementing regulations, as well as the agency's own regulations, to involve affected communities throughout the NEPA process in a meaningful manner. In its environmental justice guidance, EPA affirms public participation as one of the hallmarks of NEPA. The guidance notes that public interaction, if it is to establish trust with all types of stakeholders, must encourage active community participation, recognize community knowledge, and utilize cultural formats and exchanges. EPA EJ Guidance at 4.2. Additionally,

because involving affected communities can present unique challenges, the guidance catalogues a number of these potential challenges (language and communication barriers, technically complex issues, etc.) and offers potential solutions (use of local translators, use of plain language in meetings and printed material, etc.). *Id.* at Exh. 5. The CEQ environmental justice guidance similarly recommends a number of specific steps to overcome potential barriers to participation. CEQ EJ Guidance at 13.

Other possibilities exist for enhancing public participation under NEPA. For example, some have argued that community members should be given the opportunity to educate themselves on the technical aspects of a site or facility, as well as on the NEPA process, before the NEPA process even begins. It also has been argued that a more systematic effort is needed to involve communities in the EIS process, and that public hearings prior to the EIS should be mandatory. *See* NATIONAL ENVIRONMENTAL JUSTICE ADVISORY COUNCIL, REPORT OF THE ENVIRONMENTAL JUSTICE ENFORCEMENT AND COMPLIANCE ASSURANCE ROUNDTABLE 11 (U.S. Environmental Protection Agency, pub., Oct. 1996). It has also been suggested that EPA maintain an up-to-date, user-friendly guide on the NEPA process. *Id.* at 19.

The CEQ regulations also provide for the participation of Tribes, as well as state and local government agencies, throughout the EIS process. Where the effects of a proposed action are on a reservation, a Tribe may, by agreement with the lead agency, become a “cooperating agency;” state and local agencies with special expertise in the environmental impacts at issue in the EIS may also become cooperating agencies. 40 C.F.R. § 1508.5. The role of a cooperating agency may include participating in the scoping process, as well as developing information and preparing environmental analyses, including portions of the EIS. 40 C.F.R. § 1501.6. In a 1999 memorandum, CEQ “urges agencies to more actively solicit in the future the participation of state, tribal, and local agencies” as cooperating agencies in implementing NEPA’s EIS process. Memorandum from George T. Frampton, Jr., Council on Environmental Quality, Designation of Non-Federal Agencies to be Cooperating Agencies in Implementing the Procedural Requirements of the National Environmental Policy Act (July 28, 1999) [hereinafter “1999 CEQ Memorandum”].

B. Determining Whether to Prepare an Environmental Impact Statement

1. Generally

When a federal agency is considering a proposed action, it must determine whether the action requires preparation of an EIS. 40 C.F.R. Part 1501. As noted above, NEPA requires preparation of a “detailed statement,” or EIS, in connection with “proposals for legislation and other major Federal actions significantly affecting the quality of the human environment.” 42 U.S.C. § 4332(2)(C). Major federal actions are “actions with effects that may be major and which are potentially subject to Federal control and responsibility.” 40 C.F.R. § 1508.18. Federal actions for purposes of NEPA can generally be categorized as policies, plans, programs, or projects. 40 C.F.R. § 1508.18(b).

The term “significantly” as used in NEPA requires an examination of both the context for and the intensity, or severity, of the impacts. 40 C.F.R. § 1508.27. Human environment “shall be interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment.” 40 C.F.R. § 1508.14. When an EIS is prepared “and social and economic or social and natural or physical environmental effects are interrelated,” then the EIS must discuss all of these effects on the human environment. *Id.* These definitions are discussed in more detail in Part II.C.2.c., below.

Each federal agency is directed by the CEQ regulations to review its own regulations to determine whether a proposed action is either one that normally requires an EIS, or one that normally does not require either an EIS or an Environmental Assessment. 40 C.F.R. § 1501.4(a). If the action falls within the former category, the agency should begin the process of preparing an EIS. If the action falls within the set of categorical exclusions, the agency may simply proceed with the action. 40 C.F.R. §§ 1507.3(b)(2)(ii), 1508.4. If the proposed action is neither one that normally requires an EIS nor one that is normally excluded from NEPA review, the agency should prepare an Environmental Assessment to determine whether an EIS is required. 40 C.F.R. § 1501.4(b). The activities for which EPA typically prepares an EIS, as well as the categories of activity that are generally excluded from EIS preparation, are set forth in EPA’s NEPA regulations. See 40 C.F.R. Part 6. As discussed earlier, EPA has authority to subject decisions to the EIS process voluntarily.

2. Preparation of an Environmental Assessment

An Environmental Assessment is “a concise public document” that briefly provides “sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact.” 40 C.F.R. § 1508.9(a). Ultimately, the EA is used to determine whether preparation of an EIS is required. 40 C.F.R. § 1501.4(c). An EA can aid in an agency’s compliance with NEPA when an EIS is not necessary, and an EA can also facilitate preparation of an EIS when one is required. *Id.* The CEQ regulations provide that an agency may prepare an EA on any action at any time to assist agency planning and decision-making. 40 C.F.R. § 1501.3(b).

An EA must include brief discussions of the need for the proposed action, of alternatives, and of the environmental impacts of the proposed action and alternatives, as well as a list of agencies and persons consulted. 40 C.F.R. § 1508.9(b). If an agency determines on the basis of the EA not to prepare an EIS, the agency must make a finding of no significant impact (FONSI). 40 C.F.R. § 1501.4(e). A FONSI briefly sets forth the reasons why an action not otherwise excluded from NEPA substantive review will not have a significant effect on the human environment. The FONSI must include the EA or a summary of it, and must note any other related environmental documents. 40 C.F.R. § 1508.13. The FONSI must be made available to the affected public, and in some instances it must be made available for public review before the agency makes a final determination whether to prepare an EIS and before the action may begin. 40 C.F.R. § 1501.4(e); 40 C.F.R. § 6.400(d).

Because the EA must include a brief discussion of the environmental impacts of a proposed action and its alternatives, preparation of an EA provides an early means of identifying affected communities of color and low-income communities and potential disproportionate impacts on those communities resulting from the proposed action. EPA can use the EA process to explore environmental justice concerns, an analysis of which will inform the agency’s decision on whether a

full EIS must be prepared. Also, because the EA process is simpler than the EIS process and can be invoked at any time, EPA can use it as a flexible means of ascertaining possible environmental justice implications of agency decisions.

EPA's environmental justice guidance recommends the use of an EA to analyze and record potential environmental justice considerations. If the initial environmental justice screening analysis identifies environmental justice concerns, then the agency is to conduct a small-scale scoping analysis and to solicit community involvement and input, as well as to develop alternatives and mitigation measures. EPA EJ Guidance at 3.2.3.1. Importantly, the guidance further indicates that the EA should contain "a comparative socioeconomic analysis that is scaled and tailored" to evaluate the potential effects to the community. *Id.* See also the CEQ EJ Guidance at 8-9. Socio-economic analyses are discussed in Part II.C.2.c., below. Even if the agency's initial environmental justice screening analysis results in no environmental justice concerns, the analysis is still to be recorded, and the guidance recommends that the agency re-examine the screening conditions throughout the NEPA process. EPA EJ Guidance at 3.2.3.1. EPA's guidance also provides that, to the extent practicable, EIS-like public participation is to be pursued in connection with an EA when social and economic impacts will be, or are perceived to be, substantial, even in the absence of "significant" impacts. EPA EJ Guidance at 4.2.

C. Preparation of the Environmental Impact Statement

1. Scoping

Upon determining that a proposed action may significantly affect the environment, a federal agency must prepare an EIS. This process begins with scoping – "an early and open process for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action." 40 C.F.R. § 1501.7. To determine the scope of an EIS, an agency must consider three types of impacts: direct, indirect, and cumulative. 40 C.F.R. § 1508.25.

EPA, by way of the scoping process, can begin to engage affected communities in the NEPA process if this has not already been done. It would be difficult to assess how a proposed action might affect communities of color and low-income communities without communicating directly with community residents. Both the CEQ and EPA environmental justice guidance documents emphasize the importance of determining whether an area affected by the proposed action may include people of color and low-income communities, and seeking the input of these communities in the scoping process. Both guidances discuss in detail steps for enhancing traditional public participation tools to involve affected communities. *See* CEQ EJ Guidance at 11-12; EPA EJ Guidance at 3.2, 4.1.

2. Preparation of the Draft Environmental Impact Statement

An EIS must contain a "full and fair discussion of significant environmental impacts" and inform both decision-makers and the public of the reasonable alternatives that would avoid or minimize adverse impacts or enhance the quality of the human environment. 40 C.F.R. § 1502.1 The EIS is an analytic document that discusses impacts in proportion to their significance. The EIS must state how the alternatives it considers, as well as the decisions based upon the document, will or will not achieve the requirements of NEPA. 40 C.F.R. § 1502.2.

The EIS for a proposed agency action is typically prepared in two stages, draft and final. 40 C.F.R. § 1502.9. An agency should begin preparation of an EIS as near as possible to the time that the agency is developing or is presented with a proposal, and early enough so that the EIS can contribute to the decision-making process, rather than be used to rationalize or justify decisions already made. 40 C.F.R. § 1502.5. EISs are to be prepared using an interdisciplinary approach that ensures the integrated use of the natural and social sciences and the natural design arts. 40 C.F.R. § 1502.6. EISs must also be prepared using plain language so that they can be easily understood. 40 C.F.R. § 1502.8. EPA requires at least one public meeting on all draft EISs. 40 C.F.R. § 6.400(c).

The portions of the EIS discussing alternatives to the proposed action, the affected environment, and environmental consequences are of special importance to the NEPA process. Moreover, as discussed below, each of these sections also has key environmental justice implications.

a. Alternatives

The section of the EIS discussing alternatives to the proposed action is the “heart” of the EIS. 40 C.F.R. § 1502.14. This section presents the environmental impacts of the proposal and the alternatives in comparative form, “sharply defining the issues and providing a clear basis for choice among options by the decision maker and the public.” *Id.* The discussion of alternatives must include the proposed action, as well as the alternative of no action. *Id.* Appropriate mitigation measures are to be included if they are not already included in the proposed action or the alternatives. *Id.* The CEQ regulations define mitigation to include:

- avoiding the impact altogether by not taking a certain action or parts of an action;
- minimizing impacts by limiting the degree or magnitude of the action and its implementation;
- rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
- reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and
- compensating for the impact by replacing or providing substitute resources or environments.

40 C.F.R. § 1508.20.

EPA can advance environmental justice goals in the preparation of an EIS by (1) ensuring that affected communities of color and low-income communities play a role in the development of alternatives and possible mitigation measures, and (2) developing mitigation measures that address significant adverse effects on these communities. EPA can also present alternatives and mitigation measures in the EIS in a way that makes clear any disproportionately high and adverse effects likely to result from a given alternative. Both the CEQ and EPA guidance documents discuss the importance of the participation of affected communities in developing and commenting on possible alternatives to the proposed action and mitigation measures. CEQ EJ Guidance at 15-16; EPA EJ Guidance at 3.2.5, 3.2.7. The EPA guidance lists examples of potential mitigation measures for addressing disproportionately high and adverse effects and notes other steps to ensure that mitigation measures are implemented, including establishing the mitigation measure as a permit condition or requiring monitoring and reporting. EPA EJ Guidance at 3.2.7.

b. Affected Environment

Another requirement of the EIS is that it “succinctly” describe the environment of the area to be affected or created by the alternatives at issue. 40 C.F.R. § 1502.15. Identifying the affected environment is crucial for environmental justice purposes. This requirement provides EPA with authority to ascertain more precisely the communities of color and low-income communities that are likely to be affected by the proposed action. EPA can seek to identify the particular ways in which affected communities use resources and interact with the environment.

The CEQ environmental justice guidance notes that agencies should identify a geographic scale for which demographic data on the potential impact area will be obtained. CEQ EJ Guidance at 14. Geographic distribution by race, ethnicity, and income, as well as a delineation of tribal land and resources, should be considered. *Id.* The CEQ guidance emphasizes the importance of recognizing that communities of color, low-income communities, and Tribes may experience different impacts than other communities – for example, from subsistence wildlife and plant consumption or from use of well water in rural areas. *Id.*

Building upon the CEQ environmental justice guidance, EPA’s environmental justice guidance emphasizes the need, early in either the EA or EIS process, for the agency to identify the physical environment and all natural resources that could be affected by the proposed action or by alternative actions. EPA EJ Guidance at 3.2.4. The guidance states that the agency is to use “all means available” to identify impacts on particular resources that will adversely and disproportionately affect communities of color or low-income communities. The agency is to provide affected communities with technical assistance to ensure a thorough understanding of the proposed action and to allow for meaningful public participation and input. *Id.*

c. Environmental Consequences

The scientific and analytic basis for the alternatives section of the EIS is provided in the section on environmental consequences. 40 C.F.R. § 1502.16. This section discusses the environmental impacts of the alternatives, any adverse environmental effects that cannot be avoided should the proposal be implemented, the relationship between short-term uses of man’s environment and the maintenance and enhancement of long-term productivity, and any irreversible or irretrievable commitments of resources that would be involved in the proposal should it be implemented. *Id.*

As noted earlier, the EIS process applies to “major Federal actions significantly affecting the quality of the human environment.” 42 U.S.C. § 4332(2)(C). Under the CEQ regulations, the

environmental consequences discussion must address a number of specific factors. The following have particular relevance to environmental justice concerns:

- direct effects and their significance;
- indirect effects and their significance;
- the environmental effects of alternatives;
- natural or depletable resource requirements and conservation potential of various alternatives and mitigation measures;
- urban quality, historic and cultural resources, and the design of the built environment, including the reuse and conservation potential of various alternatives and mitigation measures; and
- means to mitigate adverse environmental impacts (if not fully covered in the alternatives section of the EIS).

40 C.F.R. § 1502.14.

The CEQ regulations define “direct” effects as those that are caused by the action and occur at the same time and place. “Indirect” effects are also caused by the action and are later in time or farther removed in distance, but remain reasonably foreseeable. 40 C.F.R. § 1508.8. Indirect effects may include growth-inducing effects and other effects related to induced changes in land use patterns, population density, increased tourist use of cultural resources, and growth rate. *Id.* Indirect effects also include effects on air, water, and other natural systems – including ecosystems. *Id.*

Cumulative Impacts. According to the CEQ regulations, “effects” can be “ecological . . . aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative.” 40 C.F.R. § 1508.8. The regulations define “cumulative impact” as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.” 40 C.F.R. § 1508.7. Thus, where EPA does prepare an EIS, the agency has authority to consider fully the adverse environmental and health impacts of a proposed activity on already overburdened communities. *See generally* DANIEL R. MANDELKER, NEPA LAW AND LITIGATION 10.12 (1999) [hereinafter “Mandelker”] (discussion of case law addressing consideration of cumulative impacts).

The Council on Environmental Quality has provided a guidance document on addressing cumulative impacts that emphasizes the importance of analyzing such impacts during all phases of the EIS process, from scoping through the development of alternatives and mitigation measures. Council on Environmental Quality, Considering Cumulative Effects Under the National Environmental Policy Act (January 1997), *available at* <http://ceq.eh.doe.gov/nepa/ccenepa/ccenepa.htm> (last visited Nov. 13, 2001). The guidance states the general principle that “additional effects contributed by actions unrelated to the proposed action must be included in the analysis of cumulative effects.” *Id.* at Table 1-2. The guidance also lists a number of examples of cumulative effects issues that could arise in a proposed activity, including: social, economic or cultural effects on low-income communities or communities of color resulting from ongoing development; long-term containment or disposal of hazardous wastes; and air emissions resulting in degradation of regional air quality. *Id.* at Table 2-1.

EPA's guidance underlines the importance of considering cumulative impacts, stating that "analysts need to place special emphasis on other sources of environmental stress within the region," including the number and concentration of permitted and non-permitted sources of pollution, the presence of toxic pollutants with high exposure potential, and other factors. EPA EJ Guidance at 2.2.2.

Social and Economic Impacts. Social and economic impacts also are included in the CEQ regulatory definition of effects. 40 C.F.R. § 1508.8. While the regulations state that economic or social effects alone are not intended to require an EIS, when an EIS is prepared and "economic or social and natural or physical environmental effects are interrelated, then the [EIS] will discuss all of these effects on the human environment." 40 C.F.R. § 1508.14. This provision, in conjunction with the requirements to consider cumulative and indirect impacts, creates an opportunity for the EIS to consider a broad range of impacts on overburdened communities, provided those impacts are related to a proposed change in the physical environment. *See generally* Mandelker at 8.07[6] (discussion of case law addressing consideration of cumulative impacts). As a result of NEPA's broad public participation provisions, this analysis can be fully informed by the comments of the affected communities.

The EPA environmental justice guidance discusses the possible need to use cultural or social impact assessments as tools for analyzing specific socio-economic impacts to communities that share a common cultural or spiritual environment. EPA EJ Guidance at 5.3. To assess accurately the potential disproportionately high and adverse effects to communities of color and low-income communities and account for these effects, the guidance notes that EIS analysts may be required to move beyond standard socio-economic modeling and consider such issues as subsistence living, treaty-protected resources, cultural use of natural resources, sacred sites, dependence on public transportation, community cohesion, and a relatively unskilled labor base. *Id.*

3. Public Comment Period

After completing the draft EIS, the agency must obtain comments from relevant federal agencies. 40 C.F.R. § 1503.1. The agency must also request comments from relevant state or local agencies and Tribes. As noted earlier, CEQ has urged federal agencies to seek out the participation of state, local, and tribal governments as "cooperating agencies." 1999 CEQ Memorandum. CEQ regulations also require public comment on the draft EIS; agencies must "affirmatively solicit" comments from persons or organizations who may be interested or affected. 40 C.F.R. § 1503.1. At least 45 days is usually provided for public comment. 40 C.F.R. § 1506.10(c). EPA thus has explicit authority to ensure that it receives input from communities of color and low-income communities affected by the action.

4. Preparation of Final Environmental Impact Statement and Issuance of Decision

An agency preparing a final EIS is required to assess and consider comments both individually and collectively, and the agency must respond to them. 40 C.F.R. § 1503.4. Although it is not required, an agency may request comments on a final EIS before issuing a final decision. 40 C.F.R. § 1503.1(b). Other agencies or persons are free to make comments, in any event. *Id.* When the federal agency prepares a final EIS, it issues a record of decision (ROD). 40 C.F.R. § 1505.2. The ROD must state the decision and identify the alternatives, specifying which were considered to be environmentally preferable. The agency also must state whether all practicable means to avoid or minimize environmental harm from the alternative have been adopted, and if not, why. A monitoring and enforcement program must be adopted and summarized where applicable for any mitigation. 40 C.F.R. § 1505.2.

Final agency action that incorporates the nation's environmental policy is of course the goal of the entire administrative process. The CEQ regulations explain that "NEPA's purpose is not to generate paperwork – even excellent paperwork – but to foster excellent action." 40 C.F.R. § 1500.1(c). This is particularly so in the environmental justice context. The goal is not simply to involve affected communities in the NEPA process and to conduct environmental justice analyses, but to factor that involvement and those analyses into decision-making.

The CEQ guidance addresses this goal by stating that when disproportionately high and adverse effects on communities of color, low-income communities, and Tribes have been identified as a result of the proposed action or its alternatives, the distribution and magnitude of the disproportionate impacts in these communities should be a factor in the agency's determination of the environmentally preferable alternative. CEQ EJ Guidance at 15. When weighing this factor, the agency should also consider the views of the affected communities. *Id.*

The CEQ guidance also states that disproportionately high and adverse effects should be among the factors discussed by the agency in its ROD. *Id.* When the agency discusses whether all practicable means to avoid or mitigate environmental and other interrelated effects were adopted, the discussion should address these effects as well. *Id.* These factors should be linked to any monitoring and enforcement program discussed in the ROD. *Id.*

EPA's guidance also provides that EISs and RODs should document the analyses used to identify the presence or absence of disproportionately high and adverse effects and present the results of those analyses. EPA EJ Guidance at 1.2. The ROD should specifically document whether the proposed action will or will not have a disproportionately high and adverse effect on communities of color or low-income communities and describe any mitigation that will be undertaken to avoid or minimize such effects. *Id.* The ROD should also discuss all alternatives and mitigation options that were analyzed and explain what role environmental justice considerations played in the decision. EPA EJ Guidance at 3.2.8.

III. OPPORTUNITIES FOR EPA TO PROMOTE ENVIRONMENTAL JUSTICE PURSUANT TO SECTION 309 OF THE CLEAN AIR ACT

Pursuant to **Section 309** of the Clean Air Act, EPA is charged with reviewing and commenting publicly on the proposed actions of other federal agencies. 42 U.S.C. § 7609(a). If EPA determines that the proposed action of another federal agency is “unsatisfactory from the standpoint of public health or welfare or environmental quality,” EPA is directed to publish this determination and refer the matter to CEQ. 42 U.S.C. § 7609(b). These two tools – the power to review and comment and the power to issue referrals to the CEQ – represent important mechanisms by which EPA can promote environmental justice under NEPA. EPA has issued a guidance document to help ensure that the Section 309 review and comment procedure fully analyzes effects on communities of color and low-income communities. U.S. EPA Office of Federal Activities, EPA Guidance for Consideration of Environmental Justice in Clean Air Act Section 309 Reviews (July 1999) [hereinafter “EPA Section 309 EJ Guidance”], *available at* http://es.epa.gov/oeca/ofa/ej_nepa.html (last visited Nov. 13, 2001).

A. EPA Review and Comment

EPA is to review and comment publicly on the environmental impacts of federal activities, including those actions for which EISs are prepared. 40 C.F.R. § 1504.1(b).

EPA’s Section 309 guidance emphasizes that the agency should participate in the NEPA process “at the earliest stage of project development and to the fullest extent practicable.” EPA Section 309 EJ Guidance at 5. At the scoping stage, the guidance recommends that EPA’s level of involvement be decided on a case-by-case basis, depending on the degree of existing environmental justice concerns. *Id.* at 6.

According to the guidance, all EISs filed with the agency should be reviewed for “adequate environmental justice content.” EPA Section 309 EJ Guidance at 6. Early in the review process, the EPA review should identify potentially affected communities of color or low-income communities, as well as the natural resources that are potentially affected. *Id.* at 8. The reviewer should determine whether the EIS reflects a comprehensive assessment of the types of impacts that the proposed action may impose upon human beings and natural resources. *Id.* If the potential for adverse effects has been identified, the agency should analyze how health and environmental effects are distributed within the affected community. *Id.* at 9. Before commenting on an agency proposal, the EPA reviewer should determine how the agency determined whether an impact is or is not disproportionately high, and the rationale behind the proposal. *Id.*

The EPA guidance also directs the reviewer to evaluate the environmental justice issues identified in the alternatives and develop mitigation measures to address potential disproportionately high and adverse effects on communities of color and low-income communities. *Id.* at 10.

With regard to public participation, the EPA reviewer is directed to note whether the draft EIS reflects a concerted effort to elicit participation of communities of color and low-income communities, and whether the draft EIS incorporated public input into analysis of disproportionately high and adverse impacts, alternatives, and mitigation measures. EPA Section 309 EJ Guidance at 7. EPA suggests that a federal agency may need to “initiate innovative approaches to overcome

linguistic, institutional, cultural, economic, historical or other potential barriers” to participation, and cites to useful strategies contained in the CEQ EJ Guidance. *Id.*

EPA has established a system for rating the environmental impact of a proposed agency action and the adequacy of the EIS. The EPA Section 309 guidance provides that environmental justice should be considered when the EPA reviewer assigns ratings. *Id.* at 11. EPA’s rating system first rates the environmental impact of the proposed action. According to the EPA guidance, the reviewer’s rating should incorporate environmental justice concerns when (1) communities of color or low-income populations, or Tribes, are present in the affected area; and (2) there may be disproportionately high and adverse human health or environmental effects on these communities. *Id.* at 11. The rating system next evaluates the adequacy of the EIS. According to the EPA guidance, the reviewer’s rating should incorporate environmental justice concerns when (1) the EIS fails to provide sufficient information to address adequately whether people of color or low-income populations are disproportionately affected; or (2) the EIS fails to draw a conclusion regarding the significance of a potential environmental justice impact. *Id.*

B. Referral to CEQ

The EPA Administrator must make a referral to CEQ of a matter that is “unsatisfactory from the standpoint of public health or welfare or environmental quality.” 40 C.F.R. § 1504.1. Referrals are to be made only after concerted and timely, but ultimately unsuccessful, attempts to resolve differences with the agency that has proposed the action. *Id.* A referral consists of a letter to CEQ requesting that no action be taken to implement the matter until CEQ acts upon it, as well as “a statement supported by factual evidence leading to the conclusion that the matter is unsatisfactory from the standpoint of public health or welfare or environmental quality.” 40 C.F.R. § 1504.3. The CEQ regulations establish the process by which the federal agency proposing the action can respond to the referral, as well the procedure by which CEQ must ultimately respond to the referral. *Id.*

In determining what environmental objections to refer to CEQ, EPA should weigh potential adverse environmental impacts, with consideration of the following:

- possible violation of national environmental standards or policies;
- severity;
- geographic scope;
- duration;
- importance as precedents; and
- availability of environmentally preferable alternatives.

40 C.F.R. § 1504.2. EPA’s Section 309 Guidance provides no specific discussion of when environmental concerns will require referral of a matter to the CEQ. Nevertheless, the broad statutory language authorizing referral, together with the far-reaching goals of the Act, give EPA ample room to consider environmental justice issues when making referral decisions.

IV. BEYOND THE ENVIRONMENTAL IMPACT STATEMENT: ADDITIONAL AUTHORITIES UNDER WHICH EPA CAN INCORPORATE ENVIRONMENTAL JUSTICE INTO EPA DECISION-MAKING

NEPA provides authority for implementing the nation's environmental policy that reaches far beyond the preparation of EISs and EAs. Although courts historically have refused to enforce against federal agencies any NEPA requirements other than the EIS administrative procedure, the statute makes clear that other opportunities exist for the agency to implement the national environmental policy. *See generally* ENVIRONMENTAL LAW INSTITUTE, REDISCOVERING THE NATIONAL ENVIRONMENTAL POLICY ACT: BACK TO THE FUTURE (1995). These textual provisions have special importance for furthering environmental justice goals, as discussed below.

A. Interpreting and Administering the Laws in Accordance with NEPA

Section 102(1) of NEPA directs that “*to the fullest extent possible*” the “policies, regulations, and public laws of the United States *shall* be interpreted and administered in accordance with the policies set forth in [NEPA].” 42 U.S.C. § 4332(1) (emphases added). Read in conjunction with **Section 105** of NEPA, which clarifies that NEPA’s policies and goals are “supplementary to those set forth in existing authorizations of Federal agencies,” Section 102(1) establishes a substantive grant of authority for EPA to interpret and administer the nation’s environmental policy.

As discussed above, the presidential memorandum accompanying Executive Order 12898 instructs federal agencies to incorporate environmental justice concerns into their decision-making under NEPA. This mandate is typically carried out by way of the EIS administrative procedure established by Section 102(2)(C). However, the Section 102(1) directive to interpret and administer the law in accordance with the policies of NEPA provides another mechanism by which EPA can promote environmental justice under the Act. Indeed, unlike the EIS administrative procedure, the use of Section 102(1) is not limited to actions likely to have a significant effect on the environment. Instead, Section 102(1) applies to the fullest extent possible to the interpretation and administration of all policies, regulations, and public laws.

Section 102(1) is critical to any analysis of EPA’s authority to promote environmental justice pursuant to NEPA, because it requires that those environmental justice goals inherent in the national environmental policy be promoted through the laws and regulations for which the EPA possesses implementing authority. Thus EPA at the very least possesses the authority to incorporate environmental justice considerations into the administration of environmental laws in circumstances where the EIS process is not triggered – for example, where the proposed action is not significant as defined in NEPA, or where preparation of an EIS is excused by the functional equivalence doctrine, a Congressional exemption, or otherwise.

As discussed throughout this report, federal environmental laws provide EPA considerable authority to integrate environmental justice consideration into its decisions – authority derived from both general statutory goals of protecting health and the environment and specific provisions governing permitting, standard setting, and other agency activities. NEPA Section 102(1) provides further support for interpreting and administering these statutes to reflect the environmental justice aims inherent in the national environmental policy. In doing so, EPA can use the same tools – such as encouraging broad participation by affected communities and conducting full analyses of disproportionate impacts – that inform environmental justice considerations under the NEPA administrative process. Additionally, EPA can adopt guidelines or review procedures to ensure that laws under the agency’s jurisdiction are being implemented and administered in accordance with the national environmental policy and its environmental justice components. EPA Region 2 has created

an “Interim Environmental Justice Policy” which incorporates environmental justice considerations into the management decisions and actions of that office. U.S. EPA Region 2, Interim Environmental Justice Policy (Dec. 2000).

B. Authority Deriving from Other Agency Responsibilities

Section 102(2) of NEPA requires federal agencies, to “the fullest extent possible,” to comply with a number of specific requirements in addition to the EIS requirement of Section 102(2)(C). This duty is also stated in the CEQ regulations. 40 C.F.R. § 1507.2. Most of these requirements, as discussed below, provide additional mechanisms by which EPA can advance environmental justice aims under the Act.

Section 102(2)(A) directs all federal agencies to “utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and in decision making which may have an impact on man’s environment.” 42 U.S.C. § 102(2)(A). The use of an interdisciplinary approach and reference to the social sciences are hallmarks of environmental justice analyses. This provision, then, provides EPA with authority to use such tools in connection with all agency planning and decision-making that may have an impact on the environment – a far broader scope of activity than that covered by NEPA’s EIS requirements.

Section 102(2)(B) requires federal agencies to “identify and develop methods and procedures, in consultation with [CEQ], which will insure that presently unquantified environmental amenities and values may be given appropriate consideration in decision making along with economic and technical considerations.” 42 U.S.C. § 102(2)(B). Certain “environmental amenities and values” associated with communities of color, low-income communities, and Tribes – such as fish relied upon for subsistence, sacred sites of great importance to Tribes, etc. – could benefit from the identification of methods and procedures that would ensure that they are appropriately considered in agency decision-making. This provision affords EPA an opportunity for doing so.

Section 102(2)(E) requires federal agencies to “study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflicts concerning alternative uses of available resources.” 42 U.S.C. § 102(2)(E). The CEQ regulations state that Section 102(2)(E) “extends to all such proposals, not just the more limited scope of section 102(2)(C)(iii) where the discussion of alternatives is confined to impact statements.” 40 C.F.R. § 1507.2(d).

This provision is important in that it expands consideration of alternatives to circumstances in which an EIS or EA will not be prepared, but a disproportionately high and adverse human health or environmental impact on communities of color or low-income communities may exist.

Section 102(2)(G) provides that federal agencies must “make available to States, counties, municipalities, institutions, and individuals, advice and information useful in restoring, maintaining, and enhancing the quality of the environment.” 42 U.S.C. § 102(2)(G). The federal environmental laws implemented by EPA provide considerable authority for the agency to disseminate information to the public. This NEPA provision bolsters the agency’s authority to enhance community capacity to identify and address environmental justice concerns.

Section 102(2)(H) requires federal agencies to “initiate and utilize ecological information in the planning and development of resource-oriented projects.” 42 U.S.C. § 102(2)(H). In light of the broad policy goals of NEPA, read in conjunction with Executive Order 12898, this provision may provide a means of incorporating a greater awareness of how communities of color and low-income communities rely on natural resources in the planning and development of projects that could affect those resources.

CHAPTER 10

FEDERAL WATER POLLUTION CONTROL ACT ("Clean Water Act" or "CWA") 33 U.S.C. §§ 1251-1387

The Federal Water Pollution Control Act (Clean Water Act or CWA) is the main federal statute governing the quality of surface water – rivers and streams – throughout the United States. It establishes national, technology-based standards for municipal waste treatment and many categories of industrial “point source” discharges (discharges from fixed sources such as pipes and ditches); requires states and, in some cases, Tribes to enact and implement water quality standards to attain designated water-body uses; addresses toxic water pollutants; and regulates dredge-and-fill activity and wetlands. It also applies these requirements to federal facilities, such as military installations or Department of Energy sites, which can have disproportionate impacts on the specific communities where they are located.

The Act’s broad scope brings a number of environmental justice issues within its reach, from protection of drinking water supplies, to reducing toxic exposure, to protecting fisheries, wetlands, and wildlife habitat. Further, the Act’s stated goal of eliminating all pollutant discharges, its well-established permitting programs, and its stringent enforcement provisions make it potentially a very effective tool that EPA can employ to address environmental justice concerns. This chapter offers a review of CWA statutory authorities for advancing environmental justice, and seeks to provide a basis for further public discussion of the specific opportunities for regulatory action discussed here.

Part I of this chapter analyzes some of the Act’s policy goals, including a national “zero-discharge” goal for both conventional and toxic pollutants. Part II discusses EPA’s standard setting and rule-making authority under the Act, which includes technology-based effluent limitations, water quality standards for receiving water bodies, toxic effluent controls, and design and management standards for land-based application of sewage sludge. Part III discusses EPA’s permitting authority, focusing on discharge permits under the National Pollutant Discharge Elimination System (NPDES) and dredge-and-fill permits under Section 404. Part IV addresses EPA’s delegation of CWA program authority to state and tribal governments, again focusing on NPDES and Section 404. Finally, Part V discusses the Act’s enforcement provisions; Part VI addresses its information gathering provisions; and Part VII outlines financial assistance provisions.

I. GENERAL PROVISIONS

The Clean Water Act reflects Congress’ clear intent first to control and then to eliminate all pollutant discharges into U.S. waters. Its very first provision, **Section 101(a)(1)**, declares that “it is the national goal that the discharge of pollutants into the navigable waters be eliminated by 1985.” 33 U.S.C. § 1251(a)(1). This “zero-discharge” goal creates a strong presumption that affects interpretation and implementation of all other sections of the Act, from setting of discharge standards and permit limits to enforcement decisions. As a first step toward the zero-discharge goal, the Act establishes an “interim goal” of “water quality which provides for the protection and

propagation of fish, shellfish, and wildlife and provides for recreation in and on the water” – the so-called “fishable/swimmable” standard that was to be attained by July 1, 1983. 33 U.S.C. § 1251(a)(2).

Similarly, **Section 101(a)(3)** states, in equally clear language, that “it is the national policy that the discharge of toxic pollutants in toxic amounts be prohibited.” 33 U.S.C. § 1251(a)(3). Both of these provisions are policy statements, and thus are subject to the complex framework established by the rest of the Act and discussed below. But taken together, they suggest that in certain circumstances, EPA may have substantial leeway to consider and to act upon environmental justice issues. In particular, where there is scientific or factual uncertainty about a decision’s impact on low-income communities and communities of color, the agency could pursue the statutory goals by exercising its discretion in favor of reducing or eliminating pollutant discharges wherever possible. In conjunction with specific authorities under the Act, particularly its strict requirements for toxics, the zero-discharge provisions could provide additional support for complete bans on the discharge of specific substances or on discharges at specific sites.

The goals and policy section also contains broad language favoring public participation. **Section 101(e)** provides that “[p]ublic participation in the development, revision, and enforcement of any regulation, standard, effluent limitation, plan, or program established by the Administrator or any State under this chapter shall be provided for, encouraged, and assisted by the Administrator and the States.” 33 U.S.C. § 1251(e). More than a simple declaration, the section goes on to provide that “[t]he Administrator, in cooperation with the States, shall develop and publish regulations specifying minimum guidelines for public participation in such processes.” *Id.*; *see* 40 C.F.R. Part 25.

Thus, the Act provides EPA clear statutory authority to develop strong public participation programs. As it has done with other statutes, such as the Resource Conservation and Recovery Act, the agency can use this general authority to continue to tailor its existing public participation rule-making and guidance efforts to the specific needs of low-income communities and communities of color. This would be particularly useful during rule-making procedures, the permitting process, and other key decision points in the CWA regime.

II. STANDARD SETTING/RULE-MAKING

Consistent with the zero-discharge goal, the Clean Water Act states simply that “the discharge of any pollutant by any person shall be unlawful” unless it complies with the specific requirements of the statute. 33 U.S.C. § 1311(a). These requirements include multiple layers of standards, primarily the technology-based standards mandated by Section 301 and developed by EPA for specific categories of point source discharges. In addition, Sections 302 and 303 require EPA and the states to develop water quality standards for discharges into specific water bodies where technology standards alone are insufficient to preserve designated uses of the water body; these standards specifically allow for consideration of health and environmental issues, including issues highly relevant for low-income communities and communities of color. Section 307 provides additional standards and requirements for toxic pollutants, and Section 405 regulates the disposal of sewage sludge.

A. Technology-Based Standards

Section 301(b)(1) of the Act initially set a minimum standard of “secondary treatment” for municipal waste treatment plants and “best practicable control technology” (BPT) for other existing point sources, especially specified categories of industrial sources. 33 U.S.C. § 1311(b)(1)(A)-(B). **Section 301(b)(2)** then establishes a standard of “best available technology” (BAT), and all sources eventually are to be ratcheted up to this level or to “best conventional pollutant control technology” (BCT), depending on the type of pollutant. 33 U.S.C. § 1311(b)(2). Section 301(b)(2) also states that BAT standards should be set at a level “which will result in reasonable further progress toward the national goal of eliminating the discharge of all pollutants,” an additional restatement of the zero-discharge goal. *Id.* The resulting effluent limitations are to be reviewed, and if appropriate, revised every five years. 33 U.S.C. § 1311(d).

In addition to the BPT “floor” for categories of existing sources, **Section 301(b)(1)(C)** provides that point source discharges also must meet “*any more stringent limitations, including those necessary to meet water quality standards, treatment standards, or schedules of compliance, established pursuant to any State law or regulations. . . or any other Federal law or regulation, or required to implement any applicable water quality standard established pursuant to this chapter.*” 33 U.S.C. § 1311(b)(1)(C) (emphasis added). This broad incorporation of other requirements into the standard could potentially be used to impose stricter limitations on individual point sources where necessary to meet other requirements of law, such as Title VI of the federal Civil Rights Act or comparable state laws.

Section 304 requires EPA to promulgate regulations that contain detailed guidelines for the agency’s adoption or revision of effluent limitations under Section 301, and to specify the factors that will be used in determining the BPT, BAT, and BCT standards for different categories of point sources. 33 U.S.C. § 1314(b). The guidelines must be reviewed annually, with public review and comment. 33 U.S.C. § 1314(m). In addition to technical issues and cost, the relevant considerations incorporated into the guidelines may include “such other factors as the Administrator deems appropriate.” 33 U.S.C. § 1314(b)(1)(B), (2)(B), & (4)(B). EPA thus could use this broad authority to consider environmental justice issues as a factor when setting appropriate levels of technology-based standards. In particular, where such standards allow or require some consideration of the costs and benefits of a particular technology, this analysis could give weight to the benefits to heavily impacted communities or sensitive populations.

The Act allows for variances from technology-based standards under certain conditions. In issuing such variances, EPA also could take environmental justice factors into account. For example, **Section 301(g)** allows the agency to modify the BAT requirements for certain “nonconventional” pollutants, such as ammonia, chlorine, and iron, as long as the lower BPT standard is still met and

such modification will not interfere with the attainment or maintenance of that water quality which shall assure protection of public water supplies, and the protection and propagation of a balanced population of shellfish, fish, and wildlife, and . . . such modification will not result in the discharge of pollutants in quantities which may reasonably be anticipated to pose an unacceptable risk to human health or the environment because of bioaccumulation, persistency in the environment, acute toxicity, chronic toxicity (including carcinogenicity, mutagenicity or teratogenicity), or synergistic propensities.

33 U.S.C. § 1311(g)(2)(C). In addition, **Section 301(h)** allows the agency to modify the secondary treatment requirement for municipal waste treatment plants that discharge into marine waters if “the discharge of pollutants in accordance with such modified requirements will not interfere, alone *or in combination with pollutants from other sources*, with the attainment or maintenance of that water quality which assures protection of public water supplies and the protection and propagation of a balanced, indigenous population of shellfish, fish, and wildlife.” 33 U.S.C. § 1311(h)(2) (emphasis added).

The Act thus directs EPA to consider carefully the public health and ecosystem risks prior to granting any such variances, including issues such as bioaccumulation, synergistic effects, and cumulative impacts.

B. Water Quality Standards

Section 302(a) provides that “[w]henver, in the judgment of the Administrator. . . , discharges of pollutants from a point source or group of point sources, with the application of [effluent limitations based on best available technology], would interfere with the attainment or maintenance of that water quality in a specific portion of the navigable waters *which shall assure protection of public health, public water supplies, agricultural and industrial uses, and the protection and propagation of a balanced population of shellfish, fish and wildlife*, and allow recreational activities in and on the water, effluent limitations (including alternative effluent control strategies) for such point source or sources shall be established which can reasonably be expected to contribute to the attainment or maintenance of such water quality.” 33 U.S.C. § 1312(a) (emphasis added).

Like Section 303, below, this section explicitly allows consideration of health and environmental impacts, and authorizes an additional tier of water-quality-based effluent limitations to be applied where technology-based standards alone are insufficient to attain specific stream uses— in this case, the fishable/swimmable standard. Unlike Section 303, which is implemented with the involvement of the states to attain uses designated by the states, Section 302 operates at the EPA Administrator’s discretion, following notice and a public hearing and some consideration of the economic and social costs and benefits. 33 U.S.C. § 1312(b). Perhaps because of the procedural hurdles, the uncertainties of cost-benefit analysis, and the historical prominence of state water-quality standards, the agency has never yet invoked this section. *See* Memorandum from Gary S. Guzy, U.S. EPA Office of General Counsel, EPA Statutory and Regulatory Authorities Under Which Environmental Justice Issues May Be Addressed in Permitting (Dec. 1, 2000) [hereinafter “OGC 2000 Memorandum”]; Richard Lazarus & Stephanie Tai, *Integrating Environmental Justice into EPA Permitting Authority*, 26 *ECOLOGICAL L.Q.* 617, 639 (1999) [hereinafter “Lazarus & Tai”]. Nevertheless, under appropriate conditions, Section 302’s express deference to “the judgment of the Administrator” and mandate for protection of public health, water supplies, and fisheries could provide an independent basis for setting standards and permit levels that address health and environmental concerns prevalent in low-income communities or communities of color.

Similarly, **Section 303(c)** requires the states to establish or revise water quality standards (WQS) by: (1) designating categories of uses, such as “industrial,” or “fishable/swimmable,” for the water bodies within their jurisdiction; and (2) developing appropriate water quality criteria for these water bodies, “such as to protect the public health or welfare. . . taking into consideration their use and value for public water supplies, propagation of fish and wildlife, recreational purposes, and

agricultural, industrial, and other purposes.” 33 U.S.C. § 1313(c)(2)(A). The standards must be reviewed every three years through a public hearing process, and submitted to EPA for approval. 33 U.S.C. § 1313(c)(1). If a state fails to submit water quality standards, or if EPA determines they are inconsistent with the requirements of the Act, EPA must promulgate standards for the state, also through a public procedure. 33 U.S.C. § 1313(c)(4).

By their very nature, water quality standards are designed to address health and environmental concerns on a site-specific, stream-by-stream basis. In both its WQS regulations and its oversight of state triennial reviews, EPA could require states to obtain, consider, and address data on disproportionate impacts to heavily burdened communities, sensitive populations, or subsistence and traditional fisherpersons. It also could ensure that the public review process includes the affected communities in these deliberations.

Further, **Section 303(d)** requires the states to identify waters for which technology-based effluent limitations alone have proven insufficient to meet the water quality standards. The state must then establish “total maximum daily loads” (TMDLs) for regulated pollutants for each impaired water body, and set the TMDLs “at a level necessary to implement the applicable water quality standards with seasonal variations and a margin of safety which takes into account any lack of knowledge concerning the relationship between effluent limitations and water quality.” 33 U.S.C. § 1313(d)(1)(C). TMDLs must be submitted to EPA for approval, and if it does not approve, the agency is authorized to promulgate such TMDLs as it considers necessary to meet the water quality standards. 33 U.S.C. § 1313(d)(2). Once a TMDL is established, the state must incorporate it into its water quality planning, which includes the ability to set effluent limitations on specific sources (presumably both point and non-point) in order to meet the water quality standards. 33 U.S.C. § 1313(e); see generally OLIVER A. HOUCK, *THE CLEAN WATER ACT TMDL PROGRAM: LAW, POLICY AND IMPLEMENTATION* (1999) [hereinafter “Houck book”].

Since the designation of water body uses and allocation of pollutant loads among sources has “clearly distributional consequences,” Lazarus & Tai at 640, many consider the TMDL program to be a prime opportunity to advance environmental justice goals:

- First, the designated water body uses could be broadened to include subsistence fishing or tribal customs, while Section 303(c)’s “public health” language could take into account the bioaccumulation of certain contaminants and the need to protect the health of subsistence fishers, Tribes, and other highly exposed populations. Lazarus & Tai at 639-40; OGC 2000 Memorandum at 7; Barry E. Hill & Nicholas Targ, *The Link Between Protecting Natural Resources and the Issue of Environmental Justice*, 20 B.C. ENVTL. AFF. L. REV. 1, 13-14 (2000) [hereinafter “Hill & Targ”]. EPA could require states to address this site- and population-specific data in establishing TMDLs and pollutant allocations within a watershed.
- Second, Section 303(d)’s insistence on a “margin of safety” means that scientific or factual uncertainty about whether a specific TMDL level is sufficient to meet water quality standards is to be resolved in favor of limiting discharges to protect public health and fisheries. 33 U.S.C. § 1313(d)(1)(C). This authority could be used to lower a TMDL throughout an entire watershed, rather than reassigning allocations within a watershed.

- Third, many TMDLs are being developed in highly collaborative public processes that include state and federal agencies, local watershed councils or advisory groups, and industry and citizen stakeholders. *See, e.g.*, Environmental Law Institute, *Putting the Pieces Together: State Nonpoint Source Enforceable Mechanisms in Context* (2000). These ad hoc procedures could become another important forum for including low-income communities and communities of color and taking account of their concerns.
- Fourth, incorporation of TMDL allocations into effluent limitations and nonpoint source control measures also will provide an opportunity to implement other relevant EPA policies at the state level. These include an already existing requirement that state water-body uses must meet the “fishable/swimmable” standard unless the state can show that it is not attainable, 40 C.F.R. §§ 131.6(a), 131.10(j); as well as EPA’s non-degradation policy requiring protection of “existing uses,” which could include tribal or subsistence fishing. *See* 40 C.F.R. § 131.12(a); Lazarus & Tai at 640.

Current caselaw suggests that while EPA may not have a statutory mandate to consider environmental justice when setting TMDLs, it retains discretion to do so. In *Dioxin/Organochlorine Center v. Clarke*, 57 F.3d 1517 (9th Cir. 1995), the agency issued a TMDL for dioxin discharges into the Columbia River based on a national average fish consumption figure of 6.5 grams per day. Environmental groups challenged this assumption, arguing that EPA should have used the 150 gram-per-day figure typical of Northwest tribal populations. The Ninth Circuit upheld the agency’s calculation, agreeing that EPA was not required to protect “sub-populations” to the same degree as the general population, and finding that its decision to apply a “lower yet adequate” health standard to Native American populations was reasonable. 57 F.3d at 1524; *see also* *Natural Resources Defense Council v. EPA*, 16 F.3d 1395 (4th Cir. 1993); Catherine A. O’Neill, *Variable Justice: Environmental Standards, Contaminated Fish, and Acceptable Risk to Native Peoples*, 19 STAN. ENVTL. L.J. 3 (2000) [hereinafter “O’Neill”]. But by the same token, the courts’ clear deference to EPA’s expertise on this issue means that the agency is free to increase protection for these populations if it chooses.

EPA has in fact proposed new draft water quality criteria methodology revisions that would allow for bioaccumulation, raise the default average fish consumption rate to 17.8 grams per day, set a default rate of 86.3 grams per day for “subsistence fishers/minority anglers,” and allow even higher rates in specific cases based on local data. *See* Notice, Draft Water Criteria Methodology Revisions, 63 Fed. Reg. 43,756, 43,762 (Aug. 14, 1998); Hill & Targ at 17-19. These measures have been criticized for their continued reliance on quantitative risk assessment, *see* O’Neill at 57-64, but they demonstrate EPA’s discretion to adjust its working assumptions to address environmental justice concerns.

C. Toxic Effluent Standards

The Clean Water Act also establishes separate standards for toxic pollutants, and sets an ultimate national goal that “the discharge of toxic pollutants in toxic amounts be prohibited.” 33 U.S.C. § 1251(a)(3). **Section 502(13)** of the Act defines “toxic pollutants” as “those pollutants, *or combinations of pollutants*, including disease-causing agents, which after discharge and upon exposure, ingestion, inhalation or assimilation into any organism, either directly from the environment *or indirectly by ingestion through food chains*, will, on the basis of information available to the Administrator,

cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunctions in reproduction) or physical deformations, in such organisms or their offspring.” 33 U.S.C. § 1362(13) (emphasis added). This broadly-worded definition allows EPA considerable leeway in determining what constitutes a toxic pollutant. The highlighted language would appear to allow the agency to consider the synergistic effects of multiple pollutants on heavily burdened communities, as well as the effects of bioaccumulation and increased exposure through high fish consumption.

Like other pollutants, toxic pollutants are primarily regulated through the technology-based standards discussed above. In addition, in **Section 307**, Congress designated a number of toxic pollutants and required the Administrator “from time to time” to add to or subtract from the list, taking into account “the toxicity of the pollutant, its persistence, degradability, the usual or potential presence of the affected organisms in any waters, the importance of the affected organisms, and the nature and extent of the effect of the toxic pollutant on such organisms.” 33 U.S.C. § 1317(a)(1); see 40 C.F.R. § 401.15. Pollutants on the list are subject to the BAT requirement and corresponding effluent limitations, “which may include a prohibition,” 33 U.S.C. § 1317(a)(2); and **Section 307(a)(4)** further requires the effluent limitations to “be at that level which the Administrator determines provides an ample margin of safety.” 33 U.S.C. § 1317(a)(4). Toxic effluent limitations are promulgated through a public notice-and-comment procedure, and must be reviewed and, if appropriate, revised every three years. 33 U.S.C. § 1317(a)(2)&(3).

Early in the Act’s history, Section 307’s “ample margin of safety” requirement was thought to grant EPA sweeping authority to regulate toxic pollutants or combinations of pollutants through health-based standards, including outright bans. See generally Oliver A. Houck, *The Regulation of Toxic Pollutants Under the Clean Water Act*, 21 ELR 10528 (1991) [hereinafter “Houck article”]. That authority was tested, and upheld, in a series of cases that had challenged EPA’s decision to ban PCBs and drastically reduce discharge limits for other toxics. *Environmental Defense Fund v. EPA*, 598 F.2d 62 (D.C. Cir. 1978) (PCBs); *Hercules, Inc. v. EPA*, 598 F.2d 91 (D.C. Cir. 1978). These rulings deferred to EPA’s analysis of the available scientific data and its assumptions in favor of protecting human health without consideration of economic factors. Houck article at 10533-34. However, other litigation targeting the scope and timetable for EPA’s toxics regulation resulted in a consent decree that in effect abandoned this health-based approach in favor of the current technology-based BAT requirement. *Id.* at 10535-36. Nevertheless, the Section 307 health-based authority “is still valid law,” and “remains a viable option for banning the discharge of toxic water pollutants.” Bradley C. Bobertz, *The Tools of Prevention: Opportunities for Promoting Industrial Pollution Prevention Under Federal Environmental Legislation*, 12 Va. Envtl. L.J. 1 (1992) [hereinafter “Bobertz”], at 5. It could be revived by EPA to address health risks to low-income communities and communities of color from specific toxic pollutants by listing those pollutants and establishing more stringent discharge standards or bans.

In addition, **Section 303(c)(2)** requires states to include all EPA-listed toxic pollutants in their review of impaired water bodies, and to develop “specific numerical criteria” for these pollutants where their presence “could reasonably be expected to interfere with those designated uses adopted by the State, as necessary to support such designated uses.” 33 U.S.C. § 1313(c)(2)(B). Absent such numerical criteria, the states must adopt criteria based on biological monitoring or assessment methods. *Id.* This section effectively requires toxic pollutants to be included in the TMDL calculations being made under Section 303(d), above. Thus, an EPA decision to expand the

toxics listings also would indirectly affect the stringency of water quality standards and TMDLs being developed at the state level. In addition, the option to use biological criteria enables methods like whole effluent testing, which has been called “the only [method] to date that even attempts to measure the cumulative effects of what is actually being discharged.” Houck article at 10558. This in turn could yield empirical data and standards that are more specifically tailored to heavily burdened communities.

Finally, **Section 304(l)** separately requires “individual control strategies” (ICSs) for toxic pollutants in areas where technology-based effluent limitations are insufficient to meet either the water quality standards or “that water quality which shall assure protection of public health, public water supplies, agricultural and industrial uses, and the protection and propagation of a balanced population of shellfish, fish and wildlife, and allow recreational activities in and on the water.” 33 U.S.C. § 1314(l)(1)(A). For each such toxic “hot spot,” the state must determine which point sources are discharging the toxic pollutants, develop specific toxic effluent limitations for those sources, and incorporate them into discharge permits. 33 U.S.C. § 1314(l)(1)(C)&(D); 40 C.F.R. § 123.46. The individual control strategies must be approved by EPA, which retains authority to promulgate them through a notice-and-comment procedure and to implement them if a state fails to do so or if the state proposal is deemed inadequate. 33 U.S.C. § 1314(l)(2)&(3). The control strategies also were to be reviewed annually, and if appropriate revised or expanded to include additional sources of pollution. 33 U.S.C. § 1314(m).

Here again, the ICS procedure for toxics – characterized as “a more focused process for setting TMDLs,” Houck article at 10548 – provides an opportunity to consider the concerns and needs of those communities most affected by toxic pollution, and to set standards accordingly. In practice, however, the ICSs have been criticized for their wide variability among the states, which has led to a “regionalization” of toxics standards that may provide as much opportunity for environmental inequity as for environmental equity. *Id.* at 10550-53. Since EPA retains oversight authority over ICSs through the annual review process, it could use this process to promote uniformity in their implementation.

D. Disposal of Sewage Sludge

Section 405 governs disposal of sewage sludge resulting from municipal waste treatment. 33 U.S.C. § 1345. Where use or disposal “would result in any pollutant from such sewage sludge entering the navigable waters,” it is subject to the standards and permit requirements of the Act. 33 U.S.C. § 1345(a)-(b). EPA must issue regulations that “specify factors to be taken into account in determining the measures and practices applicable to each such use or disposal.” 33 U.S.C. § 1345(d); see 40 C.F.R. Part 503. In addition, the 1987 amendments to the Act mandated specific regulations to address toxic pollutants found in sewage sludge.

Section 405(d)(2) requires EPA to “identify those toxic pollutants which, on the basis of available information on their toxicity, persistence, concentration, mobility, or potential for exposure, may be present in sewage sludge *in concentrations which may adversely affect public health or the environment*, and propose regulations specifying acceptable management practices for sewage sludge containing each such toxic pollutant and establishing numerical limitations for each such pollutant for each use identified,” and to review and update the list at least every two years. 33 U.S.C. § 1345(d)(2) (emphasis added). The management practices and numerical limits “shall be adequate to protect

public health and the environment from any reasonably anticipated adverse effects of each pollutant,” and EPA also may promulgate design or operational standards where numerical limits are not feasible. *Id.*

This health-based authority gives the agency extraordinary flexibility to address residual toxic pollutants in sewage sludge. EPA could use this authority to ensure that sludge disposal does not have a disproportionate impact on low-income communities or communities of color situated near disposal sites, or on sub-populations (such as small children) who may be at higher risk of exposure to disposed sludge or its runoff.

III. PERMITTING AND OTHER APPROVALS

As discussed in Part I above, the Clean Water Act establishes the ambitious goal of total elimination of both “conventional” and toxic discharges into the navigable waters of the United States. 33 U.S.C. § 1251(a)(1)&(3). The zero-discharge goal is directly reflected in the Act’s statutory presumption that all discharges are prohibited unless they meet the Act’s standards and obtain an appropriate permit. 33 U.S.C. § 1311(a). Permitting for pollutant discharges is carried out by EPA and authorized states and Tribes through the National Pollutant Discharge Elimination System. 33 U.S.C. § 1342. Permitting for dredge-and-fill activities is carried out by the U.S. Army Corps of Engineers, authorized states and Tribes, and EPA under Section 404 of the Act. 33 U.S.C. § 1344.

A. National Pollutant Discharge Elimination System

Under the National Pollutant Discharge Elimination System (NPDES), EPA and authorized states or Tribes may issue permits for discharges that conform to the Act’s multiple layers of technology-based, water-quality-based, and toxic effluent standards. In reviewing NPDES permit applications and issuing the permits, the agency has broad discretion to consider a variety of factors and to impose site-specific conditions that are deemed necessary to meet the standards and the other goals and requirements of the Act. The agency also has discretion to review, object to, and place conditions on state-issued NPDES permits that fail to meet these requirements. These authorities provide a variety of opportunities to further environmental justice.

Section 402(a)(1) of the Act provides that “the Administrator may, after opportunity for public hearing issue a permit for the discharge of any pollutant, or combination of pollutants, notwithstanding [the general discharge prohibition], upon condition that such discharge will meet either (A) all applicable requirements under [the standard-setting and discharge reporting provisions of the Act]. . .or (B) prior to the taking of necessary implementing actions relating to all such requirements, *such conditions as the Administrator determines are necessary to carry out the provisions of this chapter.*” 33 U.S.C. § 1342(a)(1) (emphasis added). In other words, the NPDES permit is a key tool that is to embody all the other requirements of the Act (Subsection (A)); and where those requirements have not yet been “implemented” through rule-making or other formal action, the Administrator retains discretion to apply them through case-by-case permit conditions (Subsection (B)). This latter provisional grant of authority has been described as “very generous,” Bobertz at 6, leading to speculation that EPA could use it to “implement” certain provisions of the Act by requiring permit conditions that address environmental justice concerns. Lazarus & Tai at 641-42; OGC 2000 Memorandum at 7.

In particular, it has been suggested that the agency could use **Section 402(a)(1)(B)** to fashion permit conditions based on its as-yet-unutilized Section 302(a) authority to impose additional water-quality-related effluent limitations where necessary to protect public health, public water supplies, and fisheries (see discussion in Part II, above). Lazarus & Tai at 642; OGC 2000 Memorandum at 7. These permit conditions could directly address environmental justice issues, such as targeting water pollutants of specific concern to low-income communities and communities of color, taking into account the higher fish consumption in certain areas, allowing for risk aggregation, or building community enforcement capacity. *Id.*

In addition, **Section 402(a)(2)** of the Act separately requires the Administrator to “prescribe conditions for such permits to assure compliance with the requirements of paragraph (1) of this subsection, including conditions on data and information collection, reporting, *and such other requirements as he deems appropriate.*” 33 U.S.C. § 1342(a)(2) (emphasis added). This provision clearly grants EPA discretion to place a wide array of reporting and disclosure conditions on NPDES permits, which could be more closely tailored to information relevant to environmental justice concerns.

Finally, even where EPA has delegated its permitting authority to the state or tribal level, **Section 402(d)** specifically authorizes the agency to review state-issued NPDES permits and to object in writing to the issuance of any permit “as being outside the guidelines and requirements of” the Act. 33 U.S.C. § 1342(d)(2)(B). Such an objection must detail “the reasons for such objection and the effluent limitations and conditions which such permit would include if it were issued by the Administrator,” *id.*, after which the state may request a public hearing on the objection and submit a revised permit. 33 U.S.C. § 1342(d)(4). If the state fails to request a hearing or to resubmit the permit, the Administrator may then issue the permit in accordance with the Act’s requirements. *Id.* EPA may waive its right of review at the time permitting authority is delegated to a state. 33 U.S.C. § 1342(e). Where it has not done so, this review process could provide an additional opportunity, and an additional forum, for incorporating environmental justice considerations into NPDES permits. (For a fuller discussion of delegated CWA authority, see Part IV, below.)

Under the permitting regulations, EPA or the states also must deny the issuance of a permit where necessary to enforce water-quality standards in impaired waters. The regulations provide that “no permit may be issued to a new source or a new discharger, if the discharge from its construction or operation will cause or contribute to the violation of water quality standards.” 40 C.F.R. § 122.4(i). Under this regulation, any potential new source in an impaired basin must show both that there is a remaining load allocation to accommodate the new discharge, and that all other dischargers in the basin are in compliance or on track to be in compliance with the water quality standards. *Id.* A similar provision governing interstate discharges was construed by the Supreme Court to allow EPA to set an absolute prohibition on any discharge that “effected an ‘actually detectable or measurable’ change in water quality.” *Arkansas v. Oklahoma*, 503 U.S. 91 (1992); see Houck book at 82 & 114 n. 66 (“the same result would seem to obtain for intrastate discharges.”). Enforcing this requirement, and shifting the burden of proof to permit applicants to show that their discharges will not affect water quality, could prove a significant driver for banning new sources from heavily impaired basins and for improving the existing conditions. See U.S. EPA, REPORT OF THE FEDERAL ADVISORY COMMITTEE ON THE TOTAL MAXIMUM DAILY LOAD (TMDL) PROGRAM 31 (U.S. Environmental Protection Agency, pub., EPA 100-R-98-006, July 28, 1998). It could prove

particularly relevant to low-income communities or communities of color whose watersheds are affected by multiple pollution sources.

In addition, under the regulations, even existing NPDES permits may be modified if there is new information that was not available at the time of permit issuance that “would have justified the application of different permit conditions at the time of issuance.” 40 C.F.R. § 122.62(a)(2). Such information could include new data demonstrating that a water body is in fact impaired and failing to meet water quality standards, or even the simple fact of a subsequent TMDL allocation. Houck book at 82. Thus, this section provides additional authority for ensuring that water quality standards in heavily impaired basins can be met.

B. Concentrated Animal Feeding Operations (CAFOs)

One subset of point sources under the NPDES program are concentrated animal feeding operations (CAFOs). These sources have become increasingly important in recent years, as hog and chicken feeding and processing operations have gotten ever larger and more concentrated. Houck book at 89. Such operations, and their actual and potential discharges, are of particular concern to the predominantly low-income, rural, and tribal communities where they tend to be situated. Under Clean Water Act regulations, all CAFOs over a certain size are treated as point sources and required to obtain a NPDES permit. 40 C.F.R. § 122.23 & app. B. Smaller operations can be included on a case-by-case basis if EPA or the state agency conducts an on-site inspection and determines that the operation “is a significant contributor of pollution to the waters of the United States.” 40 C.F.R. § 122.23(c)(1). The CAFO effluent guidelines in 40 C.F.R. Part 412 theoretically establish a zero-discharge requirement for permitted facilities, exempting only storm overflow and land application of wastes. 40 C.F.R. §§ 412.12, 412.13.

In response to criticism, some highly publicized fish kills from CAFOs, and litigation, EPA has issued a proposed rule to clarify and strengthen CAFO permitting requirements. Houck book at 89-91; see U.S. EPA Office of Wastewater Management, Animal Feeding Operations, at http://cfpub1.epa.gov/npdes/home.cfm?program_id=7 (last visited Nov. 13, 2001). But environmental justice advocates have long suggested that the agency could use its existing authority to step up permitting of large facilities, include smaller facilities on a case-by-case basis, and increase federal inspections that would trigger permitting and enforcement requirements at both the federal and state level. NATIONAL ENVIRONMENTAL JUSTICE ADVISORY COUNCIL, ENVIRONMENTAL JUSTICE IN THE PERMITTING PROCESS 30 (and transcript sections cited) (U.S. Environmental Protection Agency, pub., EPA 300-R-00-004, July 2000). These steps would help address the impact of CAFOs on low-income communities and communities of color.

C. Section 404 Dredge-and-Fill Permitting

Like pollutant discharges, dredge-and-fill activities that affect navigable waters are presumed illegal unless a permit is obtained under Section 404 of the Act: “material should not be discharged into the aquatic ecosystem, unless it can be demonstrated that such a discharge will not have an unacceptable adverse impact *either individually or in combination with known and/or probable impacts of other activities affecting the ecosystems of concern.*” 40 C.F.R. § 230.1(c) (emphasis added). Section 404 permits are issued by the U.S. Army Corps of Engineers under guidelines developed jointly by the Corps and EPA, but EPA retains veto power over permitting decisions. Section 404 and its accompanying

Corps and EPA regulations set out a detailed public notice-and-comment procedure, similar to environmental impact assessment, that requires consideration of siting issues, alternatives to the proposed project, and mitigation measures. *See generally* 33 C.F.R. Part 320, 40 C.F.R. Part 230.

Section 404(a) of the Act authorizes the Army Corps of Engineers to “issue permits, after notice and opportunity for public hearings for the discharge of dredged or fill material into the navigable waters at specified disposal sites.” 33 U.S.C. § 1344(a). In considering a permit application, the Corps first must conduct a “public interest review” that is “based on an evaluation of the probable impacts, *including cumulative impacts*, of the proposed activity and its intended use on the public interest.” 33 C.F.R. 320.4(a)(1) (emphasis added). The review consists of a case-by-case balancing of a long list of factors, which includes “conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people.” *Id.*

Several of these factors touch on environmental justice concerns. For example, the definition of “historic properties” expressly includes “Indian religious or cultural sites,” 33 C.F.R. § 320.4(e), and it has been suggested that the general “needs and welfare of the people” factor allows ample room for considering disproportionate impacts or other environmental justice issues. Hill & Targ at 36. In addition, the express requirement that cumulative impacts be considered could be especially important for communities whose watersheds are already severely impacted by dredge-and-fill projects or other kinds of activity.

Even where the Corps concludes that granting a permit is in the public interest, it still must meet EPA’s **Section 404(b)(1)** permitting guidelines. These guidelines provide that the permit may not be issued unless it can be shown that: (1) there are no “practicable alternatives” that would have less adverse ecological impact; (2) the discharge will not violate existing water quality or toxic effluent standards, or jeopardize threatened or endangered species; (3) the discharge will not cause “significant degradation” to the surrounding aquatic ecosystem, especially drinking water supplies, fisheries, and fish and wildlife habitat; and (4) all “appropriate and practicable steps” have been taken to minimize the discharge’s adverse effects. 40 C.F.R. § 230.10(a)-(d).

Here again, each of these factors could be read to include health and environmental issues relevant to low-income communities and communities of color. For example, the requirement that alternatives be considered could lead to consideration of other possible sites that are not already over-burdened or that already enjoy more environmental benefits. “Significant degradation” is specifically defined in terms of human health concerns, including exposure through the food chain. In addition, the minimization requirement appears to give broad authority to attach permit conditions or to require the permittee to take action to address a wide variety of adverse impacts. Cumulative impacts are specifically addressed in 40 C.F.R. § 230.11(g), which requires such impacts to be “documented and considered during the decision-making process concerning the evaluation of individual permit applications, the issuance of a General permit, and monitoring and enforcement of existing permits.”

Although the Corps of Engineers administers the Section 404 permitting program, EPA retains discretionary oversight. **Section 404(c)** authorizes the Administrator to prohibit, veto, or

restrict the issuance of a permit “whenever he determines, after notice and opportunity for public hearings, that the discharge of such materials into such area will have an unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas (including spawning and breeding areas), wildlife, or recreational areas.” 33 U.S.C. § 1344(c). EPA must consult with the Corps prior to exercising this authority, and must set forth its findings and reasons in writing. *Id.* Thus, the agency could apply the broad language of this provision to veto permits that may have a disproportionately high public health or environmental impact on low-income communities and communities of color, either directly or by contaminating local fisheries. OGC 2000 Memorandum at 8.

Likewise, when Section 404 permitting authority has been delegated to the state level, EPA still retains authority over permits. **Section 404(j)** authorizes the Administrator to review state-issued dredge-and-fill permits and, after consulting with the Corps and the U.S. Department of Fish and Wildlife, to object in writing to the issuance of any permit “as being outside the guidelines and requirements of” Section 404. 33 U.S.C. § 1344(j). Such an objection must “contain a statement of the reasons for such objection and the conditions which such permit would include if it were issued by the Administrator,” after which the state may request a public hearing on the objection and submit a revised permit. *Id.* If the state fails to request a hearing or resubmit the permit, the Administrator may then issue the permit in accordance with the Act’s guidelines and requirements. *Id.* As with EPA review of state-issued NPDES permits, this process could provide an additional opportunity for incorporating environmental justice considerations into Section 404 permits. (For a fuller discussion of delegated Section 404 authority, see Part IV, below.)

IV. DELEGATION OF PROGRAMS TO STATES AND TRIBES

Like other major pollution control statutes, the Clean Water Act allows EPA to delegate significant permitting, monitoring, and enforcement responsibility to the state or tribal level. This is consistent with the Act’s general policy “to recognize, preserve, and protect the primary responsibilities and rights of States to prevent, reduce, and eliminate pollution, to plan the development and use (including restoration, preservation, and enhancement) of land and water resources, and to consult with the Administrator in the exercise of his authority under this chapter.” 33 U.S.C. § 1251(b). At the same time, the Act’s zero-discharge goals are clearly stated in terms of a “national policy,” 33 U.S.C. § 1251(a)(1)&(3) (emphasis added); and another clear goal is to “encourage the enactment of improved and, so far as practicable, *uniform* State laws relating to the prevention, reduction, and elimination of pollution.” 33 U.S.C. § 1253(a) (emphasis added). Further, states are prohibited from adopting any standard, effluent limitation, or other requirement that is less stringent than federal requirements. 33 U.S.C. § 1370. As a result, even though the vast majority of states have received delegated authority, EPA retains its authority to ensure strict and uniform implementation and enforcement of its standards and programs – a key environmental justice goal. This is reflected in the delegation provisions of the Act’s two major permitting programs, NPDES and Section 404.

A. National Pollutant Discharge Elimination System

Each state may request that EPA delegate authority to it to administer the NPDES program upon a showing that the laws of the state provide “adequate authority” to carry out the program, including authority to revoke permits, require inspections, monitoring, and reporting, and to assess

penalties for violations. 33 U.S.C. § 1342(b). State programs must also provide for public participation, including judicial review of permit approvals, 40 C.F.R. § 123.30, citizen intervention in enforcement actions, and state agency response to citizen complaints. 40 C.F.R. § 123.27(d). Tribes also may request and receive delegated authority after making a similar showing, and after a further EPA finding that the Tribe is “reasonably expected to be capable” of carrying out the Act. 33 U.S.C. § 1377(e).

EPA must conduct a public hearing on the delegation decision “if interest is shown,” and consider and respond to any comments received during a notice-and-comment period. 40 C.F.R. §§ 123.1(e), 123.61. Unless it concludes that adequate authority does not exist, EPA must approve the state’s or Tribe’s application, and must then suspend federal issuance of NPDES permits in that jurisdiction. 33 U.S.C. § 1342(c)(1). While delegation of authority suspends EPA’s issuance of permits within the jurisdiction, the agency’s enforcement authority continues to operate in parallel with the state’s or Tribe’s. 33 U.S.C. § 1342(i). Moreover, any state renewals or modifications of existing permits generally may not contain effluent limitations that are less stringent than those issued by EPA. 33 U.S.C. § 1342(o)(1).

Once authority has been delegated, EPA still exercises oversight. **Section 402(c)(3)** provides that “[w]henver the Administrator determines after public hearing that a State is not administering a program approved under this section in accordance with requirements of this section, he shall so notify the State and, if appropriate corrective action is not taken within a reasonable time, not to exceed ninety days, the Administrator shall withdraw approval of such program.” 33 U.S.C. § 1342(c)(3). Grounds for withdrawal include “[r]epeated issuance of permits which do not conform to the requirements” of the Act, “[f]ailure to comply with the public participation requirements,” and failure to enforce the program adequately. 40 C.F.R. §§ 123.63(a)(2)&(3). Similarly, 40 C.F.R. § 123.63(a)(5) authorizes EPA to revoke a state’s delegated authority if the state fails to develop, implement, or enforce water quality standards under Section 303(c) and TMDLs under Section 303(d).

Though rarely invoked, this continuing oversight authority underscores that EPA retains at least the threat of exercising its discretion to hold individual state permitting programs to a uniform federal standard of water-quality protection, and potentially to implement other related federal mandates and goals, such as Title VI of the Civil Rights Act or Executive Order 12898 on environmental justice.

Equally important, EPA’s power to completely revoke a state’s delegated authority implies a number of lesser-included powers and sanctions, some of which are expressly granted by the Act. These include the ongoing authority to review, object to, and place conditions on state-issued NPDES permits under **Section 402(d)** (discussed in Part III, above); the authority to assume a state’s enforcement responsibilities in case of a “widespread” failure to enforce under **Section 309(a)(2)** (discussed in Part V, below); and the possibility of withholding federal funding or technical assistance under other sections of the Act to states whose permitting programs are not in compliance with national standards (discussed in Part VII, below).

B. Section 404 Dredge-and-Fill Permitting

Like the NPDES program, the Section 404 dredge-and-fill permitting program may be delegated to the state level, through a similar process and showing of “adequate authority” to issue, implement, and enforce permits. One major difference is that EPA’s decision whether to delegate must be made in consultation with the Army Corps of Engineers and the Fish and Wildlife Service. 33 U.S.C. §§ 1344(g)&(h). As with NPDES delegation, EPA’s Section 404 enforcement authority continues to operate in parallel with the state’s or Tribe’s. 33 U.S.C. § 1344(n).

Section 404(i) provides that “[w]henver the Administrator determines after public hearing that a State is not administering a program approved under . . . this section, in accordance with this section. . . the Administrator shall so notify the State, and, if appropriate corrective action is not taken within a reasonable time,” EPA may withdraw approval of the state program and return primary permitting authority to the Corps of Engineers. 33 U.S.C. § 1344(i). Here again, revocation or even the threat of revocation is rarely used, but may provide leverage for ensuring that uniform standards are implemented and enforced through state dredge-and-fill permitting programs. In addition, as discussed in Part III, above, **Section 404(j)** authorizes EPA to conduct an ongoing review of state-issued permits on a case-by-case basis, and to object to and impose conditions on the issuance of individual dredge-and-fill permits. 33 U.S.C. § 1344(j).

V. ENFORCEMENT

Section 309 of the Clean Water Act grants EPA broad enforcement authority, including the power to issue administrative orders, to bring civil actions against violators, and to assess stringent criminal, civil, and administrative penalties. 33 U.S.C. § 1319(a)-(g). The Army Corps of Engineers has primary enforcement authority over Section 404, but that does not exclude EPA from undertaking enforcement action. 33 U.S.C. §§ 1344(n)&(s). Where primary enforcement authority under the Act has been delegated to a state, EPA must either take action against any violations it discovers, or notify the state and pursue appropriate enforcement action if the state fails to do so. 33 U.S.C. § 1319(a)(1). If EPA finds permit violations that “are so widespread that such violations appear to result from a failure of the State to enforce such permit conditions or limitations effectively,” it must notify the state, give public notice, and, if the situation is not corrected within thirty days, assume federal enforcement responsibility until the state has satisfied EPA that it will enforce the program. 33 U.S.C. § 1319(a)(2).

Section 309(d) requires that civil penalties be determined according to “the seriousness of the violation or violations, the economic benefit (if any) resulting from the violation, any history of such violations, any good-faith efforts to comply with the applicable requirements, the economic impact of the penalty on the violator, *and such other matters as justice may require.*” 33 U.S.C. § 1319(d) (emphasis added). **Section 309(g)** contains similar language with regard to administrative penalties, also including “such other matters as justice may require.” 33 U.S.C. § 1319(g)(3).

Section 504 allows EPA to bring a suit for injunction or to take other appropriate actions “upon receipt of evidence that a pollution source or combination of sources is presenting an imminent and substantial endangerment to the health of persons or to the welfare of persons where such endangerment is to the livelihood of such persons.” 33 U.S.C. § 1364. This authority could allow the agency to take emergency actions in communities where a combination of pollutants, or a

specific incident, reaches the “imminent and substantial endangerment” threshold, as defined by EPA practice under the Act and other pollution statutes.

Section 505 of the Act authorizes citizen suits, with procedures comparable to those found in the other main pollution control statutes. 33 U.S.C. § 1364.

For a fuller discussion of statutory enforcement authorities for advancing environmental justice, see Chapter 5.

VI. INFORMATION GATHERING (RESEARCH, MONITORING, AND REPORTING)

A. Research

Section 304 authorizes EPA to conduct a broad array of research programs to further the purposes of the Act. **Section 304(a)** requires the Administrator to, “in cooperation with other Federal, State, and local agencies, conduct and promote the coordination and acceleration of, research, investigations, experiments, training, demonstrations, surveys, and studies relating to the causes, effects, extent, prevention, reduction, and elimination of pollution.” 33 U.S.C. § 1254(a)(1). In doing so, the agency must “encourage, cooperate with, and render technical services to pollution control agencies and other appropriate public or private agencies, institutions, and organizations, and individuals, including the general public.” 33 U.S.C. § 1254(a)(2). In addition to this general research authority, EPA is specifically required to “conduct research on, and survey the results of other scientific studies on, the harmful effects on the health or welfare of persons caused by pollutants.” 33 U.S.C. § 1254(c). This authority could be used to study specific health impacts on communities of color or low-income communities.

Further, **Section 304(l)** specifically requires EPA to develop “the latest scientific knowledge available in indicating the kind and extent of effects on health and welfare which may be expected from the presence of pesticides in the water in varying quantities,” and to “revise and add to such information whenever necessary to reflect developing scientific knowledge.” 33 U.S.C. § 1254(l). Similarly, **Section 304(p)** mandates “a comprehensive study and research program to determine new and improved methods and the better application of existing methods of preventing, reducing, and eliminating pollution from agriculture, *including the legal, economic, and other implications of the use of such methods.*” 33 U.S.C. § 1254(p) (emphasis added). If these mandates have ongoing appropriations authority in the EPA budget, they could be used to research pesticide and water pollution issues that affect farmworkers and others living in agricultural communities.

Section 305(b) requires the states to report to EPA on water quality within the state and the progress being made toward water quality goals, including “the economic and social benefits of such achievement.” 33 U.S.C. § 1315(b)(1)(D)(iii). The reports are prepared biennially, and EPA then must transmit them to Congress “together with an analysis thereof.” 33 U.S.C. § 1315(b)(2). EPA’s guidelines for the reports could require states to collect and report data on disproportionate water quality impacts within the state, and EPA’s analysis could consider these issues on a national scale.

B. Monitoring

Section 308(a) of the Act states that “[w]henever required to carry out the objective of this chapter. . . the Administrator shall require the owner or operator of any point source to (i) establish and maintain such records, (ii) make such reports, (iii) install, use, and maintain such monitoring equipment or methods (including where appropriate, biological monitoring methods), (iv) sample such effluents (in accordance with such methods, at such locations, at such intervals, and in such manner as the Administrator shall prescribe), and (v) provide such other information as he may reasonably require.” 33 U.S.C. § 1318(a)(A). The section also grants “the Administrator or his authorized representative” a right of entry to the premises to access and copy the records, inspect monitoring equipment, and take effluent samples, 33 U.S.C. § 1318(a)(B), and this authority also may be delegated to the states. 33 U.S.C. § 1318(c). As discussed in Part III, above, monitoring and reporting requirements may be incorporated as conditions on NPDES permits. 33 U.S.C. § 1342(a). These broad grants of authority have been upheld in a wide variety of contexts, and allow EPA to require production of information it deems necessary to further environmental justice goals.

C. Reporting

Section 308(b) requires that “any records, reports, or information obtained under this section (1) shall, in the case of effluent data, be related to any applicable effluent limitations, toxic, pretreatment, or new source performance standards, and (2) shall be available to the public.” 33 U.S.C. § 1318(b). There is an exception for information that can be demonstrated to be linked to trade secrets, but that exception does not apply to effluent data, nor to information relevant to enforcement of the Act. 33 U.S.C. § 1318(b)(2). Reporting, including reporting of monitoring data, also may be incorporated as a condition on NPDES permits. 33 U.S.C. § 1342(a)(2). These disclosure requirements could be tailored to make such information accessible to affected low-income communities and communities of color.

VII. FINANCIAL ASSISTANCE

Section 105 of the Act provides EPA general authority to make grants for research and development. 33 U.S.C. § 1255. These include grants for demonstration projects for improved technologies to reduce storm water, municipal and industrial discharges, and agricultural pollution, and each of these subsections establishes a goal of “preventing, reducing, and eliminating pollution.” *Id.* Assuming continuing appropriations, this authority could be used to target sources or substances of concern to low-income communities and communities of color.

Section 106 allows EPA to make grants to the states “to assist them in administering programs for the prevention, reduction, and elimination of pollution,” 33 U.S.C. § 1256(a), and requires such funding to be withheld from states that fail to create adequate water quality monitoring and reporting procedures. 33 U.S.C. § 1256(e)(1). A portion of such funding could be earmarked for the purpose of addressing environmental justice issues.

Similarly, **Section 319** addresses nonpoint sources of water pollution, and requires the states to prepare management plans that identify and outline measures for controlling nonpoint sources. 33 U.S.C. § 1329. Once these plans have been approved by EPA, **Section 319(h)** authorizes the agency to make grants to the states to implement the plans. 33 U.S.C. § 1329(h). In deciding among grant applicants, EPA may give priority to “particularly difficult or serious nonpoint source pollution

problems,” which could include environmental justice issues such as low-income communities’ exposure to pesticides, nitrate contamination in rural areas, and so on. 33 U.S.C. § 1329(h)(5)(A).

Section 405(g) authorizes EPA to conduct or initiate research and demonstration projects related to “safe and beneficial management and use” of sewage sludge, and to provide grants for this purpose to state pollution control agencies, public and nonprofit organizations, and individuals. 33 U.S.C. § 1345(g). As discussed in the standard-setting section above, this authority could be used to target the impacts of sludge disposal on low-income communities or communities of color, or other heavily burdened or sensitive populations.

In addition, the Act creates a number of regional programs that provide financial and technical assistance for research and demonstration projects in significant water bodies and other areas. These include the Great Lakes (**Sections 108 & 118**), Alaskan villages (**Section 113**), Lake Tahoe (**Section 114**), the Hudson River (**Section 116**), Chesapeake Bay (**Section 117**), Long Island Sound (**Section 119**), and Lake Champlain (**Section 120**). 33 U.S.C. §§ 1258, 1263, 1264, 1266-1270. To the extent that EPA has continuing appropriations for these programs, the agency could target research and funding to specific environmental justice issues in these regions.

CHAPTER 11

CLEAN AIR ACT (“CAA”)

42 U.S.C. § 7401-7671q

The Clean Air Act (CAA) regulates air emissions from both stationary sources, such as power plants, and mobile sources, such as automobiles, in order to protect public health and decrease air pollution. As enacted in 1970, the CAA promoted emissions reductions through the promulgation of air quality standards that set the levels of individual pollutants that could be emitted to the air without endangering the public. The CAA required EPA to set these standards, known as the national ambient air quality standards (NAAQS), for six criteria air pollutants. The CAA also required EPA to list and regulate toxic pollutants. To help implement and enforce the standards, EPA authorizes state-run implementation programs that meet certain minimum requirements. In addition, although the NAAQS program is still a top priority, Congress has amended the CAA several times to include new permitting and emissions trading programs and other CAA programs, such as the acid rain and stratospheric ozone programs.

The health effects caused by air pollution and the maintenance of air quality that does not endanger public health are important environmental justice issues. Disproportionate numbers of people in low-income communities and communities of color live in urban environments with high levels of air pollution. Exposure to air pollution may trigger or cause adverse health effects and may explain why respiratory illnesses, such as asthma and bronchitis, particularly affect low-income communities and communities of color. *See* U.S. EPA Region 7, *Asthma, Air Quality, and Environmental Justice: EPA’s Role in Asthma Education and Prevention*, at <http://www.epa.gov/region07/programs/artd/air/quality/asthma.htm> (last visited Nov. 7, 2001); *see also* U.S. EPA, *ENVIRONMENTAL EQUITY: REDUCING RISKS TO ALL COMMUNITIES* 14 (1992). The Clean Air Act contains authorities for addressing environmental justice issues through standard setting, permitting, enforcement and, in some instances, delegation of authority to states. The discussion of statutory authorities presented in this chapter is intended to provide the public with a foundation for further inquiry into the political, technical, legal and other considerations involved in pursuing action to address environmental justice issues under a particular area of authority.

Part I of this chapter examines the CAA goal of protecting public health and welfare and how this goal could support efforts to address public health in low-income communities and communities of color. Part II discusses EPA’s standard setting and rule-making authority under the Act, including national ambient air quality standards, nonattainment designations, new performance standards, national emission standards for hazardous air pollutants, and mobile source standards. Part III discusses EPA’s permitting authority under the CAA, focusing on Title V operating permits, new source review permits, prevention of significant deterioration permits, and the acid deposition and sulfur dioxide allowance trading program. Part IV addresses EPA’s delegation of CAA regulatory authority to state governments, examining both the specific standards for delegated CAA programs and EPA’s oversight of delegated programs. Finally, Parts V-VII discuss opportunities for advancing environmental justice through the CAA’s enforcement, information gathering, and financial assistance provisions.

I. GENERAL PROVISIONS

A. Public Health and Welfare

Congress intended the CAA to “protect and enhance the quality of the Nation’s air resources so as to promote the public health and welfare and the productive capacity of its populations.” 42 U.S.C. § 7401(b)(1). The legislative history of this provision, **Section 101(b)**, shows that Congress found public regulation of air resources to be necessary, since air pollution contributes to many diseases affecting millions of citizens. H. Rep. No. 728, 1967 U.S.C.C.A.N. 1938, 1941-43 (1967) [hereinafter “H. Rep. No. 728”]. Moreover, Congress recognized that thousands of different air pollutants are emitted every day, and exposure to this mix of pollutants can produce more adverse health effects than exposure to each of the individual pollutants. S. Rep. No. 101-228, 1990 U.S.C.C.A.N. 3388 (1990) [hereinafter “S. Rep. No. 101-228”]. Concern for public health is a recurring theme throughout the CAA, and this policy provision may provide some general authority for EPA to use the Act to address the health impacts of air pollution on communities that are disproportionately affected or subject to multiple sources and types of pollution.

Congress recognized that air pollution “causes, contributes to, or aggravates a long list of diseases and dysfunction – chronic bronchitis, lung cancer, nervous disorders, and heart disease.” S. Rep. No. 101-228. Early legislative history contemplated the need to address the impact of air pollution on individuals suffering from such diseases. H. Rep. No. 728. In recognizing the need to protect such individuals, Congress intended the CAA’s public health protection to include protection of those citizens more prone to respiratory diseases. In *American Lung Association v. EPA*, 134 F.3d 388 (D.C. Cir. 1998), the D.C. Circuit recognized that the Act requires such protection, holding that national ambient air quality standards “must protect not only average healthy individuals, but also ‘sensitive citizens’ – children, for example, or people with asthma, emphysema, or other conditions rendering them particularly vulnerable to air pollution.” *Id.* at 388-89.

The effects of pollution on sensitive populations has been an ongoing concern of low-income communities and communities of color, and it has been argued that the CAA’s public health and welfare provisions and the *American Lung Association* decision can be utilized to further environmental justice objectives. See Barry E. Hill & Nicholas Targ, *The Link Between Protecting Natural Resources and the Issue of Environmental Justice*, 20 B.C. ENVTL. AFF. L. REV. 1 (2000). Although the *American Lung Association* decision construes “public health” in the context of Section 109’s authority to set national ambient air quality standards, the decision and the Act’s legislative history provide support for the argument that public health provisions found elsewhere in the CAA also must contemplate sensitive communities. EPA could further environmental justice by attempting to utilize the Act’s various public health provisions to protect sensitive populations.

B. Advisory Committees

CAA **Section 117(b)** states that EPA shall, “to the maximum extent practicable within the time provided, consult with appropriate advisory committees, independent experts, and Federal departments and agencies” prior to issuing air quality criteria, hazardous air pollutant lists, standards, or regulations. 42 U.S.C. § 7417(b). **Section 117(a)** states that “committee members shall include, but not be limited to, persons who are knowledgeable concerning air quality from the standpoint of health, welfare, economics or technology.” 42 U.S.C. § 7416(a). This requirement to include persons who are knowledgeable about public health can be interpreted as authority to appoint committee members from low-income communities and communities of color with first-hand knowledge of

health impacts, or others who have public health backgrounds specifically focused on cumulative impacts, synergistic effects, and other environmental justice issues.

II. STANDARD SETTING/RULE-MAKING

The CAA requires EPA to promulgate numerous standards to control or prohibit emissions of pollutants into the air. These standards address various pollutants and multiple sources of such emissions. For example, the CAA regulates particulate matter emitted from buses, wood smoke emissions from home heating, sulfur dioxide emissions from electric utility plants, and carbon monoxide emissions from automobiles. In setting many of these standards, the Act requires EPA to protect the public health and welfare. As discussed above in Part I, these standard setting activities provide EPA with an opportunity to consider and protect the health concerns of sensitive populations. This Part discusses the key standard setting programs in the CAA and the authorities they provide to promote environmental justice: (a) national ambient air quality standards; (b) nonattainment designation; (c) new source performance standards; (d) national emissions standards for hazardous air pollutants; (e) urban area source regulation; (f) mobile source standards; and (g) hazardous substance accident prevention standards.

A. National Ambient Air Quality Standards (NAAQS)

The NAAQS establish levels of contamination from several pollutants that may not be exceeded in the ambient air. The NAAQS represent the levels of pollution in the ambient air that research indicates will not harm individuals who are particularly sensitive to pollutants. The Act authorizes EPA to adopt both primary and secondary NAAQS based on air quality criteria. The existing NAAQS address particulate matter, sulfur dioxide, nitrogen oxides, carbon monoxide, ozone, lead, and volatile organic compounds.

To establish NAAQS, **Section 108(a)** requires EPA to publish and revise air quality criteria for an air pollutant. 42 U.S.C. § 7408(a)(1)-(2). Air quality criteria shall reflect the “latest scientific knowledge useful in recognizing identifiable effects on public health or welfare that may be expected from that pollutant’s presence in the ambient air in varying quantities.” 42 U.S.C. § 7408(2). In addition, the criteria for an air pollutant, “to the extent practicable, must include: (1) variable factors which of themselves or in combination may alter a pollutant’s effects on public health and welfare; (2) the types of air pollutants which, when present in the atmosphere, may interact with such pollutants to produce an adverse effect on public health or welfare; and (3) any known or anticipated adverse effects on welfare.” 42 U.S.C. § 7408(a)(2).

This broad statutory language provides EPA with authority to consider a range of environmental justice concerns – risks to sensitive or vulnerable populations, unique exposure pathways, etc. – in determining the effect of pollution levels on public health and welfare. See Richard Lazarus & Stephanie Tai, *Integrating Environmental Justice into EPA Permitting Authority*, 26 *ECOL. L.Q.* 617, 632 (1999) [hereinafter “Lazarus & Tai”]. Also, because a pollutant’s effect on public health and welfare can be altered by other pollutants in the atmosphere, EPA could potentially use Section 108 authority to consider the synergistic effects of multiple pollutants on public health and welfare.

Section 109 requires EPA to prescribe primary and secondary NAAQS. 42 U.S.C. § 7409. Primary NAAQS are the “standards the attainment and maintenance of which in the judgment of the Administrator, based on such criteria and allowing an adequate margin of safety, are requisite to protect the public health.” 42 U.S.C. § 7409(b)(1). Secondary NAAQS are intended to protect the public welfare from any known or anticipated adverse effects from the presence of the listed air pollutants in the air. 42 U.S.C. § 7409(b)(2). At least every five years after 1980, EPA must complete a review of the Section 108 air quality criteria and the NAAQS promulgated thereunder, and must make such revisions or adopt new NAAQS, as appropriate. 42 U.S.C. § 7409(d)(1). Under the regulations, states and Tribes can establish ambient air quality standards that are more stringent than the national standard. 40 C.F.R. § 50.2(d).

As noted in Part I, above, the *American Lung Association* decision held that NAAQS “must protect not only average healthy individuals, but also ‘sensitive citizens’ – children, for example, or people with asthma, emphysema, or other conditions rendering them particularly vulnerable to air pollution.” 134 F.3d at 388-89. In promulgating NAAQS or in revising the air quality criteria for the NAAQS every five years, EPA can promote environmental justice by considering the impacts of air pollutants on those who are more sensitive due to asthma or other illnesses, or due to factors such as poor nutrition.

Moreover, Section 109 requires that the NAAQS allow an “adequate margin of safety” to protect public health. In *Lead Industries Association v. Environmental Protection Agency*, 647 F.2d 1130 (D.C. Cir. 1980), the D.C. Circuit held that in authorizing EPA to promulgate NAAQS, Congress “specifically directed the Administrator to allow an adequate margin of safety to protect against effects which have not yet been uncovered by research and effects whose medical significance is a matter of disagreement.” 647 F.2d at 1154. Thus, “Congress directed the Administrator to err on the side of caution in making the necessary decisions” required in setting NAAQS. *Id.* at 1155. Although some studies have demonstrated connections between air pollution and adverse health effects in low-income communities and communities of color, all of the direct, synergistic, and long-term effects on such communities may not be known for many years. Considering this uncertainty, the requirement for an adequate margin of safety gives EPA authority to err on the side of caution by setting NAAQS to address risks to communities of color and low-income communities, even where medical or scientific uncertainty exists.

In addition, **Section 109(b)(2)** requires secondary NAAQS to protect the public welfare. The Act states that “all language that refers to effects on welfare includes, but is not limited to effects on soils, water, crops, vegetation, manmade materials, animals, wildlife, weather, visibility, and climate, damage to and deterioration of property, and hazards to transportation, as well as effects on economic values and on personal comfort and well being, whether caused by transformation, conversion, or combination with other air pollutants.” 42 U.S.C. § 7602(h). Residents of low-income communities and communities of color have stated that the disproportionate amount of industrial and commercial facilities in their communities overburdens resources and results in excess noise, traffic, and accompanying psychological stress. All of these factors impact the personal comfort and well being of the community. Thus, under Section 109(b), EPA could potentially evaluate, address, and set secondary NAAQS intended to decrease these effects in such communities.

Section 108(g) states that the “Administrator may assess the risks to ecosystems from exposure to criteria air pollutants (as identified by the Administrator in the Administrator’s sole

discretion).” 42 U.S.C. § 7408(g). Although the CAA apparently does not define “ecosystem,” it could conceivably extend to areas of impact on low-income communities and communities of color. For instance, many in both rural and urban areas rely on subsistence fishing and hunting. This provision authorizes EPA to assess ecosystems that support such practices and to set a NAAQS based in part on information about exposure of these communities.

B. Nonattainment Designation

EPA designates states and areas as nonattainment, attainment, or unclassifiable areas for each criteria pollutant. Each area designated nonattainment for ozone can be further classified as a marginal area, moderate area, serious area, severe area, or an extreme area. 42 U.S.C. § 7511(a). Likewise, carbon monoxide or particulate matter nonattainment areas can be classified as moderate or serious areas, and each classification subjects the nonattainment area to required control measures. Once EPA designates an area “nonattainment” with respect to any criteria pollutant, the agency sets a date by which the area must reach attainment. The agency shall then determine whether the area attains the NAAQS by that date. Areas that do not meet the NAAQS are subject to more stringent provisions that must be incorporated within that area’s state implementation plan (SIP). (See the discussion of SIPs in Part V, below.) Within one year after EPA publishes the notice of failure to reach attainment, each state containing a nonattainment area must submit a revision to the SIP so that the relevant NAAQS will be met.

Section 182(a) requires each state in which a marginal area is located to submit a revised inventory of actual emissions from all sources in the area every three years until the area is redesignated “attainment.” 42 U.S.C. § 7511a(a)(3). **Section 182(b)** requires moderate areas to make the same submission. 42 U.S.C. § 7511a(b). **Section 182(c)** requires states in which all or part of a serious area is located to include provisions within its SIP to adopt and implement a program “to improve monitoring for ambient concentrations of ozone, oxides of nitrogen, and volatile organic compounds.” 42 U.S.C. § 7511a(c)(1). Each SIP for the area “shall contain measures to improve the ambient monitoring of such air pollutants.” 42 U.S.C. § 7511a(c)(1). **Sections 182(d) and (e)** require a state with a severe or an extreme area to make the same revisions to its SIP. 42 U.S.C. § 7511a(d)-(e). These requirements could be used to generate and disseminate data of interest to low-income communities and communities of color within these nonattainment areas.

C. New Source Performance Standards (NSPS)

The New Source Performance Standards set performance standards for new stationary sources of air pollution. EPA defines NSPS as “a standard for emission of air pollutants which reflects the degree of emission limitation achievable through application of the best system of emission reduction which (taking into account the cost of achieving such reduction, any non-air quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated.” 42 U.S.C. § 7411(a)(1). The NSPS process begins when EPA publishes a list of categories of stationary sources that cause or contribute significantly to air pollution. EPA must then enact regulations establishing federal emissions limitations for the industrial categories or subcategories of sources. EPA must review and revise these standards of performance every eight years. States must submit to EPA a plan for implementing and enforcing the EPA-enacted standards of performance for new sources within their jurisdiction. A source is

subject to the NSPS if its construction or modification was commenced after the publication of the proposed applicable NSPS.

1. Stationary Sources in General

Section 111(b) requires EPA to “list the categories of stationary sources that cause or contribute significantly to air pollution that may be reasonably anticipated to endanger public health or welfare.” 42 U.S.C. § 111(b)(1)(A). Similarly, in determining priorities for promulgating standards for major stationary sources, EPA must consider the extent to which each pollutant may reasonably be anticipated to endanger public health or welfare. 42 U.S.C. § 111(f)(2)(B). EPA can promote environmental justice by considering whether certain stationary sources impact communities of color or low-income communities in particular, and by considering fully the health impacts of the emissions from those sources.

Section 111(j) allows any person proposing to own or operate a new source to request an EPA waiver from the new source performance standards with respect to any air pollutant, to encourage the use of an innovative technological system or systems of continuous emission reduction. 42 U.S.C. § 7411(j)(1)(A). A waiver will be granted if EPA determines that the owner or operator of the proposed source has demonstrated that “the proposed system will not cause or contribute to an unreasonable risk to public health, welfare, or safety in its operation, function, or malfunction.” 42 U.S.C. § 7411(j)(1)(A)(iii). In addition to the reference to public health and welfare, which allows consideration of a broad range of impacts on low-income communities and communities of color, the provision states that the proposed system must not “contribute to” unreasonable risk to public health and welfare. This language could allow EPA to consider cumulative impacts when addressing the health risks to a community. *See Lazarus & Tai at 634.*

Under **Section 111(g)**, a governor can petition EPA to add a category of stationary sources to the list. 42 U.S.C. § 111(g)(2). If the category contributes significantly to air pollution that may endanger public health or welfare, or if a new technology renders the current standard of performance inadequate, EPA must list the category in the regulations. *Id.* Although states have the authority and responsibility to petition EPA to add categories, EPA can consider whether the category is of particular concern to low-income communities and communities of color when granting or denying a petition.

2. Solid Waste Incineration

Section 129 requires EPA to establish performance standards under Section 111 for each category of solid waste incineration unit. 42 U.S.C. § 7429(a)(1). **Section 129(a)(3)** states that such standards shall be based on “methods and technologies for removal or destruction of pollutants before, during, or after combustion, and shall incorporate for new units siting requirements that minimize, on a *site specific basis*, to the maximum extent practicable, potential risks to public health and the environment.” 42 U.S.C. § 7429(a)(3) (emphasis added). This provision gives EPA authority to establish a range of siting requirements designed to ensure that potential health risks to low-income communities and communities of color from solid waste incinerator air emissions are minimized, including consideration of cumulative impacts and meaningful community participation procedures. *See Lazarus & Tai at 632.*

As part of the performance standards for solid waste incineration units, CAA **Section 129(c)** requires EPA to promulgate regulations requiring the owner or operator of each unit to: (1) monitor emissions “at a point at which such emissions are emitted into the ambient air . . . and at such other points as necessary to protect public health and the environment;” (2) monitor “such other parameters relating to the operation of the unit and its pollution control technology as the Administrator determines are appropriate;” and (3) report the results of such monitoring. 42 U.S.C. 7429(c). The regulations must address the form and frequency of monitoring reports, and must require that any monitoring reports or test results indicating the exceedance of any standard “be reported separately and in a manner that facilitates review for purposes of enforcement actions.” *Id.* Copies of monitoring results must be maintained on file at the facility and be made available for inspection and copying by interested members of the public during business hours. *Id.* These provisions could be used to ensure that monitoring data is available to affected communities.

D. National Emission Standards for Hazardous Air Pollutants (NESHAPs)

The Clean Air Act requires EPA to list the categories of sources of certain specified hazardous air pollutants (HAPs). These categories are then divided into major sources and area sources. Major sources are those stationary sources that emit up to ten tons per year of any one HAP or 25 tons per year of any combination of HAPs. Area sources are any stationary sources that are not a major source or a motor vehicle. For the categories and subcategories that EPA lists, the agency must establish emissions standards, known as NESHAPs, for each category of major source and area source. Regulation of HAPs is especially important for protection of public health in communities that are exposed to air pollution from multiple sources.

Section 112(c)(3) requires EPA to list each category or subcategory of area sources that the agency “finds presents a threat of adverse effects to human health or the environment (by such sources or in the aggregate) warranting regulation under this section.” 42 U.S.C. § 7412(c)(3). Thus, EPA could take into account aggregate impacts when identifying and listing area sources of hazardous air pollution emissions.

Section 112(d) requires EPA to promulgate regulations establishing standards for each category or subcategory of major sources and area sources of HAPs listed under CAA §112(c). 42 U.S.C. § 7412(d)(1). Such standards are known as maximum achievable control technology (MACT) standards. MACT standards must require the maximum degree of reduction in emissions of HAPs that EPA determines is feasible for new or existing sources or for new categories, taking into consideration the cost of such emissions reduction and any non-air quality health and environmental impacts and energy requirements., 42 U.S.C. § 7412(d)(2). This provision gives EPA authority to consider a potentially broad range of health and environmental impacts. The National Environmental Justice Advisory Council has suggested that the agency incorporate its Urban Air Strategy and related environmental justice goals (See Section II.E., below) into the MACT rule-makings. *See* NATIONAL ENVIRONMENTAL JUSTICE ADVISORY COUNCIL, ENVIRONMENTAL JUSTICE IN THE PERMITTING PROCESS, App. C (U.S. Environmental Protection Agency, pub., EPA 300-R-00-004, July 2000) [hereinafter “NEJAC Permitting Report”].

Section 112(f) requires EPA to investigate and report to Congress on (1) methods of calculating the risk to public health from sources subject to NESHAP regulation, (2) the public health significance of such risk and the methods and costs of reducing such risks, (3) the actual health

effects on persons living in the vicinity of sources, and (4) recommendations as to new legislation regarding such risk. 42 U.S.C. § 7412(f)(1)-(2). If Congress does not act on any legislative recommendation submitted in EPA's report, **Section 112(f)(2)** requires EPA to promulgate standards for such categories of sources "if promulgation is required in order to provide an ample margin of safety to protect public health or to prevent, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect." 42 U.S.C. § 7412(f)(2).

EPA issued the Section 112(f)(2) report in 1999, but the report did not draw any conclusions about the public health significance of residual risks. U.S. EPA, Residual Risk Report to Congress 3 (Mar. 1999). In addition, the agency made no legislative recommendations because it believes "the legislative strategy embodied in the 1990 CAA Amendments provides the agency with the adequate authority to address residual risks including those in urban environments." *Id.* EPA considers the "adequate margin of safety" concept as an appropriate basis for determining the significance of and managing any residual risks for individual source categories. *Id.* In setting the margin of safety standard, the agency "strives to provide maximum feasible protection against risks to health from hazardous air pollutants by . . . limiting to no higher than approximately 1 in 10,000 the estimated risk that a person living near a plant would have." *Id.* However, in making such determination, "EPA has focused on cancer risks to humans," despite the recognition that "air toxics can cause health effects other than cancer." *Id.* The report stated that the agency is developing a policy framework for management of non-cancer effects under the residual risk program. After completing this policy, EPA could apply it to heavily impacted communities and thereby quantify and eventually reduce the disproportionate risk levels in such communities.

Section 112(b)(2) requires EPA to review periodically the list of HAPs in order to add "pollutants which present, or may present, through inhalation or other routes of exposure, a threat of adverse human health effects . . . or adverse environmental effects whether through ambient concentrations, bioaccumulation, deposition, or otherwise." 42 U.S.C. § 7412(b)(2). Likewise, **Section 112(b)(3)** states that EPA must add a substance to the HAPs list on a showing by a "petitioner or on the Administrator's own determination that the substance is an air pollutant and that emissions, ambient concentrations, bioaccumulation, or deposition of the substances are known to cause adverse effects to human health or adverse environmental effects." 42 U.S.C. § 7412(b)(3).

The broad language contained in Section 112(b) gives EPA authority to consider a wide range of health risks to communities of color and low-income communities. In addition, the provision allows EPA to review impacts on the environment that may be particularly important to those communities that rely substantially on their environment for food, fuel, and water.

In determining priorities for promulgating NESHAPs, **Section 112(e)(2)** requires EPA to consider "(A) the known or anticipated adverse effects of such pollutants on public health and the environment; (B) the quantity and location of emissions or reasonably anticipated emissions of [HAPs] that each category or subcategory will emit." 42 U.S.C. § 7412(e)(2). The broad language of this provision – which requires consideration of "anticipated" health effects and the location of emissions – gives EPA authority to consider health effects of particular concern to low-income communities and communities of color in setting priorities for regulating HAPs.

E. Urban Area Source Program

The Urban Area Source Program, also referred to as the Urban Air Toxics Program or the Urban Air Strategy, is an EPA program to reduce hazardous air emissions in urban areas. **Section 112(k)** states that Congress finds that “hazardous air pollutants from area sources may individually, or in the aggregate, present significant risks to public health in urban areas,” and that ambient concentrations in urban areas should be reduced, including a 75 percent reduction in cancer attributable to these sources. 42 U.S.C. § 7412(k)(1).

This section of the Act directs EPA to conduct a research monitoring program of urban area sources, focusing on the public health risks posed by hazardous air pollution and atmospheric transformation. 42 U.S.C. § 7412(k)(2). After monitoring is complete, the section requires EPA to submit to Congress a comprehensive strategy to control HAPs emissions in urban areas, and to identify at least 30 pollutants that present the greatest risk to the public in the largest number of urban areas, and the source categories emitting these pollutants. 42 U.S.C. § 112(k)(3). In addition, the strategy must include a schedule of specific actions to substantially reduce the public health risks posed by sources of hazardous air pollutants in urban areas, must achieve a reduction in cancer rates, must identify research needs in air monitoring and air modeling, and must make recommendations for changes in the law that would further these objectives. 42 U.S.C. § 7412(k)(3)(C)-(D).

EPA’s report to Congress was completed in July 2000. U.S. EPA Office of Air and Radiation & U.S. EPA Office of Air Quality Planning and Standards, National Air Toxics Program: The Integrated Urban Strategy (July 2000). The strategy explicitly sets a goal to “address disproportionate impacts of air toxics hazards across urban areas, such as those in areas known as hot spots and low-income communities in urban areas.” *Id.* at ES-2. The strategy has four components: (1) standard setting at both the national and local levels; (2) initiatives at both the national and local level to address specific pollutants and to identify and address specific community risks; (3) air toxics assessments to identify areas of concern, to prioritize efforts to reduce risks, and to track progress; and (4) education and outreach efforts to inform stakeholders about the strategy and to get input into designing programs to implement it. *Id.* at ES-3.

As required by Section 112, the strategy identifies 33 HAPs that pose the greatest threats to public health in urban areas. *Id.* at ES-4. The strategy outlines a tiered standard setting process for urban area sources that includes requiring maximum achievable control technology or generally available control technology, and calls for greater reductions in HAPs from motor vehicles. *Id.* at 4-3 to 4-11. To address disproportionate risks that may exist between different cities, neighborhoods, or demographic or similarly exposed groups, the strategy states that “more refined modeling will generally be needed to evaluate localized disparities within any one urban area.” *Id.* at 5-23. For this reason, the ability of EPA or state and local authorities to assess localized risk disparities will depend on the availability of detailed data on emissions and population distribution, local-scale models, and sufficient resources. *Id.* at 5-23.

EPA’s implementation of the Urban Air Toxics Program can aid in reducing risks to low-income communities and communities of color from HAPs in urban areas. After EPA conducts the assessments necessary to identify localized disparities, the agency could set standards specifically targeted at reducing disproportionate health risks in affected communities. The program could potentially provide states with a better understanding of public health impacts when making permitting decisions. *See generally* NEJAC Permitting Report at I-293-297 and App. C.

F. Mobile Source Standards

Along with stationary sources and area sources, the CAA regulates emissions from mobile sources. Title II of the Act authorizes EPA to regulate emissions from automobiles, trucks, buses, aircraft, and nonroad engines, such as marine engines and handheld engines. The agency may also regulate gasoline and other engine fuels under CAA Title II. In addition, the Act sets standards for the emissions of hydrocarbons, carbon monoxide, and nitrogen oxides from light-duty vehicles, and grants EPA broad discretion to set standards for other pollutants from these and other mobile sources. Generally, in setting mobile source standards, the criterion most relied upon is the technological feasibility of achieving the promulgated emissions limit.

1. Motor Vehicle and Heavy-Duty Truck Emissions

Section 202(a)(1) states that EPA shall prescribe and revise “standards applicable to the emission of any air pollutant from any class or classes of new motor vehicles or new motor vehicle engines, which [in EPA’s judgment] cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare.” 42 U.S.C. § 7521(a). Similarly, **Section 202(a)(3)(B)** states that on the basis of available information “concerning the effects of air pollutants emitted from heavy-duty vehicles or engines and from other mobile source related pollutants on the public health and welfare,” EPA “may promulgate regulations . . . applicable to classes or categories of heavy-duty engines.” 42 U.S.C. § 7521(a)(3)(B). Studies demonstrate that children living near highways in urban areas have poorer lung function than children living in cleaner areas. *See* U.S. EPA, Public Hearings Regarding Control of Air Pollution from New Motor Vehicles 16 (2000). Since low-income communities and communities of color in urban areas are often located next to highways and urban roads, EPA can promote environmental justice by ensuring that emissions standards under Section 202 are designed to protect those living in close proximity to roads.

2. Mobile-Source-Related Air Toxics

Section 202(l) requires EPA to promulgate and from time to time revise regulations containing “reasonable requirements” to control HAPs emissions from motor vehicles and motor vehicle fuels. 42 U.S.C. § 7521(l). These regulations must contain standards that reflect “the greatest degree of emission reduction achievable through the application of technology” taking into consideration established standards, available technology, cost, noise, energy, and safety. *Id.* EPA stated in the Urban Air Toxics Strategy that it wants to consider the disproportionate impacts of air toxics in areas, known as hot spots, that have elevated pollutant levels that could be associated with serious health risks. (See Section II.E., above.) In addition, states have identified such hot spots as an issue of environmental justice. *See* U.S. EPA, Control of Emissions of Hazardous Air Pollutants from Mobile Sources; Proposed Rule, 65 Fed. Reg. 48057 (Aug. 4, 2000).

Mobile-source-related air toxics can play a significant role in the creation of hot spots in low-income communities and communities of color. For instance, residents of the predominantly African American and Latino neighborhoods of Harlem and Washington Heights in Manhattan have stated that their health is profoundly affected by the numerous mobile sources in their neighborhoods. The neighborhoods contain a marine transfer station that attracts 200 heavy duty trucks daily, a port authority bus station, and a diesel fuel rail line. In addition, they border three highways and the Triborough and George Washington Bridges, over which millions of cars pass each year. To address

such mobile-source-affected hot spots, EPA could use the Section 202(l) authority to conduct risk characterizations of air toxics and develop approaches to address methods of reducing mobile-source-related air toxics emissions in heavily impacted areas. U.S. EPA, Public Hearings Regarding Control of Air Pollution from New Motor Vehicles: Proposed Heavy-Duty Engine and Vehicle Standards and Highway Diesel Fuel Sulfur Control Requirements (June 19, 2000).

3. Regulation of Fuels

CAA **Section 211(c)(1)** states that EPA may control or prohibit the manufacture, introduction, or sale of any fuel or new fuel additive for use in a motor vehicle, motor vehicle engine, or non-road engine or non-road vehicle if in EPA's judgment "any emission product of such fuel or fuel additive causes, or contributes, to air pollution which may be reasonably anticipated to endanger the public health or welfare." 42 U.S.C. § 7545(c)(1). Similarly, **Section 211(i)** regulates diesel fuel, and **Section 211(k)** requires EPA to promulgate regulations "establishing requirements for reformulated gasoline to be used in gasoline fueled vehicles in specified nonattainment areas." 42 U.S.C. §§ 7545(i), 7545(k)(1). Such regulations require "the greatest reduction in emissions of ozone forming volatile organic compounds and emissions of toxic air pollutants . . . achievable through the reformulation of conventional gasoline, taking into consideration . . . any non-air-quality and other air-quality related health and environmental impacts . . ." *Id.* **Section 211(b)(2)(A)** states that for the purpose of registration of fuels and fuel additives, "the Administrator may also require the manufacturer of any fuel or fuel additive . . . to conduct tests to determine potential public health effects of such fuel or additive (including, but not limited to, carcinogenic, teratogenic, or mutagenic effects.)" 42 U.S.C. § 7545(b)(2)(B).

Many low-income communities and communities of color are surrounded by highways, close to diesel fuel transportation centers, and home to numerous truck fleets. *See* U.S. EPA, Public Hearings Regarding Control of Air Pollution from New Motor Vehicles 16 (2000). CAA Section 211's fuel and fuel additive, diesel fuel, and reformulated gasoline provisions give EPA authority to impose stricter standards on emissions from fuels, thereby reducing the harmful impacts within hot spots. For example, EPA recently adopted new sulfur content requirements for diesel fuel designed to reduce significantly emissions of sulfur dioxide, nitrogen oxide, and other air toxics from diesel engines. 66 Fed. Reg. 5002 (Jan. 18, 2001), codified in 40 C.F.R. Parts 69, 80, & 86.

4. Urban Bus Standards

Section 219(a) requires EPA to promulgate motor vehicle emission standards for urban buses for the model year 1994 and thereafter. 42 U.S.C. § 7554(a). The standards would require particulate matter emissions (PM) from urban buses not to exceed 50 percent of the emissions of PM generally allowed under Section 202's standard. *Id.* If EPA determines that urban buses are not complying with this standard, **Section 219(c)(2)** directs EPA to require (in addition to compliance with the PM standards) that all new urban buses in metropolitan areas with a 1980 population of 750,000 or more operate on low-polluting fuels. 42 U.S.C. § 7554(c)(2). **Section 219(c)(2)(C)** allows EPA to extend Section 219(c)'s PM and low-polluting fuel requirements to metropolitan areas with a 1980 population of less than 750,000 if it would result in a significant public health benefit. 42 U.S.C. § 219(c)(2)(C). EPA could promote environmental justice in part by considering the health impacts of bus emissions on low-income communities and communities of color when deciding whether to

extend the urban bus PM and clean fuel requirements to the many large cities that currently are not required to comply.

G. Hazardous Substance Accident Prevention

Section 112(r)(7)(B)(ii) provides that the Section 112(r) regulations “shall require the owner or operator of stationary sources at which a regulated substance is present in more than threshold quantity to prepare and implement a risk management plan to detect and prevent or minimize accidental releases of such substances from the stationary source, and to provide a prompt emergency response to any such releases in order to protect human health and the environment.” 42 U.S.C. § 7412(r)(7)(B)(ii). These regulations require the risk management plan to include a description of the source’s processes and an estimation of the population within a certain radius of the source for accident and emergency purposes. 40 C.F.R. §§ 68.12(a), 68.22, 68.30. EPA can require that these plans take into account the socio-economic and cultural identity of the surrounding area in order to help ensure that the response plan will be effective. For example, a plan should reflect whether the primary language of the surrounding community is a language other than English.

III. PERMITTING AND OTHER APPROVALS

The Act’s federal emissions standards and state implementation plans require the use of permits to control the amount and type of air emissions from certain sources. The CAA provides for several individual permit programs addressing specific types of pollutant emissions and sources. The new source review (NSR) permit program requires the owner or operator of a new source to show that the source will comply with the relevant SIP or federal implementation plan and will not cause or contribute to any NAAQS violation. 42 U.S.C. § 7410(a)(2)(C). In addition, if EPA designates an area as a nonattainment area for a particular criteria air pollutant, permits are required for construction and operation of new or modified major stationary sources within the nonattainment area. 42 U.S.C. § 7502(c)(5).

Likewise, the prevention of significant deterioration (PSD) permit program requires a new or modified major source to obtain a permit when it has the potential to emit a designated pollutant in an attainment area for that pollutant and, consequently, would contribute to concentrations of the pollutant in the area. 42 U.S.C. § 7470(1); 40 C.F.R. § 51.165(b). The acid deposition and control program requires sources to comply with prescribed sulfur dioxide and nitrogen oxide emissions limitations by specified deadlines. 42 U.S.C. § 7651(a). However, unlike other permit programs, the acid deposition control program authorizes a sulfur dioxide allowance trading program under which sulfur dioxide emissions limitations may be transferred between sources. 42 U.S.C. § 7651b.

Generally, permits are issued by the states. In the case of individual permitting programs that have not been adopted in state implementation plans, or when states fail to carry out the CAA satisfactorily, the permits are federal permits issued by EPA; EPA also has permitting authority over tribal lands. To effectively manage the individual permit programs and other CAA requirements applicable to a particular source, the CAA authorizes states or EPA to issue what is known as a Title V operating permit. Title V operating permits tie together the different requirements of the individual CAA programs in a single permit issued to a source. 42 U.S.C. § 7661a. Thus, the Title V operating permit serves as a tool for implementing the requirements of the SIP program and the

NSR, PSD, nonattainment, HAPs, and Subchapter IV acid rain programs. A Title V permit usually specifies the pollutants to be released, how much may be released, and the control measures the source owner must take to reduce pollution.

This Part discusses how the CAA authorizes EPA to promote environmental justice under each of the key permit programs: (a) Title V operating permits; (b) new source review permits; (c) prevention of significant deterioration permits; and (d) the acid deposition and sulfur dioxide allowance trading program.

A. Title V Operating Permits

Title V of the Clean Air Act facilitates regulation of air emissions from significant stationary sources by establishing a single comprehensive permit that includes all of a facility's applicable CAA requirements. EPA sets minimum requirements for any permit program administered by a delegated state or local agency; those programs must be consistent with CAA Title V and may establish additional or more stringent requirements. These minimum elements include monitoring and reporting; a permit fee system; adequate personnel and funding; authority to issue, enforce, terminate, modify, revise, or revoke permits; authority to collect civil penalties; adequate application procedures; and public participation and information sharing. 40 C.F.R. § 70.4(b). The state must incorporate these elements into a SIP and submit it to EPA for review. (For a discussion of SIPs, see Part IV, below).

Section 110(c) states that EPA must promulgate a federal implementation plan (FIP) within two years after the agency finds that a state has failed to make a required submission or finds that a state plan or plan revision does not satisfy the minimum criteria, or when the agency disapproves a SIP in whole or in part. 42 U.S.C. § 7410(c). In developing a FIP, EPA would have the discretion to take environmental justice issues into account in developing the plan's control measures. This would allow EPA to consider environmental justice in permitting, siting, and approval of emissions sources within the region governed by the FIP. *See* Memorandum from Howard F. Corcoran, U.S. EPA Office of General Counsel, Environmental Justice Law Survey (Feb. 25, 1994) [hereinafter "OGC 1994 Memorandum"]. The Environmental Appeals Board has noted that where EPA has permitting authority, the agency may consider environmental justice issues on a case-by-case basis without issuing a generally applicable rule or guidance document. *In re Ecoelectrica*, 7 E.A.D. 56, 1997 WL 160751 at 9 n. 15 (1997) citing *In re Chemical Waste Management of Indiana*, 6 E.A.D. 66, 78 (E.A.B. 1995), *In re Envotech, L.P.*, 6 E.A.D., 260, 283 n.27 (E.A.B. 1996).

Even where states administer approved programs, EPA retains oversight authority and may veto the issuance of permits sought by emissions sources. When a source applies for a permit, the state program must provide EPA with a copy of the application. 42 U.S.C. § 7661d(a). If EPA objects to the permit, it must provide the permitting authority and the permit applicant with a statement of reasons for the objection. 42 U.S.C. § 7661d(b). If a state or local program fails to remedy EPA's objection within 90 days, EPA shall issue or deny the permit. *Id.* Once a permit has been issued, EPA may modify, terminate, or revoke the permit under appropriate circumstances. 42 U.S.C. § 7661d(c). Taken together, these provisions give EPA ongoing oversight authority that the agency could use to ensure that state programs address environmental justice concerns, particularly those related to enforcement and public participation, in the permitting process.

Section 505(b) states that if EPA does not object in writing to the issuance of a permit, any person may petition the EPA to object to the permit within 60 days after the expiration of a 45-day review period. 42 U.S.C. § 7661d. The petition shall be based only on objections to the permit that were raised with reasonable specificity during the public comment period. *Id.* EPA shall grant or deny such petition within 60 days after the petition is filed, and any denial of a petition is subject to judicial review. *Id.* If the petitioner demonstrates that the permit is not in compliance with the requirements of CAA Title V, EPA shall issue an objection to the permit. *Id.* This section provides EPA with another tool for identifying and addressing environmental justice issues in the Title V operating permit program.

In addition to enforceable emission limitations, a compliance schedule, and monitoring and reporting requirements, **Section 504(a)** requires that any permit issued under a Title V permit program include other conditions necessary to assure compliance with applicable requirements, including the requirements of an applicable SIP. 42 U.S.C. § 7661c(a). Similarly, **Section 504(b)** authorizes EPA to prescribe procedures and methods for determining compliance and for the monitoring and analysis of pollutants, and **Section 504(c)** requires permits to include inspection, entry, monitoring, compliance, certification, and reporting requirements to assure compliance with the permit's terms and conditions. 42 U.S.C. § 7661c(b)-(c).

As noted by prior commentators, this language may authorize EPA to impose, either directly or indirectly, permit conditions that enhance the affected community's ability to ensure that the facility complies with the law, including by allowing communities access to a source. *Lazarus & Tai* at 638. EPA could impose permit conditions that require a source to provide a community group or a local enforcement authority, such as a fire department, with relevant information regarding emissions during a set period. This would allow local communities to oversee the source and its compliance with air permits. *Id.*

CAA **Section 504(b)** establishes EPA's authority to promulgate monitoring requirements for state programs, and these are further elaborated in regulations. 40 C.F.R. § 70.6(a)(3). Where the applicable requirement does not require periodic testing or monitoring, the permit must include "periodic monitoring sufficient to yield reliable data from the relevant time period that are representative of the source's compliance with the permit." 40 C.F.R. § 70.6(a)(3)(i)(B). The permit must incorporate all applicable record-keeping requirements, including records of required monitoring information. 40 C.F.R. § 70.6(a)(3)(ii). The permit also must incorporate all applicable reporting requirements and require submission of reports of any required monitoring, prompt reporting of deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and corrective action or preventative measures taken. 40 C.F.R. § 70.6(a)(3)(iii)(A)-(B). By requiring monitoring, record-keeping, and reporting by permitted sources, these provisions allow low-income communities and communities of color access to information that potentially could lead to enforcement actions or citizen suits to protect the communities' health and well being. EPA could interpret, implement, and enforce these regulations to ensure that the data generated is relevant to these communities' concerns and accessible by community members.

B. New Source Review (NSR) Permits

Along with other requirements, each SIP or FIP must contain a basic program for the preconstruction review of major new sources. The program applies to any new source or modification of a source that would significantly contribute to concentrations of any pollutant for which a NAAQS has been established. 42 U.S.C. § 7503(a)(1)(B); 42 U.S.C. § 7410(a)(2)(C). It requires the owner or operator of the proposed source to show that the source will adhere to the SIP or FIP, and will not cause or contribute to any NAAQS violation. In addition, if EPA designates an area as a nonattainment area for a particular criteria air pollutant, permits are required for construction and operation of new or modified major stationary sources within the nonattainment area. 42 U.S.C. § 7502(c)(5).

Section 173(a)(5) allows EPA and the states to issue NSR permits for constructing and operating a new or modified stationary source if, among other things, an “analysis of alternative sites, sizes, production processes, and environmental control techniques for the proposed sources demonstrates that the sources’ benefits significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification.” 42 U.S.C. § 7503(a)(5). This broad language authorizes EPA to consider the impacts of siting a facility in a community of color or a low-income community in the NSR process. Although “social costs” are not defined, the term potentially encompasses a broad range of impacts of a facility on an overburdened community. OGC 1994 Memorandum; Memorandum from Gary S. Guzy, U.S. EPA Office of General Counsel, EPA Statutory and Regulatory Authorities Under Which Environmental Justice Issues May Be Addressed in Permitting (Dec. 1, 2000) [hereinafter “OGC 2000 Memorandum”], at 11.

C. Prevention of Significant Deterioration (PSD) Permits

States also operate “prevention of significant deterioration” programs in attainment areas in order to prevent increased pollution. In 14 states that have not incorporated the PSD program into their SIPs, the programs are federal programs. One stated purpose of the PSD program is to protect public health and welfare from any actual or potential adverse effect that may reasonably be anticipated to occur from air pollution, even where this is attainment and maintenance of all NAAQS. 42 U.S.C. § 7470(1). Under PSD review, a permit is required for any new or modified source that has the potential to emit a designated pollutant in an attainment or unclassified area for that pollutant and that would contribute significantly to concentrations of the pollutant in that area. 40 C.F.R. § 51.165(b). To obtain a PSD permit, an applicant must show that the source would meet the emissions limitation for each pollutant subject to PSD regulation and would not cause or contribute to a violation of the applicable limits on air quality deterioration. 42 U.S.C. §§ 165(a)(3)&(5).

Section 165(a)(2) states that a proposed PSD permit for the construction of a major emitting facility must be reviewed according to EPA regulations and a public hearing must be held with opportunity for interested persons “to appear and submit written or oral presentations on the air quality impact of the source, alternatives thereto, control technology requirements, and other appropriate considerations.” 42 U.S.C. § 7475(a)(2). Such public hearings on PSD permits could address environmental justice issues as one of the “appropriate considerations” provided for in the Act. EPA could help ensure that low-income communities and communities of color have a meaningful opportunity to present their concerns. OGC 2000 Memorandum at 11.

Section 165(e)(1) states that before the PSD permit review, the applicant must conduct an analysis of the ambient air quality at the proposed site and in areas that may be affected by emissions from the facility, for each pollutant subject to regulation that will be emitted. 42 U.S.C. § 7475(e)(1). Similarly, under **Section 165(a)(7)**, an applicant for a PSD preconstruction permit must agree to conduct monitoring to determine the effect that emissions from the facility may have, or are having, on air quality in any area that may be affected by emissions from such a source. 42 U.S.C. § 7475(a)(7). These analyses must include continuous gathering of air quality monitoring data to determine whether the facility will exceed the maximum allowable pollutant concentrations. The data must be gathered over one year preceding the date of the permit application, unless a state allows a shorter period, and the results of the analysis must be available at the time of the public hearing on the application for the permit. 42 U.S.C. § 7475(e)(2).

D. Acid Deposition and Sulfur Dioxide Allowance Trading Program

The CAA requires EPA to seek ways to reduce acid deposition and its threat to natural resources, ecosystems, materials, visibility, and public health. 42 U.S.C. § 7651(a). To achieve such reductions, affected sources will be required to comply with prescribed emission limitations by specified deadlines. 42 U.S.C. § 7651(b). These limitations may be met through alternative methods, including participation in an emission allocation and transfer system that aims to reduce annual emissions of SO₂ by ten million tons and to reduce annual emissions of nitrogen oxides by approximately two million tons from 1980 emission levels. *Id.* Electric utilities are targeted for about 85 percent of this reduction. U.S. ENVIRONMENTAL PROTECTION AGENCY, DO THE ACID RAIN SO₂ REGULATIONS APPLY TO YOU? (U.S. Environmental Protection Agency, pub., EPA 430-R-94-002, Feb. 1994). In Phase I of the program, 110 large generation sources had to reduce SO₂ emissions after January 1, 1995; Phase II began in the year 2000, when all regulated units became subject to a cap on total SO₂ emissions. 42 U.S.C. §§ 7651c, 7651d. A major part of the program is its market-based system of emission allowances to reduce SO₂ emissions. Each “allowance” authorizes the emission of up to one ton of SO₂ during or after a specified calendar year. 42 U.S.C. § 7651a(3).

Under **Section 403(b)**, allowances “may be transferred among designated representatives of the owners of affected sources . . . and any other person who holds such allowances, as provided by the allowance system regulation.” 42 U.S.C. § 7651b(b). These regulations establish the allowance system, including requirements for the allocation, transfer, and use of allowances. *Id.* **Section 403(d)** requires EPA to promulgate a “system for issuing, recording, and tracking allowances.” 42 U.S.C. § 7651b(d). **Section 403(a)** requires EPA to publish a proposed and final list of the basic allowance allocations. 42 U.S.C. § 1751b(a).

EPA has been reviewing the possibility of creating similar trading programs for other pollutants under the CAA, including toxic pollutants. To date, the proposed programs have been criticized for having the potential to create disproportionate health impacts or toxic “hot spots” in low-income communities and communities of color. *See* NEJAC Permitting Report at App. C. In a resolution addressed to EPA, NEJAC set forth a number of recommendations for amending the EPA economic incentive program regulations to address potential disproportionate impacts in communities of color and low-income communities. Summary of the Meeting of the National Environmental Justice Advisory Council (Nov. 30 - Dec. 2, 1999) A-4, *available at* http://es.epa.gov/oeca/main/ej/nejac/past_nmeet.html (last modified Jan. 5, 2001).

IV. DELEGATION OF PROGRAMS TO STATES AND TRIBES

As noted earlier, after EPA promulgates a primary or secondary NAAQS for a pollutant, states must submit an implementation plan to control that pollutant and enforce the NAAQS. 42 U.S.C. § 7410. Within their SIPs, states also adopt programs addressing other CAA requirements, such as the PSD and NSR programs. 42 U.S.C. §§ 7410(a)(2)(I)&(J). Each state implementation plan is adopted after notice and public hearing, and must include enforceable emission limitations, control measures, and compliance schedules and enforcement programs necessary or appropriate to meet the applicable requirements. 42 U.S.C. § 7410(a)(2)(A). In addition, states that are designated marginal, moderate, serious, severe, or extreme areas for ozone or moderate or serious areas for carbon monoxide attainment must submit a SIP to EPA. 42 U.S.C. §§ 7511c-7511e, 7512-7512a.

Within a year after a state program is submitted, EPA must approve or disapprove it, in whole or in part. 42 U.S.C. § 7410(k)(2). If it disapproves, EPA must notify the state of any necessary revisions, and the state must resubmit the program. 42 U.S.C. § 7410(k)(5). If EPA provides a partial approval, the state is still required to submit a fully approvable program and may be sanctioned for failure to do so. 42 U.S.C. § 7410(k)(3). If a program is not submitted within 18 months after the submission deadline or 18 months have passed since disapproval of the program, EPA must sanction the state. 42 U.S.C. § 7509. If the state has no approved program two years after the date required for submission, EPA must promulgate, administer, and enforce a federal permit program. 42 U.S.C. § 7410(c).

A. State Implementation of Specific Standards

1. NAAQS

CAA **Section 110(k)(3)** allows EPA to approve or disapprove a submitted SIP in full or in part. 42 U.S.C. § 7410(k)(3). EPA must approve the SIP if it meets all of the applicable requirements of the chapter. *Id.* When EPA finds that a SIP is “substantially inadequate to attain or maintain the relevant NAAQS . . . or to otherwise comply with the chapter, EPA shall require the state to revise the plan as necessary to correct the inadequacies.” 42 U.S.C. § 7410(k)(4). **Section 110(l)** states that each revision to a SIP shall be adopted only after “reasonable notice and public hearing.” 42 U.S.C. § 7410(l). These provisions give EPA authority to incorporate environmental justice considerations into the SIP development and review process, and to ensure that states implement federal standards and requirements consistently. *See* OGC 1994 Memorandum.

2. PSD Requirements

Section 161 states that “each applicable implementation plan shall contain emission limitations and such other measures as may be necessary . . . to prevent significant deterioration of air quality in each region” designated as an attainment area or unclassifiable. 42 U.S.C. § 7471.

Prior to state redesignation of any PSD area, **Section 164(b)** states that notice shall be afforded and public hearings shall be conducted in the areas proposed to be redesignated and in areas which may be affected by the proposed redesignation. 42 U.S.C. § 7474(b)(1)(A). Prior to any such public hearing, a satisfactory description and analysis of the health, environmental, economic, social, and energy effects of the proposed redesignations shall be prepared and made available for public inspection. *Id.* This section provides authority to ensure that the full range of impacts on affected communities is considered prior to redesignation, and that a meaningful forum for identifying community concerns takes place.

B. EPA Oversight and Discretionary Sanctions

Section 110(a)(2)(E) requires the SIP to provide necessary assurances that a state will have adequate personnel, funding, and authority under state law to carry out the SIP (and is not prohibited by any provision of federal or state law from carrying out such an implementation plan or portion thereof). 42 U.S.C. 7410(a)(2)(E). It has been noted that EPA can advance environmental justice goals by using this authority to ensure that individual SIPs comply with federal standards, and potentially by implementing other related federal mandates and goals, such as Title VI of the Civil Rights Act or Executive Order 12898 on environmental justice. *See* Lazarus & Tai at 633.

Section 110(m) allows EPA to “apply any of the sanctions listed in [Section 179] at any time . . . the Administrator makes a finding, disapproval, or determination . . . in relation to any [SIP] or [SIP] item . . . with respect to any portion of the State that the Administrator determines reasonable and appropriate, for the purpose of ensuring the requirements of [the chapter] relating to such [SIP] or [SIP] item are met.” 42 U.S.C. § 7410(m). Similarly, **Section 502(i)** provides that if EPA determines that a permitting authority is not adequately administering a program or portion thereof, the agency may impose Section 179 sanctions against the state. 42 U.S.C. § 7661a(i).

Section 179 sanctions include both highway sanctions and offset sanctions. 42 U.S.C. § 7509. Under highway sanctions, states lose significant federal highway funding and project approval. Offset sanctions require a state to impose an emissions reduction ratio of at least two to one for increased emissions when applying the offset emissions requirements of Section 173. These sanctions could be a tool to ensure that particular environmental justice issues are addressed under specific CAA permit programs. Likewise, EPA could make environmental justice a factor in deciding whether and when to impose these discretionary sanctions. OGC 1994 Memorandum.

C. General State Implementation Plan Provisions

1. State Boards

Section 128(a) requires each SIP to contain requirements that “any board or body which approves permits or enforcement orders under [the CAA] shall have at least a majority of members who represent the public interest” 42 U.S.C. § 7428(a)(1). EPA could promote environmental justice by requiring any such boards to include individuals concerned with environmental justice issues or who represent low-income communities or communities of color. *See* Lazarus & Tai at 639.

2. Public Notification

Under **Section 127(a)**, each SIP shall contain measures to notify the public “on a regular basis of instances of areas in which any [NAAQS] is exceeded or was exceeded during any portion of the preceding calendar year, to advise the public of the health hazards associated with such pollution, and to enhance public awareness of the measures which can be taken to prevent such standards from being exceeded and the ways in which the public can participate in regulatory and other efforts to improve air quality.” 42 U.S.C. § 127(a). Such measures may include posting warning signs on interstate highway access points to metropolitan areas or television, radio, or press notices. *Id.* EPA has authority to ensure that the public notification measures contained in SIPs are designed to make information accessible to communities of color and low-income communities.

V. ENFORCEMENT

Whenever EPA finds that a person has violated any requirement of an applicable SIP or permit, the agency must notify the person and the state of such a finding. At any time after 30 days following the date of notice of the violation, EPA may issue an order requiring the person to comply with the plan or permit, issue an administrative penalty, or bring a civil action. This Part describes briefly the central CAA enforcement authorities. For a fuller discussion of statutory enforcement authorities for advancing environmental justice, see Chapter 5.

Section 113(b)(1) states when EPA can bring an enforcement action. When the alleged violator is “any person that is the owner or operator of an affected source” the agency “shall, as appropriate” commence a civil action or assess a civil penalty. 42 U.S.C. § 7413(b)(1). However, when the violator is “any other person” the agency “may” commence a civil action or assess a civil penalty. *Id.* In either case, EPA has broad discretion in choosing when and where to bring an enforcement action.

Section 113(e) states that in determining the amount of any penalty under Section 113 and Section 304(a), EPA or a court must take into consideration “(in addition to such other factors as justice may require) the size of the business, the economic impact of the penalty on the business, the violator’s full compliance history and good faith efforts to comply, the duration of the violation as established by any credible evidence. . . , payment by the violator of penalties previously assessed for the same violation, the economic benefit of noncompliance, and the seriousness of the violation.” 42 U.S.C. § 7413(e)(1). EPA could potentially incorporate environmental justice concerns into these factors, in particular the “duration” and “seriousness” factor, as a basis for enhanced penalties.

Section 113(g) states that “at least 30 days before a consent order or settlement agreement of any kind under [the CAA] to which the United States is party . . . is final or filed with a court, the Administrator shall provide a reasonable opportunity by notice in the Federal Register to persons who are not named as parties or intervenor in the action or matter to comment in writing.” 42 U.S.C. § 7413(g). EPA shall “promptly consider any such written comments and may withdraw or withhold consent to the proposed order or agreement if the comments disclose facts or considerations which indicate that such consent is inappropriate, improper, inadequate, or inconsistent with the requirements of [the CAA].” *Id.* EPA or the Justice Department could actively seek comments on proposed settlements from affected communities, which may yield information that could bear on the appropriateness of a settlement, such as facts about exposure patterns.

Section 303 states that EPA, on receipt of evidence that a pollution source or combination of sources presents an imminent and substantial endangerment to public health, welfare, or the environment, may bring suit to stop the emission of air pollutants causing or contributing to such pollution or to take such other actions as may be necessary. 42 U.S.C. § 7603. If it is not practicable to assure prompt protection by commencing such a civil action, “EPA may issue such orders as may be necessary to protect public health or welfare or the environment.” 42 U.S.C. § 7603. Any order issued by EPA under this section shall be effective upon issuance and shall remain in effect for a period of not more than 60 days. *Id.* This authority allows the agency to take emergency action in communities where a combination of pollutants, or a specific incident, reaches the “imminent and substantial endangerment” threshold.

VI. INFORMATION GATHERING (RESEARCH, MONITORING, AND REPORTING)

A. Monitoring

Many low-income communities and communities of color historically have lacked the resources necessary to effectively monitor pollution sources in their communities. As a result, communities have been limited in their ability to advocate federal or state enforcement or to bring their own citizen suit enforcement actions. By requiring sources to monitor emissions and to share that monitoring information with affected communities, EPA can provide these communities with the information and the means necessary to safeguard their health and environment. In addition to the monitoring requirements discussed above in connection with permitting, the Act creates a number of opportunities for generating monitoring data.

1. Generally

For the purpose of developing or assisting in the development of any implementation plan, standard of performance, emission standard, any solid waste combustion regulation, or any other provision, **Section 114(a)** states that EPA may require any person who owns or operates any emission source or who is subject to any CAA requirement to (1) establish and maintain records; (2) make reports; (3) install, use, and maintain such monitoring equipment, and use audit procedures, or methods; (4) sample emissions; (5) keep records on control equipment parameters, production variables or other indirect data when direct monitoring of emissions is impractical; (6) submit compliance certifications; and (7) provide such other information as the EPA may reasonably require. 42 U.S.C. § 7414(a)(1)(A)-(G). Moreover, **Section 114(c)** states that “any records, reports, or information obtained under [Section 114(a)] shall be available to the public,” except where there is a showing that the information at issue is entitled to protection as a trade secret. 42 U.S.C. § 114(c). EPA could use this broad authority to ensure generation of information from facilities located near low-income communities and communities of color and to ensure its effective dissemination within those communities.

2. Accidental Release Monitoring

Section 112(r)(7) states that in order to prevent accidental releases of regulated substances, EPA is authorized to promulgate release prevention, detection, and correction requirements, which may include monitoring, record-keeping, reporting, training, equipment, etc. 42 U.S.C. § 7412(r)(7)(A). Such regulations must make distinctions between various types, classes, and kinds of facilities, taking into consideration factors including the size and location of the facility. *Id.* EPA thus has authority to consider whether a facility is located in a community of color or low-income community, or other heavily impacted area, when establishing the types of monitoring requirements that are needed to prevent and address accidental releases.

3. Enhanced Monitoring and Compliance Certifications

Section 114(a)(3) authorizes EPA to require enhanced monitoring and submission of compliance certifications. 42 U.S.C. § 7414(a)(3). Compliance certifications shall include: (A) identification of the applicable requirement that is the basis of the certification, (B) the method used for determining the compliance status of the sources, (C) the compliance status, (D) whether compliance is continuous or intermittent, and (E) such other facts as EPA may require. *Id.* Compliance certifications and monitoring data are subject to Section 114(c), which states that “any records, reports, or information obtained under [Section 114(a)] shall be available to the public,” except where there is a showing that the information at issue is entitled to protection as a trade secret. 42 U.S.C. § 114(c). Here again, specific compliance data could be required from facilities located near low-income communities and communities of color and disseminated widely in those communities.

4. State Implementation Plan Monitoring Requirements

Section 110(a)(2)(B) requires “each implementation plan submitted by a state” to “provide for the establishment and operation of appropriate devices, methods, systems, and procedures necessary to monitor, compile, and analyze data on ambient air quality.” 42 U.S.C. § 110(a)(2)(B). Likewise, **Section 110(a)(2)(F)** allows EPA to require SIPs to include “the installation, maintenance,

replacement, and implementation of other necessary steps, by owners of operators of stationary sources to monitor emissions from such sources,” 42 U.S.C. § 110(a)(2)(F), and **Section 110(a)(2)(K)** requires SIPs to provide for air quality modeling. 42 U.S.C. § 7410(a)(2)(K). Each of these monitoring and modeling requirements could be adjusted to consider cumulative exposures, sensitive populations, and other issues of concern to communities of color and low-income communities.

5. Great Lakes, Chesapeake Bay, and Lake Champlain Monitoring

Section 112(m) requires EPA to monitor and research the public health effect of acid deposition in the Great Lakes, Chesapeake Bay, and Lake Champlain, and to submit to Congress a biennial report on the results of the monitoring. 42 U.S.C. § 7412(m). The report must include an assessment of “the environmental and public health effects,” 42 U.S.C. § 7412(m)(5)(B), and EPA must also determine whether other CAA provisions are adequate to prevent adverse public health and environmental effects, including effects resulting from “indirect exposure pathways, associated with atmospheric deposition,” and take into consideration the tendency of pollutants to bioaccumulate. 42 U.S.C. § 7412(m)(6). Based on the report, EPA must promulgate further emission standards or control measures necessary to prevent such effects. *Id.* **Section 112(m)(3)** requires EPA to establish a Great Lakes atmospheric deposition monitoring network, and also to establish Chesapeake Bay and Lake Champlain monitoring stations. 42 U.S.C. § 7412(m)(3). Given this broad authority, EPA can collect information relevant to the communities that depend on these water resources for fishing and other uses.

B. Research and Development

1. Generally

The CAA requires EPA to establish a national research and development program for prevention and control of air pollution. As part of this program, **Section 103(a)(1)** authorizes the agency “to conduct and promote the coordination and acceleration of research, investigations, experiments, demonstrations, surveys and studies relating to the causes, effects (including health and welfare effects), extent, prevention, and control of air pollution.” 42 U.S.C. § 7403(a)(1). In conducting such research, EPA could promote environmental justice by targeting program resources to research the health and welfare effects of air pollution on low-income communities and communities of color.

Similarly, **Section 103(a)(3)** requires EPA “to conduct investigations and research and make surveys concerning any specific problem of air pollution” in cooperation with any state air pollution control agency if EPA is requested to do so or if in the agency’s judgment such a problem may affect communities in another state. 42 U.S.C. § 7403(a)(3). Under this provision, EPA could investigate, research, and survey problems of concern to communities of color and low-income communities.

In carrying out the research and development authorized by Section 103(a), **Section 103(b)** states that EPA is authorized to, among other things, collect and make available research results including recommendations; cooperate with other federal departments and air pollution control agencies, private agencies, institutions, organizations, and industries; make grants to air pollution control agencies, institutions, organizations, and individuals for the purposes of research and development for the prevention of air pollution; and collect and disseminate basic data on chemical,

physical, and biological effects of varying air quality and other information pertaining to air pollution and the prevention and control thereof. 42 U.S.C. § 7403(b). This section authorizes EPA to work with communities in carrying out research, and to ensure that the results of the research are disseminated to affected communities.

Section 103(d) requires EPA, in consultation with the Department of Health and Human Services, to conduct a research program on the short-term and long-term effects of air pollutants, including wood smoke, on human health. 42 U.S.C. § 7403(d). In conducting such research, the agency “shall conduct studies, including epidemiological, clinical, and laboratory and field studies, as necessary to identify and evaluate exposure to and effects of air pollution.” 42 U.S.C. § 7403(d)(A). In conducting this research, EPA must develop methods and techniques necessary to identify and assess the risks to human health from both routine and accidental exposures to individual air pollutants and combinations thereof. 42 U.S.C. § 7403(d)(3).

The research program must include an evaluation of each hazardous air pollutant to decide its relative priority for preparation of environmental health assessments. These are based on reasonably anticipated toxicity to humans and exposure factors such as frequency of occurrence as an air pollutant and volume of emissions in populated areas. 42 U.S.C. § 7403(d)(B). The environmental health assessments “shall include: (1) an examination of the available toxicological and epidemiological information for the pollutant to ascertain the levels of human exposure that pose a significant threat to human health and the associated acute, subacute, and chronic adverse health effects; (2) a determination of gaps in available information related to human health effects and exposure levels; and (3) where appropriate, an identification of additional activities, including toxicological and inhalation testing, needed to identify the type or levels of exposure that may present a significant risk of adverse health effects in humans.” 42 U.S.C. § 7403(d)(C)(i)-(iii). Since many low-income communities and communities of color, especially rural communities, rely on wood as a primary fuel for heating and cooking, EPA can use this study in part to quantify health effects on such communities.

2 *Air Toxics Research*

Section 112(j)(3) states that EPA “shall establish and maintain an air toxics clearinghouse and center to provide technical information and assistance to State and local agencies and, on a cost recovery basis, to others on control technology, health and ecological risk assessment, risk analysis, ambient monitoring and modeling, and emissions measurement and monitoring.” 42 U.S.C. § 7412(j)(3). EPA also must use the authority of Section 103 to examine methods for preventing, measuring, and controlling emissions and evaluating associated health and ecological risks. *Id.* Where appropriate, such activity shall be conducted with not-for-profit organizations. *Id.* All information collected under Section 112(j)(3) shall be available to the public. *Id.* Likewise, **Section 112(p)** requires EPA to oversee the establishment of a National Urban Air Toxics Research Center “capable of undertaking and maintaining similar research capabilities in the areas of epidemiology, oncology, toxicology, pulmonary medicine, pathology, and biostatistics.” 42 U.S.C. § 7412(p). These research efforts could be directed to specific toxic pollutants of concern to low-income communities and communities of color.

VII. FINANCIAL ASSISTANCE

Section 103(a)(2) requires EPA to “encourage, cooperate with, and render technical services and provide financial assistance to air pollution control agencies and other appropriate public or private agencies, institutions, and organizations, and individuals in the conduct of such activities” for the prevention and control of air pollution. 42 U.S.C. § 7403(a)(2). Thus, community groups and individuals should be able to seek out and receive technical and financial aid from EPA in activities aimed at preventing and controlling air pollution. This type of aid could, for example, help organizations and individuals in collecting information, clarifying test results, and/or purchasing monitoring equipment.

Section 104(a) states that EPA must give special emphasis to research and development into new and improved methods with industry-wide application for the prevention and control of air pollution resulting from combustion of fuels. 42 U.S.C. § 7404(a). “In furtherance of such research and development [the Administrator] shall . . . provide for Federal grants to public or nonprofit agencies, institutions, and organizations and to individuals, and contracts with public or private agencies, institutions, or persons for payments of . . . part of the cost of acquiring, constructing, or otherwise securing for research and development purposes, new or improved devices or methods having industry wide application of preventing or controlling discharges into the air of various types of pollutants.” 42 U.S.C. § 7404(a)(2).

Under **Section 105**, EPA may make grants to state air pollution control agencies for the prevention and control of air pollution or implementation of NAAQS. 42 U.S.C. § 7405. The section requires the agency

[b]efore approving any planning grant . . . to receive assurances that the [air control agency receiving the grant] has the capability of developing a comprehensive air quality plan for the air quality control region, which plan shall include (when appropriate) a recommended system of alerts to avert and reduce the risk of situations in which there may be imminent and serious danger to the public health or welfare from air pollutants and the various aspects relevant to the establishment of air quality standards for such air quality control region, including the concentration of industries, other commercial establishments, populations and naturally occurring factors which shall affect such standards.

42 U.S.C. § 7405(a)(3). EPA could use this provision to condition grant assistance on consideration of cumulative impacts in the planning process for establishing air quality standards, and on considering demographic factors in developing the recommended system of alerts.

CHAPTER 12

RESOURCE CONSERVATION AND RECOVERY ACT (“RCRA”)

42 U.S.C. § 6901 *et seq.*

The Resource Conservation and Recovery Act of 1976 (RCRA) is the primary federal law regulating the management and disposal of solid waste. Among other things, it establishes a “cradle-to-grave” system for regulating hazardous waste from its generation through its storage, transport, and ultimate disposal (Subtitle C), and addresses non-hazardous solid waste, with primary responsibility for implementation resting with the states (Subtitle D). The original 1976 Act was enhanced and strengthened by the Hazardous and Solid Waste Amendments of 1984.

The siting of hazardous and solid waste facilities has long been an important environmental justice issue. One of the first cases to focus national attention on these issues was the siting of a PCB (polychlorinated biphenyl) landfill in a predominantly African-American community in Warren County, North Carolina in 1982. See Paul Mohai & Bunyan Bryant, *Race, Poverty and the Environment*, 18 EPA JOURNAL 6 (March/April 1992); Robert Bullard, *Environmental Justice in the 21st Century*, available at <http://www.ejrc.cau.edu/ejinthe21century.htm> (last visited Nov. 9, 2001). RCRA directly addresses the health and environmental risks posed by waste disposal activities. Implementation of specific RCRA provisions to address environmental justice issues necessarily requires consideration of many political, technical, legal and other factors. This chapter seeks to provide a foundation for such inquiry in the future by offering a review of key statutory authorities that provide potential opportunities for incorporating environmental justice goals in EPA decision-making under the Act.

Part I of the chapter outlines RCRA policy goals and objectives that lend support to environmental justice initiatives. Part II discusses EPA’s standard setting and rule-making authority under RCRA, concentrating on hazardous waste regulation; it focuses most closely on the agency’s authority to set standards for hazardous waste treatment, storage, and disposal facilities. Part III discusses EPA’s permitting authority under RCRA, again focusing primarily on requirements for treatment, storage and disposal facilities. Part IV addresses EPA’s delegation of RCRA regulatory authority to state governments, examining both EPA’s extensive authority to regulate hazardous wastes through its approval of state hazardous waste management plans and the comparatively large delegation of authority to the states to regulate non-hazardous solid wastes. Finally, Parts V-VII discuss opportunities for advancing environmental justice through RCRA’s enforcement, information gathering, and financial assistance provisions.

I. GENERAL PROVISIONS

RCRA contains a number of congressional findings, objectives, and policies related to hazardous and non-hazardous waste. While these statements do not create binding obligations on EPA, they can be useful in supporting the agency’s environmental justice initiatives under other, substantive provisions of the statute.

Section 1001(a)(3) contains a congressional finding “that the continuing concentration of our population in expanding metropolitan and other urban areas has presented these communities with serious financial, management, intergovernmental, and technical problems in the disposal of solid wastes resulting from the industrial, commercial, domestic, and other activities carried on in such areas.” 42 U.S.C. § 6901(a)(3). This recognition of the special problems of urban areas might support EPA efforts to target pockets of higher environmental risk within urban areas.

Section 1001(a)(4) finds “that while the collection and disposal of solid wastes should continue to be primarily the function of State, regional, and local agencies,” federal leadership and technical and financial assistance is necessary to promote “the development, demonstration, and application of new and improved methods and processes to reduce the amount of waste and unsalvageable materials and to provide for proper and economical solid waste disposal practices.” 42 U.S.C. § 6901(a)(4). This finding might support efforts to address a variety of environmental justice issues, including the siting and regulation of solid waste management sites in communities of color and low-income communities. These efforts could be based, at least in part, on the broad language encouraging EPA to help develop and put into practice “new and improved methods and processes . . . to provide for proper and economical waste disposal practices.”

Section 1001(b)(2) finds that “disposal of solid waste and hazardous waste in or on the land without careful planning and management can present a danger to human health and the environment.” 42 U.S.C. § 6901(b)(2). This emphasis on “careful planning” might encompass front-end planning for the siting of hazardous waste sites, something that is important to safe management of hazardous waste in general, and to heavily impacted communities in particular.

According to **Section 1003(a)**, RCRA is designed “to promote the protection of health and the environment and to conserve valuable material and energy resources.” 42 U.S.C. § 6902(a). The language “protection of health and the environment,” which appears here and in various forms throughout the statute, is flexible enough to support a wide range of initiatives. Environmental justice issues, particularly those that directly impact the health of communities, would fit within this language. Section 1003(a) also lists eleven types of actions that Congress expected EPA to take in implementing RCRA, including technical and financial assistance, training, and waste minimization. *Id.* These actions, which are augmented by additional authority throughout the Act, provide opportunities for integrating environmental justice concerns into EPA’s administration of the RCRA program.

Finally, **Section 1003(b)** “declares it to be the national policy of the United States that, wherever feasible, the generation of hazardous waste is to be reduced or eliminated as expeditiously as possible.” 42 U.S.C. § 6902(b). This call for pollution prevention in general adds weight to EPA’s more specific waste reduction efforts. Pollution prevention could be one component of a larger slate of measures aimed at reducing risk in heavily impacted communities.

II. STANDARD SETTING/RULE-MAKING

RCRA and its implementing regulations create a two-tiered system of waste management. Wastes deemed “hazardous” face a full array of EPA command-and-control regulation under Subtitle C of the Act, including standards applicable to waste generators, transporters, and treatment,

storage, and disposal facilities. Wastes that do not fit that definition receive more lenient treatment under the solid waste provisions in Subtitle D, which is primarily implemented by the states. Each of the subtitles is discussed below.

A. EPA’s General Authority to Issue Regulations Under RCRA

Section 2002(a)(1) empowers the EPA Administrator to issue regulations “necessary to carry out his functions” under the Act. 42 U.S.C. § 6912(a)(1). This is a substantial conferral of authority to EPA; courts have held that the agency has considerable discretion to deem what is “necessary” for carrying out the Act. As discussed in Chapters One and Two, EPA generally has broad discretion in determining what measures are “necessary” under such open-ended grants of authority. Thus, if EPA deems a specific measure necessary to protect human health or the environment or to carry out its functions generally, courts likely will defer to the agency’s judgement. This legislative grant of power could support EPA’s ability to take actions that include the protection of health and environmental quality in low-income communities and communities of color.

B. Hazardous Waste Regulation

1. Hazardous Waste Identification and Listing

RCRA Section 1004(5) defines the term “hazardous waste” expansively to include any solid waste “which because of its quantity, concentration, or physical, chemical, or infectious characteristics may: (A) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or (B) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed.” 42 U.S.C. § 6903(5).

Section 3001 instructs EPA to identify hazardous wastes subject to Subtitle C by using two different methods: (1) according to its hazardous characteristics, or (2) by listing particular hazardous wastes. A solid waste is classified as a hazardous waste and regulated under Subtitle C if it either exhibits one of the defined hazardous characteristics or it is listed as a hazardous waste, unless it is categorically exempted under the RCRA regulations. 42 U.S.C. § 6921. In promulgating its criteria for hazardous characteristics and listed wastes, EPA is directed to take into account factors such as toxicity, persistence, degradability in nature, potential for accumulation in tissue, flammability, corrosiveness, and other hazardous characteristics. 42 U.S.C. §6921(a).

This determination raises environmental justice issues, as it requires EPA to determine the waste’s health impact on humans – which inevitably involves a determination of which population or sub-population of humans to base the standard upon. For example, in determining a waste’s “toxicity” or “potential for accumulation in tissue,” EPA must determine whether its “standard” human subject would be taken from the general population, a sensitive population, or a population that faces disproportionate exposure to the waste or cumulative exposures to it and other kinds of wastes. By including these types of factors in its determination, EPA can further environmental justice in its identification of hazardous wastes and their inclusion in the more restrictive Subtitle C regime.

2. Generator Standards

Section 3002(a) directs EPA to issue regulations applicable to generators of hazardous waste “as may be necessary to protect human health and the environment.” 42 U.S.C. § 6922(a). This broad grant of authority is supplemented by congressional mandates for standards on record-keeping practices, labels and containers, manifesting, and biennial reporting. 42 U.S.C. § 6922(a)(1)-(6). EPA thus has authority under this section to provide targeted information to the public about wastes generated in their communities through record-keeping and biennial reporting, and to thereby assist communities in participating in decisions about waste generation and regulatory activities in their neighborhoods.

Section 3002(b) requires generators to certify that they have “a program in place to reduce the volume or quantity and toxicity” of their wastes. Generators also must certify that the proposed method of treatment, storage, or disposal “minimizes the present and future threat to human health and the environment.” 42 U.S.C. § 6922(b). This health-based language supports consideration of environmental justice concerns; for example, the process of certifying proposed methods of treatment, storage, or disposal could include an examination of the surrounding community to account for possible cumulative risks and synergistic effects.

3 *Transporter Standards*

Section 3003(a) directs the agency to develop regulations applicable to hazardous waste transporters “as may be necessary to protect human health and the environment.” 42 U.S.C. § 6923(a). These regulations must include, “*but need not be limited to,*” requirements for record-keeping, labeling, and manifesting. *Id.* (emphasis added). EPA must consult with the U.S. Department of Transportation (DOT) before issuing transporter regulations, and under **Section 3003(b)**, the agency also may recommend that the DOT issue new rules under the Hazardous Materials Transportation Act. 42 U.S.C. § 6923(b). EPA could use this section to address environmental justice concerns about how hazardous wastes are transported through population centers, either by issuing its own rules or by recommending that the DOT do so.

4 *Treatment, Storage and Disposal Facilities Standards (TSDFs)*

Section 3004(a) likewise authorizes EPA to issue standards for waste treatment, storage, and disposal facilities “as may be necessary to protect human health and the environment.” 42 U.S.C. § 6924(a). Paralleling the language of Section 3003, Section 3004(a) states that the particular standards to be issued “need not be limited to” those listed in the section. *Id.* According to **Section 3004(a)(1)-(7)**, the TSDF standards must include requirements concerning:

- maintenance of records of all hazardous wastes treated, stored, or disposed of at the TSDF;
- reporting, monitoring, and inspection and compliance with the manifest system;
- treatment, storage, or disposal practices satisfactory to EPA;
- location, design, and construction of TSDFs;
- contingency plans for responding to unanticipated damage from treatment, storage, or disposal;
- maintenance of facilities and additional qualifications as to ownership, training of personnel, and financial responsibility; and

- permitting of TSDFs under RCRA Section 3005.

42 U.S.C. § 6924(a)(1)-(7). Here, too, the agency has been given wide latitude to address issues of concern to low-income communities and communities of color.

Sections 3004(d)-(e) and **(g)** prohibit land disposal of specified hazardous wastes, including liquid wastes and organic compounds, solvents and dioxins, and additional wastes specified by EPA. 42 U.S.C. § 6924(d)-(e),(g). These wastes may not be disposed of on land unless it is demonstrated to EPA with a reasonable degree of certainty that there will be “no migration of hazardous constituents . . . for as long as the wastes remain hazardous.” *Id.* **Section 3004(d)(1)(A)-(C)** requires the agency to take a precautionary approach in setting its “no migration” standards, taking into account “*the long-term uncertainties associated with land disposal*, the goal of managing hazardous wastes in an appropriate manner in the first instance, and the persistence, toxicity, mobility and propensity to bioaccumulate of such hazardous wastes and their hazardous constituents.” 42 U.S.C. § 6924(d)(1)(A)-(C) (emphasis added). This precautionary approach can be used to promote environmental justice by ensuring that the “no migration” standards are as strict as necessary to protect health and the environment in affected communities.

For wastes subject to the land disposal prohibition, **Section 3004(m)** requires EPA to promulgate regulations prescribing the “levels or methods of treatment, if any, which substantially diminish the toxicity of the waste or substantially reduce the likelihood of migration of hazardous constituents from the waste so that short-term and long-term threats to human health and environment are minimized.” 42 U.S.C. § 6924(m)(1). The waste can only be disposed of on land if it is treated by the prescribed methods and to the prescribed levels. *Id.* Because many TSDFs are located in communities of color and low-income communities, EPA has an opportunity to advance environmental justice by considering the risks particular to these communities in setting the “no migration” standard and the prescribed treatment standards. For example, in assessing the toxicity of the waste and its “long-term threats to human health,” EPA could consider the waste’s impacts on sensitive populations, as well as impacts through multiple or unique exposure pathways.

EPA also is authorized in **Section 3004(n)** to issue regulations for monitoring and controlling air emissions at TSDFs “as may be necessary to protect human health and the environment.” 42 U.S.C. § 6924(n). If EPA finds that air emissions from TSDFs disproportionately affect the health of communities of color and low-income communities, it can use its Section 3004(n) authority to address these problems.

Section 3004(a)(4) empowers EPA to issue standards for the “the location, design, and construction” of treatment, storage, and disposal facilities. 42 U.S.C. § 6924(a)(4). **Section 3004(o)(7)** augments this authority by directing the agency to “specify [technological] criteria for the acceptable location” of new and existing TSDFs “as necessary to protect human health and the environment.” 42 U.S.C. § 6924(o)(7). Existing location standards deal with seismic and hydrological considerations, 40 C.F.R. § 264.18, and with ecologically sensitive areas such as coastal zones and endangered species habitats. 40 C.F.R. § 270.3. EPA could add environmental justice considerations to this list, for example, by mandating the use of buffer zones between facilities and community residents. *See* Memorandum from Gary S. Guzy, U.S. EPA Office of General Counsel, EPA Statutory and Regulatory Authorities Under Which Environmental Justice Issues May Be Addressed in Permitting (Dec. 1, 2000) [hereinafter “OGC 2000 Memorandum”]. EPA could also

require consideration of the degree to which the health of a proposed community is already stressed by environmental and other factors. Thus, in making siting decisions, facilities and regulators would need to consider effects on sensitive populations, synergistic effects, and multiple or unique exposure pathways to ensure that the facility would not have adverse health impacts on the community.

Similarly, **Section 1004(2)** defines the term “construction” to include “preliminary planning to determine the economic and engineering feasibility and the public health and safety aspects of the project,” as well as “economic investigations and studies” 42 U.S.C. § 6903(2). This definition could add support for EPA actions to encourage consideration of health issues specific to low-income communities and communities of color in the planning stages of a facility,

Training standards under **Section 3004(a)(6)** likewise could be designed to take environmental justice concerns into account. 42 U.S.C. § 6924(a)(6). Current training standards deal only with the technical demands of hazardous waste management. *See* 40 C.F.R. § 264.16. EPA could expand the scope of this training to include environmental justice issues as well. As Richard Lazarus and Stephanie Tai point out, such training could help “bridge the gap between the community and a regulated facility within that community.” Richard Lazarus & Stephanie Tai, *Integrating Environmental Justice into EPA Permitting Authority*, 26 *ECOL. L.Q.* 617, 644 (1999) [hereinafter “Lazarus & Tai”].

Contingency planning criteria promulgated under **Section 3004(a)(5)** offer another opportunity to promote environmental justice. 42 U.S.C. § 6924(a)(5). In some cases, generic contingency planning might not adequately serve the needs of low-income communities and communities of color. Under this provision, EPA can establish more specialized planning standards that do a better job of addressing the particular circumstances of the affected communities.

C. Non-Hazardous Waste Regulation

The regulation of non-hazardous solid wastes is of critical importance, as non-hazardous wastes represent by far the nation’s largest volume of wastes and can, in many cases, result in threats to human health and the environment as great as those of hazardous wastes. *See* Robert B. McKinstry, Jr., & Mark A. Stevens, *Regulation of Nonhazardous Wastes Under RCRA* in *THE RCRA PRACTICE MANUAL* 209 (Theodore L. Garrett, ed., 1994). In particular, some so-called non-hazardous wastes that are excluded from regulation under Subtitle C – for example, household hazardous waste and small generator hazardous waste – are indistinguishable from materials regulated as hazardous wastes, and absent effective regulation, can cause the same adverse health effects to surrounding communities. *See id.*

Although RCRA is focused primarily on hazardous waste regulation, it also subjects non-hazardous wastes to limited regulation under Subtitle D. 42 U.S.C. §§ 6941-6949a. Unlike Subtitle C, which contemplates comprehensive federal regulation with a limited role for the states in the implementation of permits, Subtitle D contemplates a much larger role for state and local agencies, with technical and financial assistance from the federal government. However, EPA still plays a significant role in non-hazardous waste regulation by providing technical guidelines for state solid waste disposal facilities, reviewing and approving state solid waste management plans, and prohibiting open dumping and providing criteria that define sanitary landfills.

1. EPA Guidelines for State Solid Waste Disposal Facilities

Section 1008 requires EPA to develop guidelines that, among other things, “provide a technical and economic description of the level of performance that can be obtained by various available solid waste management practices . . . which provide for the protection of *public health and the environment*,” and describe levels of performance, including appropriate methods and degrees of control, that provide for “*protection of public health and welfare*.” 42 U.S.C. § 6907 (emphasis added). These performance guidelines are recommended for all solid waste facilities, but they are binding only for federal agencies and contractors operating any federal property or facility. 42 U.S.C. § 6924. Nevertheless, EPA can use this authority, which specifically focuses on public health protection, to recommend and in some cases set standards for solid waste disposal facilities that will sufficiently protect against adverse health effects in surrounding communities.

2. EPA Guidelines and Approval of State Solid Waste Plans

Under **Section 4002(b)**, EPA must promulgate guidelines to assist in the development and implementation of state solid waste management plans. These guidelines are to be reviewed at least every three years, and revised as appropriate. 42 U.S.C. § 6942(b). **Section 4002(c)(9)** states that in promulgating the guidelines, EPA must consider “the political, economic, organizational, financial, and management problems affecting comprehensive solid waste management.” 42 U.S.C. § 6942(b). As Richard Lazarus and Stephanie Tai point out, “little dispute exists that environmental justice presents a major ‘political’ problem affecting solid waste management.” Lazarus & Tai at 647. Thus, Section 4002 would authorize EPA to include in its guidelines for state solid waste management plans recommendations for how a state might best address environmental justice concerns related to solid waste management. *Id.*

3. Prohibition on Open Dumping

Section 1008 requires EPA to define methods of waste disposal that constitute “open dumping.” 42 U.S.C. § 6907. **Section 4005(a)** imposes the principal substantive requirement of Subtitle D by prohibiting such dumping as defined by EPA. 42 U.S.C. § 6945(a). **Section 4004(a)** grants EPA authority to promulgate regulations containing criteria for determining which facilities are classified as open dumps and which as sanitary landfills, and provides that “[a]t a minimum, such criteria shall provide that a facility may be classified as a sanitary landfill and not an open dump only if there is *no reasonable probability of adverse effects on health or the environment* from disposal of solid waste at such facility.” 42 U.S.C. § 6944(a) (emphasis added). Thus, EPA has considerable discretion to consider health-related factors specific to low-income communities and communities of color when defining acceptable methods of solid waste disposal.

III. PERMITTING AND OTHER APPROVALS

The RCRA permitting process offers visible and immediate opportunities for addressing environmental justice. EPA has already begun investigating ways to improve its consideration of environmental justice issues before and during RCRA permitting. *See* OGC 2000 Memorandum at 2-5. There is a rich literature on this subject, as well as a substantial body of experience at the regional and state level, as the agency’s own reports indicate. *See* U.S. EPA OFFICE OF SOLID WASTE AND

EMERGENCY RESPONSE, 1997-1998 WASTE PROGRAMS ENVIRONMENTAL JUSTICE ACCOMPLISHMENTS REPORT (EPA-500-R-00-003, May 2000). This body of experience provides a foundation for further action by EPA.

A. Permitting for Hazardous Waste Management Under Subtitle C

1. TSDF Permit Conditions

RCRA **Section 3005** requires any facility that is treating, storing, or disposing of hazardous waste onsite to obtain a permit. 42 U.S.C. § 6925(a). **Section 3005(c)(3)** states that “[e]ach permit issued under this section shall contain such terms and conditions as the Administrator (or the State) determines necessary to protect human health and the environment.” 42 U.S.C. § 6925(c)(3). Permit writers can rely on this so-called “omnibus” authority to impose permit conditions related to environmental justice, addressing such matters as the presence of sensitive sub-populations, unique exposure pathways, and risk aggregation. Like the health-based language found in other sections of RCRA, the section provides a legal foothold to consider a wide range of environmental justice measures.

The Environmental Appeals Board addressed the scope of EPA’s powers under Section 3005(c)(3) in *In re Chemical Waste Management of Indiana, Inc.*, 6 E.A.D. 66, 1995 WL 395962 (June 29, 1995). The case involved environmental justice challenges to EPA’s issuance of the Hazardous and Solid Waste Amendments portion of a RCRA permit. Although the Board held that EPA was not *required* to include environmental justice considerations in RCRA permitting decisions, it strongly endorsed the agency’s authority to do so as a matter of policy under Section 3005(c)(3). “We conclude,” the Board held, “that there are areas where the Region has discretion to act within the constraints of the RCRA regulations and, in such areas, as a matter of policy, the Region *should* exercise that discretion to implement the Executive Order.” 1995 WL 395962 at 5 (emphasis added).

While the *Chemical Waste Management* opinion encourages EPA to incorporate environmental justice considerations into RCRA permitting, it also identifies one potentially significant limitation to the agency’s Section 3005(c)(3) power. By its own terms, the omnibus clause confines the reach of EPA authority to “such terms and conditions as the Administrator (or State) determines necessary to protect human health and the environment.” According to the Board, this language deprives EPA of the discretion “to redress impacts that are unrelated or only tenuously related to human health and the environment, such as disproportionate impacts on the economic well-being of a minority or low-income community.” 1995 WL 395962 at 7.

It is possible to read this portion of the *Chemical Waste Management* decision as erecting a greater barrier to the agency’s environmental justice powers than the Board might have intended. The Board is not saying that economic and social impacts are beyond the scope of the agency’s regulatory authority. It is merely saying that EPA must link such impacts to health or environmental quality. Lazarus & Tai at 663. In actuality, the linkages between socio-economic effects and human health and environmental quality are not as remote as they might appear, and such links are incorporated in environmental impact assessments, as discussed in the National Environmental Policy Act chapter of this report. A significant problem is that those pressing environmental justice claims before EPA and the Board rarely possess the technical and legal resources necessary to establish these linkages. The *Chemical Waste Management* decision, the Executive Order, and EPA’s

implementing actions all suggest that the agency itself could investigate these linkages, even if environmental justice claimants do not have the resources to do so.

2 Land Disposal Permits

Section 3019 provides opportunities to incorporate environmental justice concerns in land disposal permits. Under **Section 3019(a)**, applicants for land disposal permits must include certain information in their applications, including information about “reasonably foreseeable releases” from normal operations and transportation accidents, and information about the potential pathways, nature, and magnitude of human exposure to releases. 42 U.S.C. § 6939a(a)(1)-(3). In addition, under **Section 3019(b)**, EPA may request the Agency for Toxic Substances and Disease Registry to conduct a health assessment when, in EPA’s judgment, a land disposal facility “poses a substantial potential risk to human health.” 42 U.S.C. § 6939a(b).

Section 3019(d) provides that priority is to be given to “those sites at which . . . potential risk to human health appears to be highest, and for which . . . existing health assessment data is inadequate to assess the potential risk to human health.” 42 U.S.C. § 6939a(d). **Section 3019(f)** defines “health assessments” in a way that encompasses a number of environmental justice concerns, such as “the existence of potential for pathways of human exposure (including ground or surface water contamination, air emissions and food chain contamination),” and the “potential susceptibility of the community within the likely pathways of exposure.” 42 U.S.C. § 6939a(f).

Such information about exposure pathways and cumulative risks are precisely the kind of data environmental justice advocates often seek. Under the Section 3019 provisions, EPA has authority to generate this information, at least with respect to land disposal facilities. In addition, **Section 3019(c)** provides that “[a]ny member of the public may submit evidence of releases or of exposure to hazardous constituents from such a facility, or as to the risks or health effects associated with such releases or exposure.” 42 U.S.C. § 6939a(c). This section provides an important opportunity for public participation in the health assessment process.

B. Permitting for Non-Hazardous Waste Facilities Under Subtitle D

Although Subtitle D lacks the comprehensive federal permitting and enforcement schemes established under Subtitle C, it does have a limited permitting system applicable to non-hazardous waste management facilities that receive household hazardous waste and small quantity generator waste that is exempted from regulation under Subtitle C. RCRA **Section 4005** requires states to implement a permit program for all solid waste management facilities that may receive household hazardous wastes or small quantity generator waste. If a state fails to adopt an adequate permit system, EPA may take enforcement action under the Act. 42 U.S.C. § 6945(c)(2).

C. Public Participation in Permitting

EPA also has ample authority to encourage public participation in RCRA permitting. For example, **Section 7004(b)(2)** directs the EPA to publicize its intention to issue a permit to the public and local government officials. If EPA receives written notice of opposition, “or if the Administrator determines on his own initiative, he shall hold an informal public hearing.” 42 U.S.C. § 6974(b)(2). Using this authority, the agency issued its RCRA Expanded Public Participation Rule, which specifically addresses environmental justice concerns. 60 Fed. Reg. 63417 (Dec. 11, 1995). The expanded participation rule requires, among other things, that permit applicants hold informal public meetings with affected communities *before* submitting their applications to the permitting authority.

The environmental justice arena offers an excellent forum for EPA to expand and refine new ideas about public participation. Although mandatory environmental justice requirements were dropped from the final Expanded Public Participation Rule, *see* 60 Fed. Reg. at 63420-21, the rule provides ample guidance, and six years of experience under the rule may yet provide the basis for reconsideration of whether to include mandatory public participation provisions.

IV. DELEGATION OF PROGRAMS TO STATES AND TRIBES

A. Hazardous Waste Regulation

RCRA places the primary burden of hazardous waste regulation on the federal government. As discussed above, EPA is required to promulgate regulations to identify the characteristics of hazardous waste; list particular hazardous wastes that are subject to regulation; and establish uniform standards applicable to generators, transporters, and TSDFs.

However, RCRA does allow the states a significant role in administering hazardous waste regulation. **Section 3006** authorizes EPA to delegate significant implementation and enforcement powers to the states. 42 U.S.C. § 6926. Such delegation is governed by federal guidelines developed by EPA in consultation with the states. 42 U.S.C. § 6926(a). Much like the delegation process under other environmental statutes, RCRA delegation begins with application by a state for federal authorization. States may submit their applications only after notice and opportunity for a public hearing. 42 U.S.C. § 6926(b). The EPA will authorize the state program unless it finds that the state program “is not equivalent to” or “consistent with” the federal program, or does not provide adequate enforcement authority to implement the program. 42 U.S.C. § 6926(b). Further, EPA cannot approve a state program unless the program provides for public availability of information

obtained by the state regarding facilities and sites of treatment, storage, and disposal of hazardous wastes. 42 U.S.C. § 6926(f) Such information must be available to the public in the same manner and to the same degree as would be the case if EPA were carrying out the program. *Id.*

Under **Section 3009**, state programs may not impose requirements less stringent than the federal program, but they may impose requirements, including those for site selection, that are more stringent than the federal program. 42 U.S.C. § 6929. Courts have held, however, that states may not administer their RCRA programs in ways that burden interstate commerce. *Hazardous Waste Treatment Council v. South Carolina*, 945 F.2d 781, 792 (4th Cir.1991) (RCRA does not reflect “an unmistakable clear congressional intent to permit states to burden interstate commerce”); *Chemical Waste Management, Inc. v. Templet*, 967 F.2d 1058 (5th Cir. 1992), *cert. denied*, 113 S. Ct. 1048 (1993) (Louisiana statute barring importation of hazardous waste from foreign countries violates the Commerce Clause). Thus, EPA could apply the “no less stringent” provision to help ensure that the agency’s environmental justice initiatives are included in state programs; states are free to adopt further environmental justice measures as long as they do not unduly burden interstate commerce.

Once approved, the state RCRA program operates in lieu of the federal program, and EPA may not enforce the federal program in that state. In such states, federal law has been displaced by state law. 40 C.F.R. § 264.1(f). Most states have received final authorization to administer the RCRA base program – the RCRA hazardous waste program prior to the Hazardous and Solid Waste Amendments of 1984. However, not all parts of the program have been delegated to all states, and a smaller number of states have been authorized to administer the additional requirements imposed by HSWA. EPA carries out the HSWA-driven permitting regulations in states that are not yet authorized to do so. 42 U.S.C. § 6926(c)(4).

Thus, although RCRA authorizes significant delegation of administrative authority to the states, EPA still retains oversight over state programs, through which it can ensure that environmental justice measures are implemented. First, EPA can pursue environmental justice strategies directly through administration and enforcement of HSWA requirements in states that are not yet authorized to do so. Second, EPA can incorporate environmental justice measures into state programs as they receive HSWA approval, as well as state programs that have already been delegated. To do so, EPA could revise its state program guidelines under Section 3006(a). 42 U.S.C. § 6926(a). If a state-issued permit fails to incorporate the resulting environmental justice aspects of the program, EPA may submit comments during the permit’s public comment period. 40 C.F.R. § 271.19(a). The agency may then act to implement the steps outlined in its comments if the state fails to implement its own program. 40 C.F.R. § 271.19(e). Third, in extreme cases, EPA can withdraw authorization of a state program that is not administered “in accordance with the requirements” of RCRA. 42 U.S.C. § 6926(e). Because Section 3009 requires states to impose requirements at least as stringent as federal requirements, EPA could potentially withdraw authorization of a state program that failed to incorporate federal environmental justice requirements. 42 U.S.C. § 6929.

B. Non-Hazardous Waste Regulation

As discussed in Part II.C., above, **Section 4006** requires states to identify agencies to develop and implement the state solid waste management plan. 42 U.S.C. § 6946. **Section 4003** outlines the minimum requirements a state plan must meet in order to obtain EPA approval, including the prohibition on “open dumping.” 42 U.S.C. § 6943. **Section 4007** provides that if a state plan meets these requirements and contains provisions for revision of such plans, EPA shall approve the plan, 42 U.S.C. § 6947, and states with approved plans are entitled to federal financial assistance for solid waste management. 42 U.S.C. §§ 6947, 6948. The agency may withdraw approval of a state plan, after notice and opportunity for public hearing, if the plan fails to comply with minimum requirements. 42 U.S.C. §§ 6947. In addition, **Section 4005(c)** delegates to the states responsibility for implementing a permit program for all solid waste management facilities that may receive household hazardous wastes or small quantity generator waste. 42 U.S.C. §6945(c). These permits must comply with the criteria for sanitary landfills adopted by EPA. *Id.*

These statutory provisions give EPA authority to provide guidelines and technical assistance to the states in developing adequate solid waste management facilities and solid waste management plans that address environmental justice concerns. EPA also can use the “carrot” of financial assistance to encourage states to develop and submit for EPA approval solid waste management plans that incorporate these concerns.

V. ENFORCEMENT

RCRA provides EPA with extensive enforcement powers. The vast majority of EPA enforcement activity falls into three general categories: administrative orders, civil actions, and criminal prosecutions. There also are special provisions allowing the agency to take direct action in cases of “imminent and substantial endangerment,” and to require corrective actions.

A. Administrative Orders, Civil Actions, and Citizen Suits

RCRA **Section 3008** gives EPA the authority to issue compliance orders, suspend or revoke permits, and assess penalties of up to \$25,000 per day for any violation of the statute. 42 U.S.C. § 6928. Even though RCRA lacks a provision enabling the agency to base penalties on considerations of “justice,” in contrast to the Clean Air and Clean Water Acts, it does require penalties to be gauged by “the seriousness of the violation and any good faith efforts to comply with applicable requirements.” 42 U.S.C. § 6928(a)(3). The agency has established a formula for determining the amount of the penalties, which takes into account the gravity and duration of the violation, the economic benefit received by the violator, and factors such as the violator’s history of noncompliance, good or bad faith, and ability to pay. *See* U.S. EPA, RCRA Civil Penalty Policy (October 1990), *available at* <http://www.es.epa.gov/oeca/ore/rcra/cmp/100090.pdf> (last visited Nov. 9, 2001).

All of these factors are relevant to the health and environmental impacts on low-income communities and communities of color. The seriousness or gravity of a violation depends not only on its magnitude, but also on the context in which it occurs. A RCRA violation might well have more serious consequences in areas already overburdened with environmental risks than in less

intensely developed areas. Economic benefit and history of noncompliance also can be important considerations in assessing penalties in communities of color and low-income communities.

Under **Section 3008(g)**, after referral by EPA, the Department of Justice may commence a civil lawsuit before a federal district court judge in the district where the violation occurred. The court can assess civil penalties of up to \$25,000 per day of violation, or grant injunctive relief ordering particular actions. 42 U.S.C. § 6928(g). Judicially imposed penalties typically take into account the same factors as those addressed in EPA's RCRA Civil Penalty Policy, and thus offer similar opportunities to address environmental justice issues.

Section 7002 provides for citizen suits “against any person . . . who is alleged to be in violation of any permit, standard, regulation, condition, requirement, prohibition, or order” under RCRA. 42 U.S.C. § 6972(a)(1)(A). Typical of citizen suit provisions, the section requires the complainant to give notice to EPA and the alleged violator prior to filing suit in federal court. 42 U.S.C. § 6972(b)(1). If the agency then fails to commence and prosecute its own enforcement action, the citizen suit may go forward. *Id.*

B. Criminal Enforcement

Section 3008(d) makes available criminal penalties for certain “knowing” violations of the statute. 42 U.S.C. § 6928(d). Included among these are knowing transportation to a facility without a permit, and knowing treatment, storage, or disposal of hazardous wastes without a permit or interim status coverage. The penalties for Section 3008(d) violations are fines up to \$50,000 per day, imprisonment of up to five years, or both. If a violator knows that he is placing “another person in imminent danger of death or serious bodily injury,” these penalties may be increased to \$250,000 (\$1,000,000 for organizations), and fifteen years in prison. 42 U.S.C. § 6928(e). The ability to target criminal enforcement efforts gives EPA another way to address environmental justice.

C. Imminent and Substantial Endangerment

RCRA **Section 7003** provides an additional source of authority for responding to hazards caused by the improper handling, storage, treatment, transportation, or disposal of hazardous waste. 42 U.S.C. § 6973. If any of these activities “may present an imminent and substantial endangerment to health or the environment,” EPA may file a lawsuit on behalf of the United States in federal district court against any person who has contributed, or is contributing, to such activities. *Id.* Section 7003 enables EPA to seek orders restraining defendants from continuing these activities, directing defendants “to take such other actions as may be necessary,” or both. After providing notice to the affected state, the agency may also take other actions, “including, but not limited to, issuing such orders as may be necessary to protect public health and the environment.” 42 U.S.C. § 6973(a). Violations of imminent hazard orders are punishable by fines of up to \$5,000 per day. 42 U.S.C. § 6973(b). This “as may be necessary” language represents a broad and flexible grant of authority with which the agency can take action to further environmental justice goals.

D. Corrective Action

Even where a hazardous waste release does not present an “imminent and substantial endangerment,” EPA can require remediation of releases through corrective action. First, EPA has the authority to impose corrective action requirements through its permitting authority under **Section 3004(u)** for all releases from solid waste management units at any TSDF seeking a permit. 42 U.S.C. § 6924(u). In addition, **Section 3004(v)** requires EPA to mandate corrective action beyond the facility boundary “where necessary to protect human health and the environment.” 42 U.S.C. § 6924(v). This clearly authorizes EPA to consider health effects in the surrounding community in imposing more stringent corrective action requirements. EPA also can include corrective action requirements in a permit through its omnibus permitting authority under **Section 3005(c)(3)**, which allows EPA to include any requirements “necessary to protect human health and the environment.” 42 U.S.C. § 6925(c)(3). Finally, under **Section 3008(h)**, EPA can impose corrective action requirements for releases at interim status facilities (facilities authorized to treat, store, or dispose of hazardous waste while awaiting a permit). 42 U.S.C. § 6928(h).

VI. INFORMATION GATHERING (RESEARCH, MONITORING, AND REPORTING)

A. Research

EPA has substantial research capabilities under RCRA. **Section 2002(a)(2)** authorizes the agency to consult and exchange information with other federal agencies doing research “relating to solid waste . . .” 42 U.S.C. § 6912(a)(2). **Section 2002(a)(4)** authorizes consultation with scientists and other groups as EPA “deems advisable.” 42 U.S.C. § 6912(a)(4). Under **Section 2002(a)(5)**, the agency may also use the resources of federal agencies, “including . . . the National Bureau of the Census,” to perform research related to resource recovery and conservation “and to otherwise carry out the Administrator’s functions” under RCRA. 42 U.S.C. § 6912(a)(5). Under this broad grant of authority, EPA could undertake or fund research studies aimed specifically at environmental justice issues. For example, EPA could use Geographic Information Systems to compile a geographically specific inventory of environmental justice information. Such a database could provide a foundation for future agency innovations.

Additional authority for research is provided by **Section 8001(a)**. 42 U.S.C. § 6981(a). Under this provision, EPA must conduct research, or fund research by others, relating to “(1) any adverse health and welfare effects of the release into the environment of material present in solid waste, and methods to eliminate such effects. . . . (5) the reduction of the amount of such waste and unsalvageable waste materials. . . . [and] (13) any adverse effects on air quality (particularly with regard to the emission of heavy metals) which result from solid waste which is burned (either alone or in conjunction with other substances) for purposes of treatment, disposal or energy recovery.” *Id.* All of these research activities could incorporate environmental justice issues.

Section 3012 requires states to undertake a continuing program to compile, publish, and submit to EPA an inventory that describes the location of each hazardous waste site within the state, including information on the amount, nature, and toxicity of waste, and techniques for waste treatment or disposal used at each site. 42 U.S.C. § 6933. EPA must assist this effort by providing

information, and also may make grants to states to carry out the program. 42 U.S.C. § 6933(a),(c). If a state fails to carry out the program adequately, EPA must assume responsibility for it. 42 U.S.C. § 6933(b). Similarly, **Section 3016** requires each federal agency to undertake a continuing program to compile, publish, and submit to EPA an inventory of each site owned by the agency at which hazardous waste is stored, treated, or disposed, and to make the inventory available to the public. 42 U.S.C. § 6937. If EPA determines that a federal agency is not providing adequate information, it may notify the head of that agency; and if the deficiencies persist, EPA may carry out the inventory program. 42 U.S.C. § 6937(b). Both of these programs compile research that can help assess whether hazardous waste sites are disproportionately located in low-income communities or communities of color.

B. Monitoring, Sampling, and Inspections

EPA enjoys extensive monitoring and inspection powers under RCRA. **Section 3007(a)** applies to any person who generates, stores, treats, transports, disposes of, or “otherwise handles” hazardous wastes. 42 U.S.C. § 6927(a). Upon the request of any agency representative, these parties must provide information concerning hazardous wastes and allow entry, inspection, and sampling. All records, reports, or information obtained through this authority must be made available to the public, unless a showing of business confidentiality is made “satisfactory to the Administrator.” 42 U.S.C. § 6927(b).

RCRA **Section 3013** provides for further monitoring authority. 42 U.S.C. § 6934. If the agency determines, “upon the receipt of any information,” that the presence or release of any hazardous waste from a facility “may present a substantial hazard to human health or the environment,” it can require the owner or operator of the facility to conduct “monitoring, testing, analysis, and reporting” that the agency deems “reasonable to ascertain the nature and extent of such hazard.” 42 U.S.C. § 6934(a). Under **Section 3013(d)**, if EPA determines that the owner or operator cannot perform these actions in a manner “satisfactory to the Administrator,” it may carry out the actions on its own, or authorize “any person” to do so, at the facility’s expense. 42 U.S.C. § 6934(d).

These provisions could potentially support a range of additional information gathering activities aimed at important issues affecting low-income communities and communities of color. For example, EPA could seek new ways to involve community members in monitoring, inspection, and enforcement. Agency representatives need not be full-time employees of EPA. Local residents, for example, could be hired and trained by the agency to conduct environmental inspections at facilities in their neighborhoods.

C. Reporting and Record-keeping

RCRA provides EPA with substantial authority to impose reporting and record-keeping requirements for generators, transporters, and TSDFs. **Section 3007** empowers EPA to require generators, TSDFs, and those “otherwise handl[ing]” hazardous wastes to “furnish information relating to such wastes” and to allow access for copying all records relating to the wastes. 42 U.S.C. § 6927(a). Under **Section 3002**, the agency must issue regulations on record-keeping and reporting for generators of hazardous wastes. 42 U.S.C. § 6922(a)(1). **Section 3003** contains no explicit reporting requirements for transporters, but does authorize the agency to promulgate standards “necessary to protect human health and the environment.” 42 U.S.C. § 6023(a). RCRA **Section 3004** confers

broad authority to promulgate regulations “as may be necessary to protect human health and the environment,” including but not limited to requirements for “maintaining all records of hazardous wastes . . . and the manner in which such wastes were treated, stored or disposed of.” 42 U.S.C. § 6024. These provisions authorize EPA to establish reporting requirements that provide communities with information that can help them more effectively address health and environmental risks.

VII. FINANCIAL ASSISTANCE

One of RCRA’s objectives, stated in **Section 2002(a)(3)**, is to “provide technical and financial assistance to States or regional agencies in the development and implementation of solid waste plans and hazardous waste management programs.” 42 U.S.C. § 6912(a)(3). Under RCRA **Section 3011**, EPA makes annual grants to states to help cover the costs of implementation. 42 U.S.C. § 6931. These funds are allocated among the states based on the extent to which hazardous waste is managed within the state, the extent of human and environmental exposure in the state, and “such other factors as the Administrator deems appropriate.” 42 U.S.C. § 6931(b). Factors deemed appropriate by EPA could include the extent to which states have implemented, or are working to implement, environmental justice measures into their programs.

Under **Section 4008**, certain state solid waste management plans are eligible for financial assistance from EPA if the plans contain various factors related to resource recovery and conservation. 42 U.S.C. § 6948. In order to obtain approval, the state plan must comply with certain minimum requirements, including prohibiting the open dumping of solid waste. 42 U.S.C. § 6943(a)(2). If a plan is approved, then EPA must also approve the state’s application for financial assistance. 42 U.S.C. § 6947(b)(2). This financial assistance could be conditioned on state furtherance of environmental justice goals, such as enhanced monitoring and reporting for landfills located in low-income communities or communities of color.

Under **Section 7007(b)**, EPA may make grants to states, educational institutions, and other eligible organizations for the “training [of] persons for occupations involving the management, supervision, design, operation, or maintenance of solid waste management and resource recovery equipment and facilities,” or for the training of instructors for these programs. 42 U.S.C. § 6977(b). EPA could use its Section 7007 authority, alone or in combination with other authorities, to train residents of low-income communities and communities of color for skilled positions at nearby solid waste facilities.

Finally, **42 U.S.C. Section 6941a(6)** – which is part of Subtitle D although it lacks a separate RCRA section number – finds that “various communities throughout the nation have different needs and different potentials for conserving resources and for utilizing techniques for the recovery of energy and materials from waste, and Federal assistance in planning and implementing such energy and materials conservation and recovery programs should be available to all such communities on an *equitable basis in relation to their needs and potential.*” 42 U.S.C. § 6941a(6) (emphasis added). This section recognizes that issues of equity and fairness are a part of federal assistance efforts to improve solid waste disposal, and could support generally EPA efforts to direct assistance to low-income communities and communities of color.

CHAPTER 13

COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT ("CERCLA" or "Superfund") 42 U.S.C. §§ 9601-9675

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund) was enacted in 1980 in response to growing public concern over inactive hazardous waste sites, such as Love Canal in New York and Valley of the Drums in Kentucky. The statute authorizes EPA to clean up and take actions to address and prevent releases of hazardous substances. Superfund takes its name from the revolving fund set up to finance site cleanups. The parties responsible for the releases or threat of releases of the hazardous substances may be required to pay all the government's costs of responding to the problem. EPA may also require the parties responsible for the release or threat of release to take the necessary cleanup actions. Except for limited defenses, those responsible for hazardous substances at a site are jointly, severally, strictly, and retroactively liable for cleanup costs.

According to some estimates, as many as one in four people lives within a four-mile radius of a Superfund site. *See* Statement by Carol Browner, Administrator, U.S. Environmental Protection Agency, on the Administration's Proposal for Superfund Reform (Oct. 5, 1994). Many of these people live in low-income communities and communities of color. *See, e.g.*, U.S. EPA, OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE, ENVIRONMENTAL JUSTICE TASK FORCE DRAFT FINAL REPORT (U.S. Environmental Protection Agency, pub., EPA 540/R-94/003, 1994) (citing 1983 General Accounting Office study that found three of four hazardous waste sites investigated in Southern U.S. were located in primarily African American communities); UNITED CHURCH OF CHRIST COMMISSION FOR RACIAL JUSTICE, TOXIC WASTES AND RACES IN THE UNITED STATES (1987) (studying the demographic characteristics of communities with uncontrolled toxic waste sites, and finding that African-Americans were heavily over-represented in the populations of metropolitan areas with the largest number of such sites). Therefore, the effective and efficient cleanup of Superfund sites is essential to protecting the health and environment of many communities of color and low-income communities. A landmark 1992 study that raised awareness of environmental justice concerns focused on the Superfund program. The study, published in the *National Law Journal*, found that EPA took longer to address hazards in communities of color than in largely white communities and that EPA accepted less stringent cleanup remedies in communities of color. *See* Marianne Lavelle & Marcia Coyle, *Unequal Protection*, NATIONAL LAW JOURNAL (Sept. 21, 1992) [hereinafter "Lavelle & Coyle"].

This chapter offers the public a review of the CERCLA statutory authorities that could potentially be used to address environmental justice concerns in EPA's regulatory activities under the Act. Part I of the chapter discusses the broad authority granted to EPA under the Superfund statute to respond directly to, or require that responsible parties respond to, releases or threats of releases of hazardous substances. Part I also addresses the specific duties that CERCLA imposes on the federal government with respect to the cleanup of contaminated facilities it owns. Part II outlines the various standard setting provisions and EPA rule-making authorities granted under the Act that could potentially be used in a manner that takes into account environmental justice concerns. Part

IV outlines the provisions of the statute that address the role of the states and Tribes in implementing the Superfund program and that could be used to advance environmental justice goals. Part V outlines the various CERCLA enforcement authorities and penalty provisions. Part VI discusses the wide range of information gathering and similar authorities that are granted to EPA under CERCLA, including investigation and monitoring authorities, as well as authority to conduct research. Part VI also outlines the numerous reporting requirements imposed on both EPA, in connection with its administration of the Superfund program, and federal government agencies, in their capacity as owners of facilities contaminated with hazardous substances. Finally, Part VII addresses the CERCLA provisions authorizing financial assistance mechanisms that can help support environmental justice goals.

I. GENERAL PROVISIONS

Unlike many environmental laws, CERCLA provides authority for and requires certain types of direct actions by the federal government. Most notably, CERCLA grants EPA the authority to respond directly to, or require that responsible parties respond to, releases or threats of releases of hazardous substances. The statute also authorizes the use of monies in the Superfund for certain EPA activities, including enforcement and abatement actions and hazardous substance research. And, unlike many of the other environmental statutes, CERCLA imposes certain specific duties on the federal government with respect to the cleanup of contaminated facilities it owns.

This Part discusses authorities under CERCLA in the following areas: (a) response actions; (b) abatement actions; (c) use of Fund monies; (d) federal facility cleanup duties; (e) administrative record public participation procedures; and (f) public participation in remedial action plans.

A. Response Actions

A core aspect of the Superfund program is EPA's authority to take action to ensure the cleanup of facilities where a release or threat of a release of a hazardous substance is imminent or has occurred.

Section 104 (a)(1) authorizes EPA to act whenever there has been a release (or a substantial threat of release) of any hazardous substance, contaminant, or pollutant that may present an "imminent and substantial danger to the public health or welfare." 42 U.S.C. § 9604(a)(1). Specifically, EPA may "remove or arrange for removal of," "provide for remedial action," or "take any other response measure" that EPA deems is necessary to protect the "public health or welfare or the environment." *Id.*

Sections 101(23) and **101(24)** define the terms "removal" and "remedial action." Removal actions are typically shorter term, immediate cleanup activities, while remedial actions are longer term, permanent actions. Both terms are defined broadly to include a wide range of activities. For example, the term "remedial action" includes not only "repair and replacement of leaking containers," but also "the costs of permanent relocation of residents, businesses and community

facilities,” under certain circumstances. 42 U.S.C. § 9601(23)&(24). The term “response” action includes both removal and remedial actions. 42 U.S.C. § 9601(25).

Response measures must be consistent with the National Contingency Plan (NCP). As discussed in more detail below, the NCP provides the organizational structure and procedures for preparing for and responding to releases of hazardous substances, pollutants, and contaminants. The statute directs EPA to give “primary attention” to releases which EPA deems may present a “public health threat.” 42 U.S.C. § 9604(a)(1); *see also* 40 C.F.R. § 300.400(c) (regulations stating certain requirements for EPA to follow in determining the need for, planning, or undertaking Fund-financed response actions).

These general provisions grant EPA considerable authority to respond to releases and threatened releases of hazardous substances. Given the broad statutory language, environmental justice concerns, such as cumulative risk and vulnerability of sensitive populations, could presumably be taken into account by EPA in defining “imminent and substantial danger” and determining whether to use its response authority. The statute also provides that EPA actions may be taken to protect “welfare,” in addition to public health and the environment. This may provide a basis for EPA to consider non-health impacts, such as social, cultural, and economic impacts, that might be of particular concern to communities of color and low-income communities.

Section 104(a)(4) establishes exceptions to the limitations on EPA’s removal and remedial authority that are contained in Section 104(a)(3). The limitations prevent EPA from taking removal or remedial action in response to releases or threats of releases from a naturally occurring substance from a location where it is naturally found; from products that are part of the structure of, and result in exposure within, residential buildings or business or community structures; or releases into public or private drinking water supplies due to deterioration of the system through ordinary use. Despite these limitations, Section 104(a)(4) allows EPA to respond to these types of releases or threats of releases of hazardous substances when it constitutes a “public health or environmental emergency” and no other person with authority and capability to respond will do so in a timely manner. 42 U.S.C. § 9604(a)(4). EPA has issued regulations implementing these provisions. 40 C.F.R. § 300.400(b).

EPA has rarely used these exceptions to the limitations on its removal and remedial authority. EPA could, however, rely on this section to address hazardous substance releases in low-income communities and communities of color that may otherwise go unaddressed. This may include releases from products, such as asbestos or lead paint, that are part of the structure of buildings. They may also include releases into public or private drinking water supplies due to deterioration of the system through ordinary use, particularly in communities with limited financial resources for maintaining buildings and water systems. In addition, such releases may pose particular public health threats in many low-income communities and communities of color because of factors such as sensitive populations and cumulative risks. Furthermore, because many low-income communities and communities of color have limited resources, it may be likely that there are no other authorities with capability to respond to the releases.

Section 104(c)(1) sets out several exceptions to the general rule that response actions financed by the Fund may not continue after \$2 million has been obligated or 12 months has elapsed from the date of the initial response to the release or threat of release of a hazardous substance. A

key exception to the \$2 million/12-month cap on response actions is provided when: (1) continued response actions are immediately required to prevent, limit, or mitigate an emergency; (2) there is immediate risk to the public health, welfare, or environment; and (3) such assistance will not otherwise be provided on a timely basis. While the statute uses the term “response action” in imposing the cap, which includes both removal and remedial actions, EPA has interpreted the cap to cover only “removal actions” and not remedial actions. *See* 40 C.F.R. § 300.415 (b)(5); 42 U.S.C. § 9604(c)(1).

The exception to the cap on the amount and duration of removal actions funded by the Superfund is a general rule that could potentially be applied, on a case-by-case basis or possibly through guidance or regulations, to assist communities of color and low-income communities that may be subject to immediate risks that would not otherwise be addressed in a timely manner.

B. Abatement Actions

Section 106(a) provides specific authority to EPA to take enforcement-related actions when there may be an imminent and substantial endangerment to the public health, welfare, or environment because of an actual or threatened release of a hazardous substance. 42 U.S.C. § 9606(a). This section provides specific mechanisms for EPA to implement the authority granted in Section 104(a). For example, this section authorizes the President to require the Attorney General of the United States to secure such relief as may be necessary to abate the danger or threat. The courts, in turn, are given jurisdiction to grant “such relief as the public interest and the equities may require.” *Id.* EPA is also authorized to take other actions including, but not limited to, issuing orders as may be necessary to protect public health, welfare, and the environment. *Id.* EPA uses this order authority as a means of requiring private parties to complete response actions.

This is a general provision that can be used to address releases in communities of color and low-income communities. Given the broad statutory language, EPA could presumably take factors, such as sensitive populations and cumulative risks, into account in determining whether there is an “imminent and substantial endangerment.” As discussed, the statute also provides that EPA actions may be taken to protect “welfare,” in addition to public health and the environment. This may provide a basis for EPA to consider non-health impacts that might be of particular concern to heavily impacted communities.

Section 106(c) requires EPA to establish guidelines for using the imminent hazard, enforcement, and emergency response authorities granted under Section 106 of CERCLA, which provides the authority for EPA to issue cleanup orders and to request that the Justice Department assist it in securing necessary relief in court. 42 U.S.C. § 9606(c). Among the issues that must be addressed by the guidelines are: the enforcement of standards and permits, the gathering of information, and the imminent hazard and emergency powers authorized in other statutes administered by EPA. *Id.* This section provides broad, general authority that arguably would allow EPA to take environmental justice considerations into account in developing or amending guidelines for using its emergency response and enforcement authorities.

C. Uses of Fund Monies

The statute specifies the permissible uses of monies appropriated to the Fund. **Section 111(b)** authorizes claims against the Fund for injury to or loss of natural resources, including claims asserted by Tribes or by the United States on behalf of any Tribe for injury to natural resources they control. 42 U.S.C. § 9611(b). This is a general provision that could be used by tribal communities or by the United States on behalf of Tribes. Environmental justice goals could be forwarded by making the claims process for Tribes as streamlined and efficient as possible, and by providing assistance and support throughout the claims process.

Section 111(c) authorizes additional uses of the Fund, some of which bear on environmental justice concerns, including the following:

- costs of a Tribe's efforts with respect to restoration, rehabilitation, or replacement of natural resources injured, destroyed, or lost as a result of a release of a hazardous substance (Section 111(c)(2));
- costs to identify, investigate, and take enforcement and abatement actions against releases of hazardous substances (Section 111(c)(3));
- costs incurred for epidemiologic and laboratory studies, health assessments, preparation of toxicological profiles, development and maintenance of a registry of persons exposed to hazardous substances to allow long-term health effect studies, and diagnostic services not otherwise available to determine whether persons in populations exposed to hazardous substances in connection with a release or a suspected release are suffering from long-latency diseases (Section 111(c)(4));
- costs incurred by EPA in evaluating facilities pursuant to petitions for environmental assessments filed by parties affected by a release or threat of release of a hazardous substance, as authorized under Section 105(d) of CERCLA (Section 111 (c)(7));
- the cost of carrying out the research, development, and demonstration program established under Section 311 of CERCLA (Section 111(c)(10)); and
- a percentage of the costs of reimbursing local governments for taking temporary emergency measures necessary to prevent or mitigate injury to human health or the environment under Section 123(b) of CERCLA (Section 111(c)(11)).

These provisions authorize EPA use of Fund monies to conduct several activities that could forward the protection of communities of color and low-income communities. These provisions are discussed in more detail below. 42 U.S.C. § 9611(c)(2), (3), (4), (7), (10).

D. Federal Facility Cleanup Duties

CERCLA applies to federally owned facilities, as well as to privately owned facilities. 42 U.S.C. § 9620(a)(1). The statute sets out the specific requirements that apply to federal facilities and the procedures that EPA must follow with respect to addressing releases or threats of releases of

hazardous substances at federal facilities.

CERCLA **Section 120(d)** requires EPA to take steps to assure that a preliminary assessment is conducted for each facility on the docket of federal facilities. Where appropriate, following this preliminary assessment, EPA is also required to evaluate facilities in accordance with the NCP criteria for prioritizing releases and listing federal sites on the National Priority List (NPL) that meet the criteria. **Section 120(d)(3)** provides that evaluation and listing must be completed “in accordance with a reasonable schedule established by the Administrator.” 42 U.S.C. § 9620(d).

Section 120(e)(1)&(2) requires federal facilities, in consultation with EPA and appropriate state authorities, to commence a remedial investigation and feasibility study not later than six months after a facility is listed on the NPL. 42 U.S.C. § 9620(e)(1)&(2). EPA and the appropriate state authorities must publish a timetable and deadlines for the “expeditious” completion of investigations and studies. *Id.*

Under **Section 120(e)(2)**, EPA is required to review the results of each investigation and study conducted. Within 180 days, the federal facility must enter into an interagency agreement with EPA for the “expeditious” completion of all necessary remedial action at the facility. Substantial continuous physical onsite remedial action must be commenced at a facility not later than 15 months after completion of the investigation and study. Interagency agreements, including the review of alternative remedial action plans and selection of remedial actions, must comply with the public participation requirements of Section 117, as discussed below. 42 U.S.C. § 9620(e)(2). **Section 120(e)(3)** provides that remedial actions at facilities subject to interagency agreements “shall be completed as expeditiously as practicable.” 42 U.S.C. § 9620(e)(3). Under **Section 120(e)(4)**, each interagency agreement must include: a review of alternative remedial actions; selection of a remedial action by the head of the relevant department, agency, or instrumentality and the EPA; a schedule for completion of each remedial action; and arrangements for long-term operation and maintenance of the facility. 42 U.S.C. § 9620(e)(4).

These sections impose duties on federal facilities and EPA that are intended to ensure the cleanup of contaminated federal facilities. EPA can promote environmental justice by implementing these provisions efficiently and effectively at sites in or near communities of color and low-income communities. For example, strict implementation of the duty to complete investigations and studies in an “expeditious” manner and to complete remedial actions “expeditiously” would substantially benefit communities of color and low-income communities where many federal facilities are located. It is well-documented that many federal facility cleanups have not proceeded expeditiously and, in fact, will take many more years to complete. *See, e.g.,* Katherine Probst, Resources for the Future, *Long-Term Stewardship and the Nuclear Weapons Complex: The Challenge Ahead* 1-3, 14-16 (1988); Interim Report of the Federal Facilities Environmental Restoration Dialogue Committee 6-8 (1993).

These statutory provisions also require EPA to follow CERCLA public participation requirements at federal facilities. As discussed earlier, EPA has considerable discretion under CERCLA to involve actively communities of color and low-income communities in the cleanup process. The use of site-specific advisory boards at certain federal facilities has generally been

viewed as a good mechanism for community involvement that could be used at more federal and non-federal sites.

CERCLA **Section 120(h)** provides EPA with another opportunity to enhance community participation in federal facility cleanups. Section 120(h) provides an exception to the general rule that all necessary remedial action must be taken before a federal facility is transferred or sold to any person. In order to qualify for the exception, several conditions must be met. 42 U.S.C. § 9620(h). For example, EPA must determine that the intended use of the property is consistent with protection of human health and the environment and that the transfer will not substantially delay necessary response actions. In addition, the federal agency must provide notice, by publication in a newspaper of general circulation in the vicinity of the property, of the proposed transfer and of the opportunity for the public to submit written comments on the suitability of the property for transfer. *Id.*

This is a general provision that imposes only minimal public participation requirements. It could be used, however, to help ensure that affected communities are informed of and have the opportunity to participate in decisions that allow the transfer of federal facilities prior to the completion of response work. In addition, the statute does not preclude more extensive public participation efforts. For example, EPA could notify local residents of the proposed transfer through direct mailings or public meetings.

E. Administrative Record Public Participation Procedures

Section 113(k)(1) requires EPA to establish an administrative record upon which to base the selection of response actions. The administrative record must be available to the public at or near the facility. EPA may also place duplicates of the records at any location. 42 U.S.C. § 9613(k)(1). EPA has issued regulations implementing this section. 40 C.F.R. Subpart I.

Section 113(k)(2) requires EPA to issue regulations establishing procedures for “appropriate participation of interested persons” in the development of the administrative record on which EPA bases the selection of removal actions and on which judicial review of removal actions is based. 42 U.S.C. § 9613(k)(2). **Section 113(k)(3)** requires EPA to provide for “participation of interested persons” in the development of the administrative record on which EPA will base the selection of remedial actions and on which judicial review of remedial actions is based. 42 U.S.C. § 9613(k)(3). The participation procedures developed must include “at a minimum”: notice to potentially affected persons accompanied by a brief analysis of the plan and alternative plans that were considered; a reasonable opportunity to comment and provide information regarding the plan; an opportunity for a public meeting in the affected area; a response to each of the significant comments, criticisms, and new data submitted in written or oral presentations; and a statement of the basis and purpose of the selected action. *Id.*; 40 C.F.R. Subpart I.

These provisions require EPA to make administrative records available to the public at or near each CERCLA facility and authorizes EPA to place duplicates of them at any location. Therefore, the provisions could be used to distribute widely administrative records and to ensure that affected communities have easy access to documents pertaining to nearby facilities. The statute presumably would not preclude publicizing the availability of the administrative record and distributing explanatory materials to communities that could assist them in understanding and using the record effectively.

The statute also gives EPA considerable discretion in developing public participation procedures for the development of administrative records. Participation in the development of administrative records can help affected communities have a more meaningful role in Superfund cleanup decisions. The broad language of the statute should allow EPA to use proactive and innovative approaches to foster such public involvement. For example, EPA could attend community meetings to solicit input and could publicize site issues at local libraries. It has also been suggested that convening community working groups could foster meaningful public involvement. See Deoohn Ferris, *Communities of Color and Hazardous Waste Cleanup: Expanding Public Participation in the Federal Superfund Program*, 21 *FORDHAM URBAN L.J.* 671, 682 (Spring 1994) [hereinafter "Ferris"].

F. Public Participation Requirements for Remedial Action Plans

Section 117(a) requires that prior to the adoption of any plan for remedial action, "as appropriate," EPA must publish notice and a brief analysis of the proposed plan and make the plan available to the public. 42 U.S.C. § 9617(a). EPA must also provide a reasonable opportunity for submission of comments and provide an opportunity for a public meeting at or near the facility regarding the proposed plan and any proposed findings. Transcripts of meetings must be kept and made available to the public. The statute also states that the notice and analysis required must include sufficient information as necessary to provide a reasonable explanation of the proposed plan and alternative proposals considered. *Id.* **Section 117(d)** explains that the term "publication," includes, at a minimum, publication in a major local newspaper of general circulation. 42 U.S.C. § 9617(d). In addition, each item received, developed, published, or made available to the public must be available for public inspection and copying at or near the facility. 42 U.S.C. § 9617(a).

Section 117(b) requires that notice of a final remedial action plan must be published and the plan made available to the public before a remedial action is commenced. 42 U.S.C. § 9617(b). The final plan must be accompanied by a discussion of any significant changes and the reasons for such changes in the proposed plan and a response to each of the significant comments, criticisms, and new data submitted in written or oral presentations. *Id.*

Section 117(c) provides that if, after the adoption of a final remedial action plan, a remedial or enforcement action is taken or a settlement is entered into that differs in any significant respect from the final plan, EPA or the state must publish an explanation of the significant differences and the reasons such changes were made. 42 U.S.C. § 9617(c). Notice must also be given to communities of any changes to the remedial action plan.

The public participation provisions with respect to remedial action plans represent the core of the CERCLA public participation program. In addition, EPA has issued regulations that provide more detail on CERCLA public involvement procedures for remedial activities. See, e.g., 40 C.F.R. § 300.430(c). EPA also has developed regulations that address public involvement in removal actions. See 40 C.F.R. § 300.415(n). The statutory language is specific in many cases with respect to EPA's obligations but also provides considerable discretion. Thus, EPA can promote environmental justice by integrally involving affected communities in the remedial selection process, both by proactively implementing the core statutory requirements and by using its discretion to support involvement through increased use of other mechanisms, such as community advisory groups at individual sites.

II. STANDARD SETTING/RULE-MAKING

Some of the rule-making authorities contained in CERCLA are broad in scope and provide considerable discretion to EPA, while some authorities are more focused. For example, EPA is granted broad rule-making authority with respect to establishing the procedures and standards for responding to hazardous substance releases. The statute also provides considerable discretion to EPA to develop guidelines for using a variety of its authorities, including its enforcement and emergency response authorities. The statute also, however, directs EPA to take steps that are more specific, such as completing assessments and evaluations of facilities by certain dates. The Act contains rule-making authority for the release reporting requirements of the Act, including the authority to designate hazardous substances and their reportable quantities. Finally, the Act contains several provisions establishing the standards for EPA to use in selecting appropriate remedial actions.

This Part discusses standard setting and rule-making authorities contained in CERCLA in the following areas: (a) designation of hazardous substances and reportable quantities; (b) the National Contingency Plan; (c) assessment and listing of facilities; and (d) remedy selection.

A. Designation of Hazardous Substances and Reportable Quantities

CERCLA includes a program that requires facilities to report releases of hazardous substances. The releases covered by this program are typically sudden and accidental releases that may require some type of emergency response. The information about such releases is reported to the National Response Center established under the Clean Water Act. The Center then notifies the appropriate federal and state entities. Federally permitted releases are not covered by these provisions. The release reporting program is separate from the core Superfund program, which covers the cleanup of facilities contaminated by prior releases of hazardous substances.

Section 102(a) provides broad authority to EPA to promulgate and revise, as appropriate, the regulations that designate those hazardous substances that, when released into the environment, “may present substantial danger to the public health or welfare or the environment.” 42 U.S.C. § 9602 (a). EPA must also promulgate regulations establishing what quantity of release of any hazardous substance must be reported. *Id.* **Section 103(a)** establishes the actual duty to report releases.

This section provides general authority that arguably could allow EPA to take into account environmental justice considerations in designating hazardous substances and their reportable quantities. For example, EPA could consider, as appropriate, cumulative exposure scenarios, sensitive populations, and consumption patterns in setting or revising threshold reporting quantities in its regulations. *See* 40 C.F.R. Part 302.

B. National Contingency Plan

The regulations and operating procedures for the Superfund program are contained in the National Contingency Plan. See 40 C.F.R. Part 300. **Section 105(a)** directs EPA to revise the NCP to include a national hazardous substance response plan that establishes procedures and standards for responding to releases of hazardous substances. 42 U.S.C. § 9605(a). The statute states that the plan must include, among other things: methods for discovering and investigating facilities; methods for evaluating and remedying releases; and methods and criteria for determining the appropriate extent of removal and remedial actions. 42 U.S.C. § 9605(a)(1)-(3). In addition, the plan must include criteria for determining priorities among releases or threatened releases throughout the U.S. for the purpose of taking remedial and removal actions. Criteria and priorities must be based, in part, on “relative risk or danger to the public health or welfare or the environment,” taking into account to the extent possible the “population at risk” and several other considerations set out in the statute, as well as “other appropriate factors.” 42 U.S.C. § 9605(a)(8)(A).

These provisions give EPA broad authority and, thus, allow EPA to consider environmental justice concerns in developing and maintaining the basic components of the Superfund program. These components include the methods for discovering and investigating facilities, evaluating and remedying releases or threats of releases, and determining the appropriate extent of removal and remedial work. The statute also specifically authorizes EPA to take into account the “population at risk” in setting criteria and priorities, as well as other “appropriate factors.” These provisions could be used by EPA to take into account environmental justice concerns in setting priorities among NPL and non-NPL sites, as well as for determining whether sites should be listed on the NPL. See Memorandum from Howard F. Corcoran, U.S. EPA Office of General Counsel, Environmental Justice Law Survey (Feb. 25, 1994) at 3 [hereinafter “OGC 1994 Memorandum”].

C. Assessment and Listing of Facilities

A key aspect of the Superfund program is determining which sites pose the greatest risk to human health and the environment. The sites that pose the greatest risks are listed on the NPL. EPA uses the hazard ranking system (HRS), 40 C.F.R. Part 300, app. A, to determine whether a site should be placed on the NPL. The Comprehensive, Environmental Response, Compensation, and Liability Information System (CERCLIS) is the database containing all sites where releases of hazardous substances have occurred and that EPA may consider for inclusion in the Superfund program. CERCLIS is available on EPA’s web site online. U.S. EPA Office of Solid Waste and Emergency Response, CERCLIS Hazardous Waste Sites, *available at* www.epa.gov/superfund/sites/cursites (last modified Oct. 16, 2001).

CERCLA **Sections 116(a)** and **(b)** set out the time frames for EPA to accomplish “to the maximum extent practicable” completion of preliminary assessments of facilities that were on CERCLIS as of October 17, 1986 and completion of any necessary inspections of such sites. 42 U.S.C. § 9616(a), (b). The section also sets time frames for evaluating CERCLIS facilities when EPA determines that evaluations are warranted based on site inspections and preliminary assessments. CERCLIS facilities listed after October 17, 1986 must be evaluated by EPA within four years after the date of the listing, if EPA determines that such an evaluation is needed. *Id.* Evaluations must be carried out according to the criteria established in the NCP for determining which releases will be included on the National Priority List. See 42 U.S.C. § 105(a)(8).

This provision could possibly be used to require EPA to meet its statutory obligation to evaluate facilities in communities of color and low-income communities, if such evaluations have not been completed within the appropriate time frames. This section does not address the factors that EPA should take into account in determining priorities among assessments or determining whether evaluations are warranted on the basis of site inspections or preliminary assessments. Because the statute is silent on these points and Section 105(a) gives EPA broad general authority to determine methods for investigating and evaluating facilities, it is arguable that EPA could consider environmental justice concerns, such as the cumulative exposures suffered by a particular community, in determining whether a site should be evaluated. In addition, the statute provides considerable discretion to EPA to develop the criteria used in site evaluations. As discussed above, the criteria for evaluations and for determining priorities among releases for inclusion on the NPL must be based, in part, on “relative risk or danger to the public health or welfare or the environment,” taking into account to the extent possible the “population at risk” and several other considerations set out in the statute, as well as “other appropriate factors.” 42 U.S.C. § 9605(a)(8)(A).

Section 105(d) provides that any person who is affected by a release or threatened release of a hazardous substance may petition for a preliminary assessment of the hazard to public health and the environment. 42 U.S.C. § 9605(d). EPA must perform the assessment within 12 months or explain why the assessment is not appropriate, if an assessment has not already been conducted. If the assessment indicates a threat to health or the environment, EPA must promptly evaluate the release in accordance with the HRS. *Id.*

This section provides a generic tool that could be used by communities to help ensure that EPA takes note of and addresses the potential risks caused by hazardous substance releases or threats of releases in their communities. EPA could increase its responsiveness to petitions, publicize the availability of this mechanism to communities of color and low-income communities, and assist communities in using this tool in an effective manner. In addition, because the statutory language does not provide guidance as to how or whether EPA should conduct a preliminary assessment in response to a petition, EPA presumably could use its discretion to take environmental justice concerns into account in making such determinations. *See also* Section 105(a) (granting authority to EPA to establish methods for evaluating and setting priorities among releases); 40 C.F.R. § 300.420(b)(5) (regulations describing petition requirements).

CERCLA **Section 118** directs EPA in taking response actions, bringing enforcement proceedings, and listing sites on the NPL to place a high priority on facilities where the release of hazardous substances has resulted in the closing of drinking water wells or has contaminated a principal drinking water supply. 42 U.S.C. § 9618. This is a general provision that could be used to help ensure that communities of color and low-income communities with contaminated drinking water are given priority in terms of allocating Fund resources, as well as enforcement resources.

Finally, **Section 104(i)(11)** provides that if a health assessment or other study contains a finding that the exposure concerned presents significant risk to public health, the President must take steps to reduce exposure and eliminate or substantially mitigate the risk. Steps include, but are not limited to providing alternative water supplies and permanent or temporary re-location of individuals. The President may also take steps to reduce the exposure of any person to hazardous substances to such level as the President deems necessary to protect human health when information is insufficient to determine a significant human exposure level with respect to a hazardous substance. 42 U.S.C. § 9604(i)(11). (See also Part VI, discussing Section 104(i)(6)(H), which requires prompt

evaluation of sites for placement on the NPL when health assessments show a serious threat).

This is a general provision that could be used by EPA to protect public health in communities of color and low-income communities. The statute requires EPA to take steps to respond to health assessments and provides powerful tools, including alternative water supplies and relocations. Notably, the statute also gives EPA the authority to take steps to reduce exposures even when information may be insufficient. See U.S. EPA, Interim Policy on the Use of Permanent Relocation As Part of Superfund Remedial Actions (U.S. Environmental Protection Agency, pub., EPA 540F-98-033, June 30, 1999).

D. Remedy Selection

The statute sets out the basic framework and standards for EPA to work with in selecting a remedial action for a site. The NCP builds on these statutory requirements. See 40 C.F.R. § 300.430.

Section 121(b) establishes the general rules or core approach that EPA uses for selecting remedial actions. The statute states a preference for permanent treatment remedies over other types of remedies: “Remedial actions in which treatment which permanently and significantly reduces the volume, toxicity or mobility of the hazardous substances, pollutants and contaminants . . . are to be preferred over remedial actions not involving such treatment.” 42 U.S.C. § 9621(b). In addition, the statute provides that the offsite transport and disposal of hazardous substances or contaminated materials without such treatment should be the least favored alternative remedial action where practicable treatment technologies are available. *Id.*

This section also requires EPA to conduct an assessment of permanent solutions and alternative treatment technologies or resource recovery technologies that, in whole or in part, will result in a “permanent and significant decrease in the toxicity, mobility, or volume of the hazardous substance, pollutant or contaminant.” *Id.* The statute directs that in making such assessments, EPA must specifically address the long-term effectiveness of various alternatives. Furthermore, in assessing alternative remedial actions, EPA must, at a minimum, take into account the following factors: (1) long-term uncertainties associated with land disposal; (2) the goals, objectives, and requirements of the Solid Waste Disposal Act; (3) the persistence, toxicity, mobility, and propensity to bioaccumulate of hazardous substances and their constituents; (4) short- and long-term potential for adverse health effects; (5) long-term maintenance costs; (6) potential for future remedial action costs, if the alternative remedial action were to fail; and (7) the potential threat to human health and the environment associated with excavation, transportation, and redispersion or containment. 42 U.S.C. § 9621(b)(1)(A)-(G).

Finally, EPA is required under Section 121(b) to select a remedial action that is protective of human health and the environment, that is cost-effective, and that utilizes permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable. If EPA selects a remedial action that does not follow the preferences established under the remedy selection provisions of the Act, EPA must publish an explanation. This section also states that EPA may select an alternative remedial action meeting the objectives of the statute whether or not such action has been achieved in practice at any other facility that has similar characteristics. However, in making such a selection EPA may take into account the degree of support for the remedial action by parties interested in the site. 42 U.S.C. § 9621(b)(2).

The CERCLA cleanup provisions state a strong preference for cleanups that are permanently

protective of public health. This preference, along with other stated goals, is consistent with ensuring that protective remedies are selected for sites in communities of color and low-income communities. Therefore, EPA should be able to consider environmental justice factors in developing and implementing remedy selection procedures. In addition to the general authority granted under this section, the statute specifically requires EPA to take into account in selecting among alternative remedies “the propensity to bioaccumulate” of hazardous substances. *See* 42 U.S.C. § 9621(b)(1)(C).

The statute also attempts to hold EPA accountable in circumstances in which it does not select permanent treatment remedies by requiring an explanation. This provision, in particular, could benefit communities of color if used proactively, in light of studies that have indicated that EPA is more likely to select non-treatment remedies for sites in communities of color than for sites in white communities. *See Ferris at 673 (citing Lavelle & Coyle).*

The NCP builds upon the statutory requirements by directing that EPA analyze various remedial alternatives on the basis of nine evaluation criteria that are divided into three categories. The first category is “threshold criteria” which includes overall protection of human health and the environment and compliance with any legally applicable or relevant and appropriate standards, requirements, criteria, or limitations under federal environmental law, or under more stringent state environmental or facility siting laws. The second category is “balancing criteria” which includes: long-term effectiveness and permanence; reduction in toxicity, mobility, or volume through treatment; short-term effectiveness; implementability; and costs. The third category is “modifying criteria” which includes state acceptance and community acceptance. 40 C.F.R. § 300.430(e)(9)&(f).

The nine regulatory criteria do not specifically address environmental justice factors but like the statutory provisions, seem to allow for consideration of such factors. Overall protection of human health and the environment and long-term effectiveness of remedial alternatives, for example, are criteria that could allow EPA to include consideration of environmental justice factors, such as sensitive populations.

In addition to the NCP regulatory provisions, EPA has issued memoranda and guidance that address remedy selection issues. Some of these documents specifically address environmental justice concerns. For example, a May 1995 memorandum titled “Land Use in the CERCLA Remedy Selection Process” references environmental justice issues several times. The memorandum notes that the type of information that may aid EPA in determining the reasonably anticipated future land use for a site, and consequently the appropriate type of remedy, includes “environmental justice issues.” *See* U.S. EPA, Office of Solid Waste and Emergency Response Directive No. 9355.7-04 at 2, 5, and 6 (May 25 1995).

Section 121(c) provides that if EPA selects a remedial action that results in any hazardous substance, pollutant, or contaminant remaining at a site, EPA must review the remedial action no less often than every five years after the initiation of the remedial action to assure that human health and the environment are being protected. 42 U.S.C. § 9621(c). In addition, if EPA determines after the five-year review that cleanup action is appropriate, EPA must take or require such action. *Id.*

This is an important statutory provision for purposes of protecting communities of color and low-income communities. EPA’s failure to conduct five-year reviews in a timely manner has been well-documented. *See, e.g.,* KATHERINE PROBST, SUPERFUND’S FUTURE: WHAT WILL IT COST, A REPORT TO CONGRESS 63 (2001). EPA has taken steps to meet its five-year review obligations, but

it remains to be seen whether it can adequately address the back log and keep up with current demands. Meeting the five-year review requirements is particularly important for communities of color to the extent that EPA is more likely to select containment remedies for sites in those communities than in white communities. *See Ferris* at 673. In addition, remedies that allow contaminants to remain onsite may pose a greater risk to communities of color and low-income communities than other communities because of cumulative exposures, consumption patterns, and the presence of sensitive populations. Low-income communities may also have limited resources for taking steps to ensure that EPA meets its review obligations. Thus, this provision could be used to protect these communities from risks posed by contaminants that remain after site cleanups are completed.

Section 121(d) includes general language about the level of cleanup that must be achieved by a remedial action. Specifically, the statute requires EPA to select and require remedial actions that “shall attain a degree of cleanup of hazardous substances, pollutants, and contaminants released into the environment and of control of further release at a minimum which assures protection of human health and the environment.” 42 U.S.C. § 9621(d). The provision also states the general rule that remedial actions must require at their completion a level or standard of control for hazardous substances, pollutants, or contaminants onsite that at least attains any legally applicable or relevant and appropriate standards, requirements, criteria, or limitations under federal environmental law, or under more stringent state environmental or facility siting laws (ARARs). Section 121(d)(4) sets out certain exceptions to the requirement that cleanups meet ARARs.

These are general provisions that apply to all cleanups. Arguably, EPA could consider environmental justice factors in determining the degree of cleanup, even if ARARs do not, because of the general standard established (“protection of human health and the environment”) and the requirement that cleanups at a minimum (“at least”) attain ARARs. It should be noted that state environmental justice laws can be considered ARARs for cleanups in those states.

E. Assessment of Natural Resource Damages Regulations

CERCLA **Section 301(c)** requires EPA to publish regulations for the assessment of damages for injury to, destruction of, or loss of natural resources resulting from a release of oil or a hazardous substance. 42 U.S.C. § 9651(c). **Section 107(a)(4)(C)** provides that responsible parties may be liable for damages for injury to, destruction of, or loss of natural resources, including the reasonable costs of assessing such injury, destruction, or loss resulting from such a release. 42 U.S.C. § 9607(a)(4)(c). **Section 107(f)** provides that only natural resources owned, controlled, or held in trust by a government entity, such as the federal government, state governments and Tribes are covered. 42 U.S.C. § 9607(f).

Section 301(c) requires that the regulations specify standard procedures for simplified assessments requiring minimal field observation. 42 U.S.C. § 9651(c). The regulations must also include alternative protocols for conducting assessments in individual cases to determine the type and extent of short- and long-term injury, destruction, or loss. The regulations must identify the best available procedures to determine such damages, including both direct and indirect injury, destruction, or loss and must take into consideration factors including, but not limited to, replacement value, use value, and ability of the ecosystem or resource to recover. The statute specifies that the regulations must be reviewed and revised as appropriate every two years. *Id.*

These provisions grant EPA broad authority to develop an approach to assessing natural resource damages. The regulations could be reviewed and revised, as appropriate, to take into account environmental justice issues, such as efficiently and effectively assessing damages to natural resources that low-income and communities of color may rely on for subsistence.

III. PERMITTING AND OTHER APPROVALS

CERCLA does not contain permitting provisions.

IV. DELEGATION OF PROGRAMS TO STATES AND TRIBES

CERCLA is one of the few major programs EPA administers that is not delegated to the states or Tribes to implement. The statute does, however, provide for a state and tribal role in program implementation.

A. Consultation Requirements

CERCLA **Section 103(c)(2)** requires EPA to consult with affected states before determining any appropriate remedial action at a Superfund site. 42 U.S.C. § 9603(c)(2). **Section 126(a)** provides that the governing body of a Tribe must be afforded substantially the same treatment as a state with respect to the key provisions of the statute. 42 U.S.C. § 9626(a). For example, Tribes must be consulted with and given the opportunity to submit priorities for remedial actions.

B. State Assurances

CERCLA **Section 104 (c)(3)** requires certain assurances from the state in which a release of a hazardous substance or threat of release occurs, before EPA can perform a remedial action. 42 U.S.C. § 9604(c)(3). These assurances are provided in a contract or cooperative agreement between EPA and the state. A key assurance required is that the state will, among other things, assure all future maintenance of removal and remedial actions. *See* 40 C.F.R. § 300.520.

The requirement that states provide assurances with respect to future maintenance of removal and remedial actions is potentially important for advancing environmental justice goals. Particularly at sites where contaminants remain after cleanup, but at other sites as well, it is critical that the response action taken at the site remains effective. This may require a range of activities by a state, such as maintaining the integrity of a fence or clay cap, or ensuring the proper functioning of a groundwater pump and treatment system. Effective operation and maintenance (O&M) is

fundamental to ensuring that communities are protected by the remedy that was completed at a site. Ensuring effective O&M at sites in low-income communities can be a particular challenge because O&M is typically the responsibility of state and local authorities, many of which have limited resources. In addition, communities of color and low-income communities may be particularly vulnerable to the potential negative health effects of failed O&M. Accordingly, EPA could use this provision to ensure that states and local governments have adequate resources and actually meet their obligations to maintain removal and remedial work provided by EPA.

C. Cooperative Agreements and Contracts with States and Tribes

Section 104(d) allows states and Tribes to apply to EPA to carry out actions authorized by Section 104 of CERCLA, including removal and remedial actions, investigations, monitoring, and information gathering. 42 U.S.C. § 9604(d). EPA must determine if the state or Tribe has the capability to carry out any or all such actions in accordance with the criteria for determining priorities among releases or threatened releases that EPA is required to establish in the NCP. *Id.*; *see also* 42 U.S.C. § 105(a)(8). EPA also must determine if the state or Tribe has the capability to carry out related enforcement actions. 42 U.S.C. § 9604(d). If the state or Tribe meets EPA's requirements, EPA may enter into a contract or cooperative agreement with the state or Tribe to carry out response actions. The statute states that contracts and cooperative agreements are subject to the terms and conditions that EPA prescribes. Contracts and cooperative agreements may cover a specific facility or facilities. *Id.*; 40 C.F.R. Part 300, Subpart F; 40 C.F.R. Part 35, Subpart C.

This provision grants broad authority to EPA to impose terms and conditions on cooperative agreements that presumably could be used to forward environmental justice goals. In assessing a state's capability to carry out actions under the Act, EPA could also promote environmental justice goals. For example, EPA could assess whether the state has a record of enforcing its environmental laws consistently in communities of color and white communities. EPA could also consider whether a state is likely to set cleanup priorities in a manner that takes into account environmental justice concerns.

V. ENFORCEMENT

CERCLA contains a variety of enforcement authorities and penalty provisions. The following is a brief outline of the key provisions. Because they are generic provisions, no analysis is provided and the same considerations with respect to environmental justice would apply to these provisions, as apply to most penalty provisions in environmental laws. For example, EPA enforcement authorities should be applied consistently and aggressively in all situations in which private parties or federal facilities fail to comply with administrative orders. This may be particularly important with respect to Superfund sites, given the research that indicates that EPA has tended to enforce more aggressively in white communities. *See Lavelle & Coyle*. In addition, CERCLA and other statutes' enforcement provisions which allow for punitive damages or fines in excess of general caps could be implemented in a manner that takes into account the special harm that noncompliance can cause to members of communities of color and low-income communities because of cumulative exposures and consumption patterns. Similarly, statutory provisions that allow for consideration of the "gravity" of the violation or allow for consideration of other "factors as justice may require" may allow EPA to include environmental justice considerations in bringing enforcement actions. For a fuller discussion of statutory enforcement authorities for advancing environmental justice, see

Chapter 5.

In addition to the standard enforcement provisions, CERCLA contains a provision, **Section 118**, discussed in Part II of this chapter, that directs EPA in bringing enforcement proceedings to place a high priority on facilities where the release of hazardous substances has resulted in the closing of drinking water wells or has contaminated a principal drinking water supply. 42 U.S.C. § 9618.

A. Fines and Penalties

Section 109(a) provides for Class I administrative penalties for violations of certain provisions of and orders issued under CERCLA. Factors to consider in determining the amount of administrative penalties include the nature, circumstances, extent, and gravity of the violation and “such other matters as justice may require.” 42 U.S.C. § 9609(a). **Section 109(b)** provides for Class II administrative penalties for violations of certain provisions of and orders issued under the Act. Penalties are assessed and collected in the same manner and subject to the provisions of Section 554 of Title 5 (Administrative Procedures Act). 42 U.S.C. § 9609(b). **Section 109(c)** authorizes actions in U.S. District Court for the assessment and collection of penalties of not more than \$25,000 per day in a variety of situations including, but not limited to, violations of administrative orders, consent decrees, and agreements. 42 U.S.C. § 9609(c).

CERCLA also contains a number of other provisions authorizing fines and penalties for specific violations of the Act. **Section 103(b)** provides for fines and imprisonment for failure to comply with the hazardous substance release reporting requirements of CERCLA. 42 U.S.C. § 9603(b). **Section 106(b)** provides that in an action brought in U.S. District Court to enforce an abatement order, a person who violates an order may be fined not more than \$25,000 for each day in which the violation occurs or failure to comply continues. 42 U.S.C. § 9606(b). **Section 122(l)** provides that a potentially responsible party that fails to comply with a term or condition of an administrative order, consent decree, or agreement may be subject to a civil penalty. 42 U.S.C. § 9622(l). **Section 104(e)(5)(B)** provides that EPA may request the Attorney General to bring a civil action to compel compliance with an EPA order requiring access to information, entry to a facility, or inspection and sampling. This section also authorizes courts to assess civil penalties not to exceed \$25,000 for each day of noncompliance. 42 U.S.C. § 9604(e)(5)(B).

B. Determination of Amounts of Liability

Section 107(c)(2) establishes certain exceptions to the (rarely used) general limitations on CERCLA liability that are set out in Section 107(c)(1). An owner or operator of a facility or other responsible person is liable for the full and total costs of response and damages, and does not benefit from the cap on liability provided in Subsection 107(c)(1) if an exception applies. The exceptions set out in Section 107(c)(1) include: willful misconduct, willful negligence, or if the primary cause of a release was a violation of applicable safety, construction, or operating standards or regulations. 42 U.S.C. § 9607(c)(2).

Section 107(c)(3) provides that any person liable for a release who fails without sufficient cause to properly provide removal or remedial action in response to an EPA order may be liable for punitive damages in an amount at least equal to and not more than three times the amount of any costs incurred by the Superfund as a result of such failure. 42 U.S.C. § 9607(c)(3).

C. State Enforcement

Section 121(e)(2) provides that a state may enforce any federal or state standard, requirement, criteria, or limitation applicable to a remedial action in the U.S. District Court in the district in which the facility is located. This section also authorizes consent decrees with stipulated penalties. 42 U.S.C. § 9621(e)(2).

D. Public Participation Requirements for Cleanup Agreements, Consent Decrees, and Cost Recovery and *De Minimis* Settlements

Section 122(d)(2) provides that at least 30 days before a final judgment is entered into between EPA and parties responsible for the performance of a remedial action, the Attorney General must provide an opportunity for persons not named as parties to the action to comment on the proposed judgment before its entry by the court as a final judgment. 42 U.S.C. § 9622(d)(2). The Attorney General is required to consider and file with the court any written comments, views or allegations relating to the proposed judgment. The Attorney General may withdraw or withhold consent to the proposed judgment if the comments, views, and allegations concerning the judgment disclose facts or considerations that indicate that the proposed judgment is inappropriate, improper, or inadequate. *Id.* The statute gives EPA the authority to grant covenants not to sue to responsible parties in certain circumstances, and the appropriateness of such covenants when included in consent decrees would also be subject to public comment. *Id.*; *see also* 42 U.S.C. § 9622(f).

Section 122(i) provides that at least 30 days prior to finalizing a settlement with a *de minimis* party or a settlement of an administrative order for recovery of costs incurred by the government, notice of the proposed settlement must be published in the Federal Register by the head of the department or agency that has jurisdiction over the settlement. 42 U.S.C. § 9622(i). The notice must identify the facility concerned and the parties to the proposed settlement. Persons who are not parties to the proposed settlement must be given a thirty-day period to file written comments relating to the proposed settlement. The head of the department or agency must consider any comments filed in determining whether or not to consent to the proposed settlement, if such comments disclose facts or consideration which indicate the proposed settlement is inappropriate, improper, or inadequate. *Id.*

These provisions are rarely used by members of the public as a means of participating in enforcement settlements for the cleanup of sites in their communities. The statute does not preclude EPA or the Justice Department from more proactively disseminating proposed settlements to communities and seeking their comments. Nor does it preclude EPA from providing explanatory materials or enlarging the period of time for comments. In fact, communities may have information that could bear on the appropriateness of a settlement, such as facts about exposure patterns or past practices of site owners.

E. Citizen Suits

Section 310 provides authority for any person to commence a civil action on his own behalf against any person, including the United States, who is in violation of any standard, regulation, condition, requirement, or order that has become effective under the statute. It also authorizes actions against the EPA or any other officer of the U.S. where there is alleged failure to perform any act or duty which is not discretionary, including duties under the federal facility cleanup provisions of CERCLA. However, citizen suits may not be brought to enforce the research, development, and demonstration duties set out in Section 311. 42 U.S.C. § 9660. These provisions also set out limitations on and procedures for citizen suits that are common to many of the environmental laws. 42 U.S.C. § 9659.

Citizen suits can be brought to enforce a wide range of CERCLA-related requirements. For example, citizen suits can be brought against private parties for failure to comply with the terms of an administrative consent order or settlement that requires them to cleanup a site. Citizen suits can also be brought against EPA for failure to meet its statutory obligations. For example, citizens could sue to require EPA to act upon a Agency for Toxic Substances and Disease Registry health assessment, if such action is required by statute. It may be difficult, however, for a citizen suit to succeed in challenging an EPA remedy selection decision. Based on the statutory language in Section 113(f) of CERCLA, courts typically bar judicial review of selected remedial actions until the cleanup work has been completed. See Larry Schnapf, *Cleaning Up Abandoned or Inactive Contaminated Sites* in *THE LAW OF ENVIRONMENTAL JUSTICE: THEORIES AND PROCEDURES TO ADDRESS DISPROPORTIONATE RISKS* 537-40 (Michael B. Gerrard, ed., 1999).

VI. INFORMATION GATHERING (RESEARCH, MONITORING, AND REPORTING)

CERCLA contains a wide range of information gathering and related authorities. EPA is given considerable discretion to conduct investigations and monitoring, and to require record-keeping. Numerous reporting requirements are also imposed on EPA in connection with its administration of the Superfund program. In addition, various reporting requirements are imposed on federal government agencies in their capacity as owners of facilities contaminated with hazardous substances. CERCLA also establishes several hazardous substance research programs.

A. Monitoring

Section 104(b) gives EPA broad authority to undertake “investigations, monitoring, surveys, testing, and other information gathering” as necessary or appropriate to identify the release, source, and nature of a hazardous substance and the extent of the danger to the public health, welfare, or the environment. EPA may use this authority whenever it determines a response action is necessary, when it has reason to believe that a release has occurred or is about to occur, or when it has reason to believe that illness, disease, or complaints of illness may be attributable to exposure to a hazardous substance and that a release may have occurred. 42 U.S.C. § 9604(b).

Section 104(e) grants EPA broad authority to request information, gain access to facilities and documents, enter facilities, and inspect and take samples when there is a reasonable basis to believe there may be a release or a threat of release of a hazardous substance. The authority is

granted for purposes of determining the need for, or choice of, response action or for enforcing the Act. 42 U.S.C. § 9604(e).

These provisions give EPA broad authority and substantial discretion and, therefore, could be used to benefit affected communities by ensuring that EPA and the communities have the information they need to address health and environmental problems caused by hazardous substances. The statute specifically authorizes EPA to respond to complaints from communities through investigations, monitoring, surveys, testing, and other information gathering activities.

B. Reporting and Record-Keeping

In general, CERCLA's record-keeping provisions help ensure that information is available to regulators and, as appropriate, to communities about the hazardous substances that are used by regulated entities. **Section 103(d)** provides broad authority to EPA to require record-keeping with respect to location, title, or condition of a facility and the identity, characteristics, quantity, origin, or condition of hazardous substances. 42 U.S.C. § 9603(d). This is a broad provision of general applicability. EPA could examine, and amend as appropriate, its record-keeping requirements under CERCLA to ensure that they are adequate for providing EPA, health agencies, and the public with sufficient information about hazardous substances and the risks they pose to communities of color and low-income communities.

1. Federal Facility Reporting Requirements

Section 120(b) provides that each department, agency, and instrumentality of the United States must add information on contamination from each facility that it owns or operates to the inventory of federal agency hazardous waste facilities required under the Solid Waste Disposal Act, if such contamination affects contiguous or adjacent property. 42 U.S.C. § 9620(b). A description of monitoring data obtained must be included. *Id.*

Section 120(c) requires EPA to establish a special Federal Agency Hazardous Waste Compliance Docket that contains information about contaminated federal facilities including, for example, information submitted by federal facilities pursuant to the Solid Waste Disposal Act and information about releases of hazardous substances required to be reported under Section 103 of CERCLA. 42 U.S.C. § 9620(c). The docket must be available for public inspection at reasonable times. EPA is required to publish in the Federal Register every six months the list of federal facilities that have been included in the docket during the immediately preceding six-month period. The publication also must indicate where in the appropriate EPA regional office additional information may be obtained about any facility on the docket. The statute further directs EPA to establish a program to provide information to the public about facilities included in the docket. *Id.*

Section 120(e)(3) provides that each federal agency is required to include in its annual budget submissions to Congress a review of alternative agency funding which could be used to provide for the costs of remedial action. 42 U.S.C. § 9620(e)(3). The budget submission must also include a statement of the hazard posed by the facility to human health, welfare, and the environment and identify specific consequences of failure to begin and complete remedial action. *Id.*

Section 120(e)(5) requires each agency responsible for compliance with CERCLA to furnish annual progress reports to Congress. The reports must include, but are not limited to: (1) the

progress in reaching interagency agreements with EPA for the cleanup of facilities; (2) the specific cost estimates and budgetary proposals involved in each interagency agreement; (3) a brief summary of the public comments regarding each proposed interagency agreement; (4) a description of the instances in which no agreement was reached the reasons why; (5) a report on progress in conducting investigations, studies, and remedial actions; and (6) a report on progress in conducting remedial actions at facilities not listed on the NPL. 42 U.S.C. § 9620(e)(5). The report must also include a detailed description of the hazard presented by each facility, plans and schedules for initiating and completing response actions, enforcement status, and an explanation of any postponements or failure to complete response actions. Reports must be given to the affected states. *Id.*

All of these federal facility reporting requirements can help inform communities of health and environmental threats. The reports can also provide information that enables communities to hold EPA and federal facilities accountable for addressing hazardous substance releases and meeting their obligations under Section 120. Implementation of these provisions could be improved by, at a minimum, further publicizing and making reports available to affected communities. Section 120(c) in particular gives EPA considerable discretion with respect to the substance of and process for dissemination of information about federal facilities by authorizing a program for providing information to the public.

2 *EPA Reporting Requirements*

Section 121(c) provides that EPA must report to Congress a list of facilities for which a five-year review is required because a selected remedial action has resulted in hazardous substances remaining onsite. 42 U.S.C. § 9621(c). The results of the reviews and any actions taken as a result of such reviews must be included in the reports to Congress. *Id.*

Section 301(h) requires EPA to submit to Congress an annual report on progress achieved each year in implementing the statute during the preceding year. 42 U.S.C. § 9651(h). The report must include the following: (1) detailed descriptions of each feasibility study carried out at a facility; (2) the status and estimated date of completion of each study; (3) notice of each study that will not meet a previously published schedule for completion and the new estimated date for completion; (4) an evaluation of newly developed feasible and achievable permanent treatment technologies; (5) progress made in reducing the number of facilities subject to review under the five-year review provisions for cleanups that result in hazardous substances remaining onsite; (6) a report on the status of all remedial and enforcement actions; and (7) an estimate of the amount of resources necessary for each department carrying out the activities under the program to complete the implementation of all of their duties. *Id.*

Section 311(e) requires EPA to submit to Congress at the time of the annual budget a progress report on the research, development, and demonstration program authorized under CERCLA Section 311, including an evaluation of each demonstration project completed in the preceding fiscal year, findings with respect to the efficacy of demonstrated technologies in achieving permanent and significant reductions in risks from hazardous wastes, the costs of such demon-

stration projects, and the potential applicability of, and projected costs for, such technologies at other hazardous substance sites. 42 U.S.C. § 9660(e).

The reports required under these provisions, similar to the federal facility reports, can assist communities in tracking Superfund progress, increasing EPA's accountability, identifying issues of concern, and highlighting potential resources that may be available. EPA could focus on how to make its reports more accessible, understandable, and helpful to affected communities.

3 Reporting to Potential Injured Parties

Section 111(g) requires EPA to issue regulations with respect to the notice to be provided to potential injured parties by an owner and operator of any vessel or facility that has released a hazardous substance. 42 U.S.C. § 9611(g). This section could provide a powerful mechanism for alerting communities to threats posed by releases of hazardous substances. EPA could issue regulations, or amend any current regulations, for example, in a manner that requires proactive outreach to communities through mechanisms such as direct mailings and the use of lay person language in notices.

C. Research, Development, and Demonstration

CERCLA establishes a substantial hazardous substances research agenda and set of programs. The Agency for Toxic Substances and Disease Registry (ATSDR) and the Department of Health and Human Services (HHS) are charged with implementing some of the programs, but EPA also has considerable research responsibilities.

1. EPA Research Programs

Section 311(b) authorizes and directs EPA to carry out a program of research, evaluation, development, and demonstration of alternative or innovative treatment technologies that may be used in response actions to achieve more permanent protection of human health, welfare, and the environment. 42 U.S.C. § 9660(b). The statute also provides for a demonstration assistance program that includes selection of sites through a public process and the evaluation of applications for demonstration projects that use alternative or innovative treatment technologies. *Id.* The statute requires that "within 90 days after October 17, 1986, and no less often than once every 12 months, thereafter, the Administrator shall publish a solicitation for innovative or alternative technologies at a state of development suitable for full-scale demonstrations at sites at which a response action may be undertaken. . . ." 42 U.S.C. § 9660(b)(5)(B). The statute provides that in selecting technologies to be demonstrated EPA must, consistent with the "protection of human health and the environment," consider several criteria. Among the criteria is the potential for contributing to solutions to waste problems that pose the greatest threat to human health and which cannot be adequately controlled under present technologies. 42 U.S.C. § 9660(b).

This section also requires EPA to conduct a technology transfer program including the development, collection, evaluation, coordination, and dissemination of information relating to the use of alternative or innovative treatment technologies for response actions. 42 U.S.C. § 9660(b). EPA is further required to establish and maintain a central reference library for such information and make it available to the public. 42 U.S.C. § 9660(b)(8).

The technology transfer program has the potential to benefit affected communities by facilitating the development of innovative technologies that could provide more protective cleanups than are currently available. It also can provide important information through the technology transfer program that could help communities determine and suggest appropriate remedial actions at nearby sites. *See Ferris at 684* (recommending the establishment of a technologies clearinghouse so that community groups can locate and advocate a variety of alternative cleanup methods).

Section 311(c) authorizes EPA to conduct and support through grants, cooperative agreements and contracts, research with respect to detection, assessment, and evaluation of the effects on and risks to health and environment of hazardous substances and detection of hazardous substances in the environment. 42 U.S.C. § 9660(c). This provision gives EPA considerable discretion to design and implement a research program that forwards the study of many issues of importance to communities of color and low-income communities.

2 *HHS Programs*

Section 311(a) requires the Secretary of HHS, in consultation with EPA, to establish and support a basic research and training program through grants, cooperative agreements, and contracts. 42 U.S.C. § 9660(a). The basic research (including epidemiological and ecologic studies) may include, by way of example: research on advanced techniques for detecting and evaluating the effects on human health of hazardous substances; methods to assess risks to human health presented by hazardous substances; and methods and technologies to detect hazardous substances in the environment and to reduce the amount and toxicity of hazardous substances. *Id.* The research and training programs established under this section have the potential to provide considerable benefits to communities of color and low-income communities. EPA could use its consultative role to help promote an environmental justice research agenda with HHS.

3 *Agency for Toxic Substances and Disease Registry Programs*

The statute establishes the Agency for Toxic Substances and Disease Registry and sets out its responsibilities and duties. Its authority is broad in scope but also includes several specific functions. In general, ATSDR is charged with implementing the health-related authorities of the Superfund statute, in cooperation with EPA and numerous other agencies. By way of example only, ATSDR is charged with: (1) establishing a national registry of serious diseases and a registry of persons exposed to toxic substances; (2) maintaining an inventory of research and studies on health effects of toxic substances; (3) providing medical care and testing in cases of public health emergencies; (4) performing health assessments for each facility on the NPL; and (5) assembling, developing, and distributing to the states educational materials on medical surveillance screening and methods of diagnoses and treatment of injury or disease related to exposure to hazardous substances.

Because the focus of this analysis is on EPA's authority, the provisions that pertain primarily to ATSDR and that do not involve EPA or implicate its authority are not discussed. Rather, the chapter focuses on aspects of the ATSDR provisions that relate directly to EPA. Accordingly, the provisions outlined below contain specific duties that EPA shares with ATSDR or that ATSDR must perform in consultation with EPA.

Section 104(i)(2) provides that EPA and ATSDR are required to prepare a list, in order of priority, of the most commonly found hazardous substances at NPL facilities that are posing the

most significant potential threat to human health. 42 U.S.C. § 9604(i)(2). The agencies are required to revise the list at least once a year. *Id.* **Section 104(i)(3)** requires ATSDR to prepare toxicological profiles of each hazardous substance on this list, in accordance with guidelines developed by ATSDR and EPA. 42 U.S.C. § 9604(i)(3). The statute includes detailed provisions on the substance, procedures, and time frames for the profiles. Profiles must be provided to the states and made available to “other interested parties.” *Id.* **Section 104(i)(5)** requires ATSDR to consult with EPA for purposes of determining whether adequate information on the health effects of each substance on the list is available, and to initiate a research program if adequate information is not available about a substance. 42 U.S.C. § 9604(i)(5).

Section 104(i)(4) requires ATSDR to provide consultations upon request to EPA and to state and local officials on health issues relating to exposure to hazardous substances. 42 U.S.C. § 9604(i)(4).

Section 104(i)(5)(D) directs EPA to issue regulations which provide, where appropriate, for the payment of the costs of the research programs established under Section 104(i) by manufacturers and processors under the Toxic Substances Control Act, registrants under the Federal Insecticide, Fungicide, and Rodenticide Act, and from recovery from responsible parties under the Superfund program. 42 U.S.C. § 9604(i)(5)(D).

Section 104(i)(6)(C) provides that ATSDR consult with EPA in establishing priorities for purposes of performing health assessments. 42 U.S.C. § 9604(i)(6)(C). Priority must be given to facilities at which there is documented evidence of the release of a hazardous substance, at which the potential risk to human health appears highest, and for which health assessment data are inadequate to assess the potential risks. ATSDR is also directed to consider the NPL schedules and the needs of EPA pursuant to schedules for remedial investigations and feasibility studies. *Id.* **Section 104(i)(6)(E)** requires states carrying out health assessments to report the results of the assessment to ATSDR and EPA and to include recommendations with respect to further activities. 42 U.S.C. § 9604(i)(6)(E).

Section 104(i)(6)(F) states that the term “health assessment” includes preliminary assessments of the potential risk to human health posed by individual sites and facilities, based on such factors as the nature and extent of contamination, the existence of potential pathways of human exposure (including ground or surface water contamination, air emissions, and food chain contamination), the size and potential susceptibility of the community within the likely pathways of exposure, the comparison of expected human exposure levels to the short-term and long-term health effects associated with identified hazardous substances and any available recommended exposure or tolerance limits for such hazardous substances, and the comparison of existing morbidity data on diseases that may be associated with the observed levels of exposure. 42 U.S.C. § 9604(i)(6)(F). ATSDR is required to use appropriate data, risk assessments, risk evaluations, and studies available from EPA. *Id.*

Section 104(i)(6)(G) explains that the purpose of the health assessments required by the statute is to assist in determining whether actions should be taken to reduce human exposure to hazardous substances from a facility and whether additional information is needed and should be acquired by conducting epidemiological studies, establishing a registry, or establishing a health surveillance program – all provided for under Section 104(i). 42 U.S.C. § 9604(i)(6)(G). In using the results of health assessments for determining what action to take, ATSDR may consider additional

information on the risks to the potentially affected population from all sources of such hazardous substances including known point or nonpoint sources other than those from the facility in question. Id.

Section 104(i)(6)(H) requires ATSDR to provide EPA and the appropriate state with the results of each health assessment and any recommendations for further actions. 42 U.S.C. § 9604(i)(6)(H). If a health assessment indicates that the release or threatened release may pose a serious threat, ATSDR must notify EPA. EPA must then promptly evaluate the release or threatened release to determine whether the site must be placed on the NPL or if the site should be given higher priority if it is already on the NPL. Id.

Many of the duties of ATSDR and EPA under this section could forward an environmental justice research agenda, as well as protect specific communities of color and low-income communities. Some provisions address environmental justice concerns directly. For example, the definition of “health assessments” in Section 104(i)(6)(F) includes preliminary assessments of potential risk to human health posed by individual sites based on factors that include the size and potential susceptibility of the community within the likely pathways of exposure. Other provisions allow environmental justice concerns to be taken into account even though they are not directly addressed. The guidelines that EPA helps develop for toxicological profiles and the hazardous substance priority list developed under Section 104(i)(2) could incorporate environmental justice considerations by, for example, focusing on particular kinds of risks to low-income communities and communities of color or by looking for particular susceptibility in such communities.

In its various consultative roles, EPA could advance environmental justice goals by, for example, ensuring that ATSDR places appropriate priority on performing health assessments at sites in communities of color and low-income communities. EPA can also act directly, pursuant to Section 104(i)(6)(H), when health assessments indicate that serious threats to communities of color and low-income communities are present. As discussed in Part I, the statute also directs EPA to act when a health assessment finds that the exposure concerned presents significant risks to public health, including providing alternative water supplies and permanent or temporary relocation of individuals. *See* 42 U.S.C. § 9604(i)(11). In addition, the statute gives EPA the authority to collect funding for the research programs established in this section, and EPA can ensure that costs are in fact recovered from the regulated community.

VII. FINANCIAL ASSISTANCE

CERCLA contains a number of financial assistance mechanisms that can help support environmental justice goals. First, EPA makes grants to state cleanup programs. Second, EPA provides assistance to local governments for carrying out temporary emergency measures to protect communities from releases or threatened releases of hazardous substances. Third, EPA provides technical assistance grants directly to community members to help them participate in the cleanup of sites in their communities. Fourth, EPA funds institutions of higher education to carry out research.

A. Grants to State Programs

CERCLA **Section 104(d)** allows states and Tribes to apply to EPA to carry out actions authorized by Section 104 of CERCLA, including removal and remedial actions, investigations,

monitoring, and information gathering. As discussed earlier, if the state or Tribe meets certain requirements, EPA may enter into a contract or cooperative agreement with the state or Tribe to carry out response actions. The statute states that contracts and cooperative agreements are subject to the terms and conditions that EPA prescribes. Under this provision, EPA has provided financial assistance to the states to carry out CERCLA responsibilities and to help develop their own state Superfund programs. EPA could use this general authority to ensure that state programs using federal funds further environmental justice goals. 42 U.S.C. § 9604(d); 40 C.F.R. § 300.515; *see also* 40 C.F.R. § 31.43 (remedies for noncompliance with terms of an award, include temporarily withholding cash payments pending correction of deficiency by grantee or wholly or partially suspending or terminating award).

B. Reimbursement to Local Governments For Temporary Emergency Measures

CERCLA **Section 123** authorizes EPA to reimburse local community authorities for expenses incurred in carrying out temporary emergency measures necessary to prevent or mitigate injury to human health or the environment associated with the release or threatened release of a hazardous substance. 42 U.S.C. § 9623. Measures may include security fencing to limit access, response to fires and explosions, and other measures which require immediate response at the local level. The amount of reimbursement is limited to \$25,000 per single response. *Id.*; *see also* 40 C.F.R. Part 310. This provision provides a potentially powerful tool for addressing threats posed by hazardous substances in low-income communities. EPA could promote the use of this provision by local governments in these communities by, for example, publicizing its availability.

C. Technical Assistance Grants (TAGs)

CERCLA **Section 117(e)** provides authority to EPA to make grants available to any group of individuals that may be affected by a release or threatened release at any facility listed on the NPL. 42 U.S.C. § 9617(e). The grants may be used to obtain technical assistance in interpreting information with regard to the nature of a hazard, the remedial investigation and feasibility study, the record of decision, the remedial design, the selection and construction of a remedial action, the operation and maintenance, or the removal action at any NPL facility. Grants are limited to \$50,000 for a single grant recipient, but the limitation can be waived under certain circumstances. Grant recipients are required to contribute at least 20 percent of the total costs of the technical assistance for which the grant is made, but the requirement may be waived in certain circumstances. Only a single grant may be made per facility but the grants can be renewed to facilitate public participation at all stages of a remedial action. *Id.*

TAGs are a key aspect of the CERCLA public participation program and provide a potentially powerful tool to communities of color and low-income communities. Over the years, the program has received considerable attention and has been criticized on several grounds. For example, the cap on the amount of funds available, the matching requirements, and the paperwork associated with applying for and using grant monies have all been cited as problems with the program. EPA recently amended the TAG program to address some of these concerns. 65 Fed. Reg. 58849 (October 2, 2000); 40 C.F.R. Part 35, Subpart M. Although the statute includes specific limits on the use of TAGs, it may be possible to increase the use of and availability of TAGs in communities of color and low-income communities through EPA's implementation of the program.

D. Research Grants

CERCLA **Section 311(d)** requires EPA to make grants to institutions of higher learning to establish and operate at least five hazardous substance research centers in the U.S. In carrying out the program, EPA should seek to have established and operated ten such centers. The centers' responsibilities must include, but are not limited to, the conduct of research and training related to the manufacture, use, transportation, disposal, and management of hazardous substances. Grant recipients must be located in an area which has experienced problems with hazardous substance management. The centers are also required to disseminate their research results. 42 U.S.C. § 9660(d).

This general provision could benefit communities of color and low-income communities by facilitating and supporting research on hazardous substances. EPA could use its grant-making authority to ensure that the centers established under this provision develop research agendas that are consistent with and forward environmental justice goals, and that their research is being disseminated effectively.

CHAPTER 14
FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT
(“FIFRA”)
7 U.S.C. §§ 136-136y
and
FEDERAL FOOD, DRUG, AND COSMETIC ACT (“FFDCA”)
21 U.S.C. §§ 301-397
AS AMENDED BY THE FOOD QUALITY PROTECTION ACT OF 1996
(“FQPA”)

Pesticides are intended to kill or adversely affect living organisms. As a result, pesticide use inevitably poses risks to non-target organisms, including humans, fish, and other wildlife, as well as to the broader environment. Pesticide use is an important issue in addressing environmental justice for a variety of reasons. First, farmworker communities, comprised largely of people of color and low-income families, are usually subjected to more frequent pesticide exposures from more sources than other communities. Second, some low-income communities and communities of color may, as a result of inadequate nutrition or other medical factors, be more susceptible to the harmful effects of pesticides. Third, many communities of color and low-income communities already bear a disproportionate share of environmental burdens flowing from other kinds of pollution, waste disposal, and facility siting.

The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Federal Food, Drug, and Cosmetic Act (FFDCA) together provide the framework for pesticide regulation in the United States. Under FIFRA, EPA regulates the manufacture, labeling, sale, and use of pesticides. Under the FFDCA, the agency regulates tolerances for pesticide residue in food. Both FIFRA and the FFDCA were significantly amended in 1996 following enactment of the Food Quality Protection Act (FQPA). The FQPA enacted into law a number of measures that may prove to be significant tools for promoting environmental justice. This chapter examines the authorities under FIFRA and the FFDCA, as amended, to incorporate environmental justice concerns into pesticide decision-making. The review is intended to provide the basis for further public inquiry and discussion about the opportunities discussed here for pursuing environmental justice in a broad range of EPA’s regulatory activities under the Act.

Part I of the chapter discusses health protection and public participation provisions that apply broadly in implementing the statutes. Part II highlights EPA’s role in addressing environmental justice issues through the Worker Protection Standard regulatory process. The focus of Part III is EPA’s authority to advance environmental justice goals when it considers registering pesticides, setting tolerances, reregistering pesticides, and granting experimental use permits. Part IV describes EPA’s oversight of state regulatory and enforcement authority under FIFRA, while Part V outlines EPA’s authority to take enforcement action. Part VI describes a variety of opportunities in the statutes for collecting information relevant to environmental justice concerns. Finally, Part VII notes EPA authority to promote environmental justice when it provides financial assistance to states and Tribes.

I. GENERAL PROVISIONS

A. Duty to Prevent Unreasonable Adverse Effects on the Environment

EPA's authority under FIFRA is guided by the Congressional mandate to prevent "unreasonable adverse effects on the environment." This standard appears throughout the FIFRA statutory scheme in a variety of contexts. Pursuant to **Section 2**, "unreasonable adverse effects on the environment" typically means "any unreasonable risk to man or the environment, *taking into account the economic, social, and environmental costs and benefits of the use of any pesticide . . .*" 7 U.S.C. § 136(bb) (emphasis added). It also means "a human dietary risk from residues that result from a use of a pesticide in or on any food inconsistent with" the "reasonable certainty of no harm" safety standard. *Id.*

Thus, in considering whether an action under FIFRA might result in an unreasonable adverse effect, EPA needs only to determine whether the action could result in an unreasonable risk. *Id.* Additionally, the term "environment" is expansively defined to include "water, air, land, and all plants and man and other animals living therein, and the interrelationships which exist among these." 7 U.S.C. § 136(j). So in ascertaining whether risks exist, the agency must consider risks to either people or the environment, or to the interrelationships between people and their natural world. The environmental factor, of course, allows EPA to consider the risks of pesticides to people and to wildlife. Consideration of "social" factors provides a further basis for addressing whether particular communities or populations face heightened risks from pesticides.

B. Public Participation

Both FIFRA and the FFDCA contain broad public participation provisions. FIFRA **Section 21(c)** provides that in connection with suspension or cancellation of a pesticide registration, "*or any other actions*" authorized by FIFRA, the Administrator has the discretion to solicit the views of all interested persons either orally or in writing. In particular, the statute expressly provides that EPA may seek such advice from "scientists, farmers, farm organizations, and *other qualified persons.*" 7 U.S.C. § 136s(c) (emphasis added). The agency could rely upon this provision to ensure that environmental justice expertise is incorporated into decision-making under FIFRA in any context.

II. STANDARD SETTING/RULE-MAKING

The Administrator is authorized generally to prescribe regulations to carry out the provisions of FIFRA. 7 U.S.C. § 136w(a)(1). FIFRA also provides for a notice and comment procedure. 7 U.S.C. § 136w(a)(2). Additionally, several aspects of standard setting and rule-making under FIFRA are of relevance for environmental justice purposes. EPA's comprehensive Worker Protection Standard is particularly important, and is the subject of current calls for reform.

In 1992, EPA issued regulations known as the Worker Protection Standard (WPS). 40 C.F.R. Part 170; *see also* 40 C.F.R. Part 156 (containing worker protection statements that must appear on labels for agricultural pesticides). The WPS, which became effective in 1995, was developed "to reduce the risk of illness or injury resulting from workers' and handlers' occupational exposures to

pesticides . . . and also from the accidental exposure of workers and other persons to such pesticides.” 40 C.F.R. § 170.1. The WPS is based on **Section 12(a)** of FIFRA, which makes it unlawful to use a registered pesticide in a manner inconsistent with its labeling. 7 U.S.C. § 136j(a)(2)(G); 40 C.F.R. § 170.9. Enforcement authority is also based in part on **Section 14(b)**, which states that a person is liable for a penalty under FIFRA if another person employed by or acting for that person violates a provision of FIFRA. 7 U.S.C. § 136l(b)(4); 40 C.F.R. § 170.9.

The WPS provides an array of protections to agricultural workers and to pesticide handlers. These protections include mandatory pesticide safety training, notice of pesticide applications, and restricted entry intervals (REIs) that must be observed following such applications; posting of information about pesticide hazards; availability of decontamination supplies and emergency medical assistance; and availability of personal protective equipment. *See generally* 40 C.F.R Part 170. Employers may not retaliate against workers attempting to comply with the WPS, nor may employers prevent or discourage compliance with the WPS. 40 C.F.R. § 170.7(b).

Since the mid-1990s, EPA has been evaluating the implementation and enforcement of the WPS. In 1996, the agency convened a National Dialogue on the WPS to assess its effectiveness. *See* U.S. EPA Office of Pesticide Programs, National Dialogue on the Worker Protection Standard, available at <http://www.epa.gov/oppfead1/safety/workers/dialogue.htm> (last modified July 30, 1999). Beginning in June 2000, the agency launched a National Assessment of the Worker Protection Program, which represents a comprehensive review of the WPS and its implementation and enforcement. *See* U.S. EPA Office of Pesticide Programs, New and Noteworthy, at <http://www.epa.gov/oppfead1/safety/newnote.htm> (last modified July 20, 2001). Stakeholder comments from the National Dialogue and the ongoing National Assessment suggest that EPA could improve implementation and enforcement of the WPS in many ways. Particularly prominent are issues of employer compliance with the WPS, and the related issue of enforcement by EPA and the states, including: (1) inadequate safety training by employers; (2) failure to provide workers with necessary information about pesticides and pesticide applications; (3) an absence of decontamination facilities; and (4) the inaccessibility of medical care in emergencies.

Attempts to improve enforcement of the existing WPS, as well as attempts to amend the rule, are relevant to environmental justice. A disproportionately high percentage of agricultural workers belong to low-income communities of color, particularly Latino communities. They may lack the financial resources, language skills, or political clout to ensure that the standards work properly to protect them. Accordingly, the changes suggested and currently being considered by EPA include: (1) all aspects of pesticide safety training; (2) improved communication with and notice to workers which take into account language and cultural differences; (3) improved training of medical professionals to recognize, diagnose, and manage injuries resulting from pesticide exposure, and a national system of reporting pesticide-related injuries; (4) improved inspections, including interviews with workers as well as employers; and (5) whistleblower provisions that would enable workers to report violations without fear of retaliation.

Another area for WPS reform that has attracted special attention is children’s health issues. It is well-established that children are at increased risk from pesticides because of greater exposure on a body-weight basis. *See* NATURAL RESOURCES DEFENSE COUNCIL, TROUBLE ON THE FARM: GROWING UP WITH PESTICIDES IN AGRICULTURAL COMMUNITIES Chapter 2 (Oct. 1998). Children are also more susceptible than adults to the effects of pesticides, because they are more likely to suffer

long-term neurotoxic effects and are less able to eliminate toxins from their bodies. *Id.* The children of agricultural workers are at even higher risk from pesticides than children in the general population. The FQPA amendments to the FFDCA establish as a new priority the protection of children and infants from pesticides. (See the discussion in Part III.B., below.)

Consistent with this approach, EPA could amend the WPS to provide strong new protections for the children of agricultural workers. For example, although restricted entry intervals are used to restrict entry into fields for a prescribed period of time after the application of pesticides, REIs are not developed with reference to the small children who are often in the fields. As a result, children accompanying their parents into recently sprayed areas may be at particularly high risk of adverse effects. *Id.*, ch. 3. The agency also could impose label restrictions to bar children entirely from working in fields where the most dangerous pesticides are in use.

III. PERMITTING AND OTHER APPROVALS

As discussed in Part I.A. above, EPA's obligation to avoid "unreasonable adverse effects on the environment" informs all of the agency's decision-making under FIFRA. Nowhere is this obligation, or its implications for promoting environmental justice, more evident than in the provisions governing pesticide registration. 7 U.S.C. § 136a. The registration process, which forms the core of the FIFRA regulatory regime, affords EPA an opportunity to collect and review data on a pesticide, as well as a means of refusing or conditioning registration to protect public health and the environment. Various aspects of the registration process bear on environmental justice.

EPA's responsibility under the FFDCA for establishing tolerances for pesticide residues, or exemptions from such tolerances, is also a key component in pesticide regulation. 21 U.S.C. § 346a. Tolerance assessment – and reassessment – is typically carried out in connection with the pesticide registration and reregistration processes, and so is discussed here. The regulation of tolerances is a powerful tool for implementing environmental justice considerations, particularly in light of the 1996 FQPA amendments to the FFDCA.

The periodic review of existing pesticide registrations – known as reregistration – ensures that environmental justice concerns arising subsequent to initial pesticide registration will ultimately be addressed as a matter of course. 7 U.S.C. § 136a-1. Finally, FIFRA and FFDCA provide for the issuance of experimental use permits, which have minor environmental justice implications. 7 U.S.C. § 136c.

A. Pesticide Registration

1. Generally

Section 3(c) of FIFRA directs EPA to register a pesticide if, among other things, the pesticide “will perform its intended function without unreasonable adverse effects on the environment,” and if the pesticide, “when used in accordance with widespread and commonly recognized practice,” will “not generally cause unreasonable adverse effects on the environment.” 7 U.S.C. § 3(c)(5)(C)-(D).

The requirement that EPA avoid unreasonable adverse effects on the environment applies not only to unconditional registrations under Section 3(c)(5), but also to *conditional* registrations. A conditional registration decision typically is made when EPA lacks sufficient information to render an unconditional registration decision. 7 U.S.C. § 136a(c)(7). For example, conditional registration can be used to expedite registration for pesticides that are identical or substantially similar to previously registered pesticides – so called “me-too” pesticides. 7 U.S.C. § 136a(c)(7)(A); 7 U.S.C. § 136a(c)(3)(B)(i)(I). Conditional registration can also be used when additional time is needed to generate the required data for an unconditional decision on a new active ingredient. For this type of conditional registration, the agency must further determine that use of the pesticide is in the public interest. 7 U.S.C. § 136a(c)(7)(C). Finally, conditional registration can be used to permit additional uses of a pesticide. 7 U.S.C. § 136a(c)(7)(B).

In the case of a pesticide with an existing registration, EPA has authority to amend (or conditionally amend) the registration. An amended registration generally is sought when a registrant wants to make significant changes to the formulation or use of a pesticide. *See, e.g.*, 7 U.S.C. § 136a(c)(7)(B) (amending registration to add new pesticide uses). In this instance, a finding by the agency that the amendment “would not significantly increase the risk of any unreasonable adverse effect on the environment” is required. *Id.*

Thus, EPA must incorporate a determination of unreasonable adverse effects on the environment into any ultimate decision to approve or deny a pesticide registration – unconditional or conditional, new or amended. As discussed in Part I.A., above, this standard allows the agency to assess the risks posed to communities of color and low-income communities by a pesticide’s use. Where a pesticide presents an unacceptable risk to particular communities, EPA has authority to refuse registration of the pesticide.

Pesticide labeling is central to the FIFRA regulatory process. Once a pesticide is registered, the directions appearing on a pesticide label represent the means by which EPA regulates its use. Under **Section 12(a)** of FIFRA, it is unlawful to sell or distribute a “misbranded” pesticide. 7 U.S.C. § 136j(a)(1)(E). A pesticide is misbranded if its labeling does not contain certain required categories of information, including directions for use. 7 U.S.C. § 136(q)(1)(F); *see* 40 C.F.R. § 156.10. Additionally, it is unlawful to use any pesticide in a manner inconsistent with its labeling. 7 U.S.C. § 136j(a)(2)(G). Labeling is also important as a means of conveying pesticide hazard information. All label text must appear in English; however, EPA may propose additional text in other languages “as is considered necessary to protect the public.” 40 C.F.R. § 156.10(a)(3). EPA thus has authority to require translation of label information into languages used in communities that may be particularly at risk from pesticide exposure.

2 *Use Classification*

A key element of the registration process is classification of the pesticide. Pursuant to **Section 3(d)** of FIFRA, if EPA determines that a pesticide, when properly applied and absent additional regulatory conditions, may generally cause unreasonable adverse effects on the environment – including injury to the applicator – the agency must classify the pesticide, or a particular use, as “restricted use.” This assumes, of course, that the pesticide would otherwise be subject to registration. 7 U.S.C. § 136a(d)(1)(C). If, however, EPA determines that a pesticide, when properly applied, will not generally cause unreasonable adverse effects on the environment, the agency will classify the pesticide, or a particular use, as general use. 7 U.S.C. § 136a(d)(1)(B). As a practical matter, EPA normally does not classify for general use; products that are unrestricted remain “unclassified.” 40 C.F.R. § 152.160. The “no unreasonable adverse effects on the environment” standard also applies to any decision by the Administrator to change a pesticide’s classification subsequent to its initial classification. *See* 7 U.S.C. § 136a(d)(2)-(3).

Pesticide classification is of great importance to registrants, because a restricted-use designation results in the imposition of additional safeguards on use. FIFRA requires that the application of restricted-use pesticides be carried out only by or under the direct supervision of a certified applicator, or subject to other restrictions. 7 U.S.C. § 136a(d)(1)(C)(i)-(ii). EPA can further environmental justice goals by ensuring that pesticides that raise environmental justice concerns – but not at a level sufficient to deny registration altogether – are classified as restricted-use and that appropriate protections are required in connection with their use.

In addition, the power to fashion locale-specific restrictions on pesticide use represents another possible mechanism for protecting communities that bear disproportionate pesticide risk. Such restrictions are frequently based on concerns about a particular climate, geographical area, or the presence of endangered species. Memorandum from Howard F. Corcoran, U.S. EPA Office of General Counsel, Environmental Justice Law Survey (Feb. 25, 1994) [hereinafter “OGC 1994 Memorandum”]. The agency could build on its existing practices to shape locale-specific restrictions to avoid pesticide impacts in communities that face disproportionate risks. Similarly, the agency could use such restrictions to protect food chains – especially fish – upon which some communities rely.

3 *Data Collection*

Pursuant to **Section 3(c)** of FIFRA, EPA must publish and maintain guidelines specifying the kinds of information that will be required to support the registration of a pesticide. 7 U.S.C. § 136a(c)(2)(A). Detailed descriptions of the types of data that must be submitted have been established by regulation. 40 C.F.R. Part 158. FIFRA’s data requirements “are intended to generate data and information necessary to address concerns pertaining to the identity, composition, potential adverse effects and environmental fate of each pesticide.” *See* 40 C.F.R. § 158.202(a). EPA relies on this data to make regulatory judgments about the risks and benefits of a pesticide. 40 C.F.R. § 158.20(b)(1).

In the case of pesticides with an existing registration, EPA may at any time determine that additional data are required to support continued registration and initiate what is known as a “data call-in.” When this occurs, the agency notifies affected registrants of the new data requirement, and

the registrants must demonstrate within 90 days of notice that they are taking appropriate steps to comply. 7 U.S.C. § 136a(c)(2)(B)(i)-(ii). Failure to comply can result in suspension of a pesticide's registration. 7 U.S.C. § 136a(c)(2)(B)(iv).

EPA's broad data collection authority enables the agency to require submission of data that will assist in the determination of whether a pesticide's use is likely to cause, or in the case of an existing pesticide, is already causing unreasonable risks in communities of color or low-income communities. The authority to conduct data call-ins further ensures that if new environmental justice concerns arise subsequent to registration of a pesticide, EPA has a means of collecting information necessary to assess the new threat.

4. Preferential Registration of Certain Pesticides

The FQPA amendments to FIFRA added definitions and new procedures regarding three categories of pesticides: minor-use pesticides, antimicrobial pesticides, and public health pesticides. A "minor use" of a pesticide, generally speaking, is a use for which sales of the pesticide do not justify the expenditure required by the registrant to maintain a registration under FIFRA. 7 U.S.C. § 136(ll). Antimicrobial pesticides are those that disinfect or sanitize, or otherwise affect the growth or development of microorganisms such as bacteria and viruses. The category also includes pesticides used to protect inanimate objects, industrial processes, or other substances from microorganisms. 7 U.S.C. § 136(mm). Public health pesticides refer to minor-use pesticides used predominantly in public health programs for vector control or other recognized health protection uses. 7 U.S.C. § 136(nn).

As a result of their perceived benefits, these categories of pesticides receive preferential treatment in the registration process. Similarly, pesticides that present reduced risks to human health and non-target organisms are subject to expedited registration procedures. 7 U.S.C. § 136a(c)(10); see U.S. EPA Office of Pesticide Programs, Guidelines for Expedited Review of Conventional Pesticides under the Reduced-Risk Initiative and for Biological Pesticides PR Notice 97-3 (Sept. 4, 1997). Nevertheless, FIFRA's requirement to avoid unreasonable adverse effects on the environment still comes into play. For example, pursuant to **Section 3(c)**, EPA may waive data requirements in the registration of a minor-use pesticide, but only if this will not prevent a determination of the incremental risk presented by the minor use and if the risk would not amount to an unreasonable adverse effect on the environment. 7 U.S.C. § 136a(c)(2)(E). In providing preferential treatment to certain pesticides in the registration process, as FIFRA now requires, the agency can nevertheless ensure that an assessment of environmental justice impacts accompanies any decision-making in connection with these pesticides.

5. Public Participation in the Registration Context

Section 3(c) of FIFRA sets out the notice-and-comment procedures for the registration process. 7 U.S.C. § 136a(c)(4). In addition, within 30 days after registration of a pesticide, EPA must make available to the public the data called for in the registration statement, along with any other scientific information the agency deems relevant to the decision. 7 U.S.C. § 136a(c)(2)(A). In fulfilling this requirement, the agency could highlight data of importance to communities of color and low-income communities.

6 Cancellation or Suspension of Pesticide Registration

Proceedings under **Section 6** of FIFRA provide a way for EPA to reclassify a pesticide or terminate its use altogether in the event that, subsequent to its registration, it poses unreasonable risks, which could include risks to communities of color and to low-income communities. If unacceptable effects on either people or wildlife in these communities can be traced to a pesticide that is being appropriately used, the agency has a clear means of resolving the problem by eliminating the use of the pesticide or removing the pesticide from the market altogether.

Pursuant to **Section 6(b)** of FIFRA, if EPA determines that a pesticide, “when used in accordance with widespread and commonly recognized practice, generally causes unreasonable adverse effects on the environment,” the agency may issue notice of an intent either to cancel its registration or change its classification, or to hold a hearing to determine whether these actions should be taken. Such notice is given to the registrant and made public, and FIFRA mandates consultation between EPA and the Department of Agriculture. 7 U.S.C. § 136d(b)(1)-(2). Additionally, the Scientific Advisory Panel (discussed below) must be consulted. 7 U.S.C. § 136w(d)(1). When a public health use is affected, the Secretary of Health and Human Services must also be consulted. 7 U.S.C. § 136d(b)(2).

Under **Section 6(c)** of FIFRA, if EPA determines that action is necessary to prevent an “imminent hazard” during the time that is required for cancellation or change in classification proceedings, the agency may issue an order suspending registration of the pesticide immediately. 7 U.S.C. § 136d(c)(1). An imminent hazard exists when the continued use of a pesticide during the time required for a cancellation proceeding “would be likely to result in unreasonable adverse effects on the environment” 7 U.S.C. § 136(l).

Pursuant to **Section 6(d)** of FIFRA, if a hearing on cancellation or change of classification is either required by EPA or requested by an adversely affected individual, the hearing shall be held after due notice, “for the purpose of receiving evidence relevant and material to the objections filed by the applicant or other interested parties, or to the issues stated by the Administrator” 7 U.S.C. § 136d(d); *see also* 7 U.S.C. § 136d(e) (providing for hearing on notice of intent to cancel a conditional registration). The agency’s statutory obligation to receive relevant and material evidence is broad enough to permit full consideration of environmental justice concerns about the pesticide at issue.

EPA has broad authority to determine the disposition of existing stocks of pesticides whose registration has been suspended or canceled under FIFRA. Pursuant to **Section 6(a)**, the agency may permit the continued sale and use of such stocks “to such extent, under such conditions, and for such uses as the Administrator determines that such sale or use is not inconsistent with the purposes of [FIFRA].” 7 U.S.C. § 136d(a)(1); *see also* 7 U.S.C. § 136d(e)(1). Accordingly, when EPA has canceled or suspended a registration – particularly when such action was based on environmental justice issues – this section provides authority for the agency to factor environmental justice considerations into the decision on how to dispose of existing stocks.

Similarly, **Section 19(b)** of FIFRA provides that when registration of a pesticide has been canceled or suspended, EPA must order a recall of the pesticide when doing so is “necessary to protect health or the environment.” 7 U.S.C. § 136q(b)(1). However, when the agency determines

that a voluntary recall will be as safe and effective as a mandatory recall, it must request the pesticide registrant to submit a plan for such recall within 60 days of the request. EPA must approve the plan unless it determines, after informal hearing, that the plan is inadequate to protect health or the environment. 7 U.S.C. § 136q(b)(2). To “protect health and the environment” means to protect against any unreasonable adverse effects on the environment. 7 U.S.C. § 136(x). In the event of a mandatory recall of a pesticide – and when EPA does not request a voluntary plan or the one submitted is inadequate – the agency must issue a regulation describing a plan for the recall. 7 U.S.C. § 136q(b)(3).

These provisions provide a two-fold means of promoting environmental justice. First, EPA may take environmental justice concerns into account in determining whether a recall is warranted. Second, when a recall is ordered, the agency could incorporate into the decision of whether a recall plan is adequate a consideration of how communities of color and low-income communities will be affected and how likely the plan is to communicate the recall to these communities in an effective manner.

B. Setting Tolerances and Granting Exemptions

1. Generally

The shipment in interstate commerce of adulterated or misbranded food is prohibited by the FFDCA. *See* 21 U.S.C. § 331(a)-(c). In the pesticide context, food is deemed adulterated “if it bears or contains a pesticide chemical residue that is unsafe. . . .” 21 U.S.C. § 342(a)(2)(B). A pesticide chemical residue is deemed “unsafe” for purposes of the FFDCA unless either a tolerance is in effect and the residue quantity is within the limits of such tolerance, or an exemption from the requirement for a tolerance is in effect. 21 U.S.C. § 346a(a)(1).

Section 408(b) of the FFDCA authorizes EPA, either in response to a petition or on the agency’s own initiative, to issue regulations establishing, modifying, or revoking a tolerance for a pesticide chemical residue on or in food. 21 U.S.C. § 346a(b)(1); 40 C.F.R. Part 180. A tolerance may be established or continued only if EPA determines that the tolerance is safe. 21 U.S.C. § 346a(b)(2)(A)(i). “Safe” means that EPA “has determined that there is a reasonable certainty that no harm will result from aggregate exposure to the pesticide chemical residue, including all anticipated dietary exposures and all other exposures for which there is reliable information.” 21 U.S.C. § 346a(b)(2)(A)(ii). If the agency sets a tolerance that varies from an existing international tolerance for that pesticide, it must give reasons for doing so. 21 U.S.C. § 346a(b)(4). EPA may also issue a regulation establishing, modifying, or revoking an exemption from the requirement for a tolerance. 21 U.S.C. § 346a(c)(1). The agency’s decision to establish an exemption from the requirement of obtaining a residue tolerance is guided by essentially the same safety standard – and the same factors – that govern establishment of tolerances. 21 U.S.C. § 346a(c).

An important exception to when a residue is deemed unsafe arises in connection with the FFDCA’s “pass-through” provision for processed foods. If a tolerance is in effect for a residue in or on a raw agricultural commodity, a residue present in or on processed food made from the raw agricultural commodity will not be considered unsafe if (1) the pesticide was used in or on the raw agricultural commodity in conformity with a tolerance; (2) the residue was removed to the extent possible by good manufacturing practice; and (3) the concentration of the residue in the processed

food is not greater than the tolerance prescribed for the residue in the raw agricultural commodity. 21 U.S.C. § 346a(a)(2). Additionally, the tolerance fixed for a parent compound generally applies to metabolites and degradation products, except when EPA determines that the degradation product poses a new dietary risk or that the combined residues from the parent product and the degradation product exceed accepted tolerance levels. 21 U.S.C. § 346a(a)(3); see ELIZABETH C. BROWN, *ET AL.*, PESTICIDE REGULATION DESKBOOK 44 (Environmental Law Institute, 2000) [hereinafter “Deskbook”].

The issue of establishing tolerances and exemptions is crucial for pesticide registrants, because EPA will not register a pesticide under FIFRA that will be used on food, animal feed, or food or feed crops until the registrant has obtained either a tolerance or an exemption under the FFDCA. 40 C.F.R. § 152.112(g). Additionally, as a result of the 1996 FQPA amendments, EPA must determine, pursuant to a statutory timetable, whether existing pesticide residue tolerances or exemptions satisfy the new FQPA safety standard; if they do not, the agency must issue a regulation modifying or revoking the tolerance or exemption. 21 U.S.C. § 346a(q)(1). Tolerance reassessment must be concluded by August 3, 2006. EPA is carrying out the tolerance reassessment process in connection with its pesticide reregistration program, discussed below.

In making determinations on tolerances and exemptions, EPA must consider aggregate exposure to pesticide residue from both dietary sources and other non-occupational sources. The aggregate exposure analysis under FFDCA works by analogy to a so-called “risk cup.” *Id.* Each pesticide has a risk cup, which corresponds to the reference dose (RfD) for a pesticide. A reference dose represents the total allowable level of daily exposure to a given pesticide that a person could receive every day for 70 years without significant risk of a long-term or chronic non-cancer health effect. Thus, EPA must consider pesticide exposure that results not just from eating food, but also from drinking water, using swimming pools, and performing lawn care. As long as the risk cup for a specific pesticide is not full, the agency can register additional pesticide uses and set new tolerances. Once the risk cup overflows, however, no new uses are permitted until either the risk level has been lowered or new data are generated to alter the baseline assumptions used to establish the RfD. See U.S. EPA Office of Pesticide Programs, Agency Actions Under the Requirements of the Food Quality Protection Act PR Notice 97-1 (Jan. 31, 1997); Deskbook at 47.

One of the core concerns of environmental justice is that multiple exposures to environmental harms from different routes need to be acknowledged and addressed. The broad new FQPA safety standard for pesticide residue tolerances, with its mandate to consider aggregate risks from various sources of exposure to pesticides, creates a powerful tool with which EPA can ensure that environmental justice concerns are incorporated into pesticide regulation. As will be discussed below, the agency also possesses the authority to examine these exposures with reference to particular communities, including communities of color and low-income communities.

2. Factors Considered in Establishing Tolerances or Exemptions

In establishing tolerances or exemptions pursuant to **Section 408(b)** of the FFDCA, EPA must consider nine specific factors, “among other relevant factors.” 21 U.S.C. § 346a(b)(2)(D). As discussed below, some of these factors are of particular importance from an environmental justice perspective.

One important factor that EPA must consider is “available information concerning the dietary consumption patterns of consumers (and major identifiable subgroups of consumers).” 21 U.S.C. § 346a(b)(2)(D)(iv). Thus, the agency can examine the extent to which dietary consumption patterns in communities of color and low-income communities differ from patterns in the general population. For example, some low-income or Native American communities rely on subsistence fishing and hunting, and the animals they consume can contain unsafe levels of pesticide residue as a result of runoff and drift. Low-income communities may also have less adequate diets and lower levels of health generally, which could combine to increase susceptibility to the harmful effects of pesticides. Similarly, agricultural worker communities often consume fresh fruits and vegetables that contain higher levels of pesticide residue than fruits and vegetables that take longer to reach the table.

Another factor that EPA must consider is “available information concerning the aggregate exposure levels of consumers (and major identifiable subgroups of consumers) to the pesticide chemical residue and to other related substances, including dietary exposure under the tolerance and all other tolerances in effect for the pesticide chemical residue, and exposure from other non-occupational sources.” 21 U.S.C. § 346a(b)(2)(D)(vi). Thus, EPA can consider whether communities of color and low-income communities are exposed to more pesticides from more sources than other communities.

Additionally, EPA is directed to consider “available information concerning the variability of the sensitivities of major identifiable subgroups of consumers.” 21 U.S.C. § 346a(b)(2)(D)(vii). This factor gives the agency a means of determining whether members of low-income communities or communities of color may be particularly sensitive to the effects of pesticides.

Taken together, these three statutory factors are significant because they refer expressly to the need to consider “major identifiable subgroups of consumers.” A fundamental concern about pesticide risk assessment has been that it fails to capture the disproportionate risks borne by population subgroups – particularly communities of color and low-income communities – that suffer higher exposure levels and may have increased susceptibility to health risks. See Scott Bauer, *The Food Quality Protection Act of 1996: Replacing Old Impracticalities with New Uncertainties in Pesticide Regulation*, 75 N.C. L. Rev. 1398 note at 1405-06 (1997). The FQPA has focused attention on major identifiable subgroups, thereby giving EPA a clear means of examining how pesticide residues impact communities of color and low-income communities. In fact, in 1998 the Natural Resources Defense Council and others filed a petition with the agency to designate farm children as a “major identifiable subgroup and population at special risk” to be protected under the FQPA pursuant to these three factors. Petition for a Directive that the Agency Designate Farm Children as a Major Identifiable Subgroup and Population at Special Risk to Be Protected Under the Food Quality Protection Act 4, *In the Matter of Natural Resources Defense Council, et al., Petition to the Administrator* (Oct. 1998), available at <http://ecologic-ipm.com/farmkids.PDF> (last visited Nov. 14, 2001).

Other factors to be weighed in connection with tolerance setting are also important to environmental justice. EPA is required to consider “available information concerning the cumulative effects of such residues and other substances that have a common mechanism of toxicity.” 21 U.S.C. § 346a(b)(2)(D)(v). This provision is a directive to consider how similar chemicals – which may be present in pesticide residues as well as “other substances” – work together to create harmful effects. Here again, because communities of color and low-income communities are more likely than the

general population to face multiple exposures from multiple toxic substances, the issue of cumulative effects from common mechanisms of toxicity is highly relevant.

Finally, it is important to note that the factors listed in the statute represent only a starting point, as EPA may also consider “other relevant factors.” 21 U.S.C. § 346a(b)(2)(D). This provides an opportunity for the agency to obtain and review any other demographic and geographical data that might assist in the identification and delineation of specific affected communities. Other factors might also include morbidity in communities of color and low-income communities, as well as susceptibility of such communities to harm from particular toxins. Taken together, all of these factors provide a set of tools not only for obtaining and examining, but also for acting on this information in establishing pesticide residue tolerances and exemptions.

3. Exposure of Infants and Children

Section 408(b) of the FFDCA requires that in the process of establishing a tolerance or exemption for a pesticide residue, EPA must assess the risk of the residue based on certain categories of available information involving infants and children. The agency must consider:

- “available information about consumption patterns among infants and children that are likely to result in disproportionately high consumption of foods containing or bearing such residue among infants and children in comparison to the general population;”
- “available information concerning the special susceptibility of infants and children to the pesticide chemical residues, including neurological differences between infants and children and adults, and effects of in utero exposure to pesticide chemicals;” and
- “available information concerning the cumulative effects on infants and children of such residues and other substances that have a common mechanism of toxicity.”

21 U.S.C. § 346a(b)(2)(C)(i). The agency must also ensure a “reasonable certainty that no harm will result to infants and children from aggregate exposure” to the residue, and publish a specific finding regarding the residue’s safety for infants and children. 21 U.S.C. § 346a(b)(2)(C)(ii).

With regard to threshold effects, an additional ten-fold margin of safety for the residue and other sources of exposure must be applied for infants and children. This additional safety factor accounts for “potential pre- and post-natal toxicity and completeness of the data with respect to exposure and toxicity to infants and children.” 21 U.S.C. § 346a(b)(2)(C). However, the agency may use a different margin of safety if, on the basis of reliable data, such margin will be safe for infants and children. *Id.*

The FFDCA’s new focus on infants and children as a result of the FQPA amendments creates a powerful mechanism through which EPA can address the effects of pesticides on infants, children and pregnant women in communities of color and low-income communities, and in particular agricultural worker communities.

4. Data Collection

In setting or revoking a tolerance for a pesticide chemical residue under **Section 408(b)** of the FFDCA, EPA may consider “available data and information” on the anticipated residue levels of the pesticide in or on food, as well as the actual levels that have been measured. 21 U.S.C. § 346a(b)(2)(E)(i). **Section 408(f)** provides that if EPA determines that additional data or information are “reasonably required” to support the continuation of a tolerance or exemption in effect, the agency may require submission of such by way of notice, rule, or order. 21 U.S.C. § 346a(f)(a)(A)-(C). EPA may issue an order modifying or revoking a tolerance or exemption if the required submission is not made in the time specified. 21 U.S.C. § 346a(f)(a)(2). As in the pesticide registration process, the agency can use data collection provisions to consider a broad range of data and information that might bear on environmental justice concerns.

When assessing chronic dietary risks in connection with the establishment of a tolerance, EPA may consider available data and information on the percentage of food actually treated – including aggregate pesticide use data from the Department of Agriculture – if four conditions are met. First, the data must be reliable. Second, the exposure estimate must not understate exposure for any “significant subpopulation group.” Third, if data are available on pesticide use and food consumption in a particular area, the population in that area must not through its diet be exposed to residues above those estimated by EPA. Fourth, the estimate for anticipated dietary exposure must be periodically reevaluated. 21 U.S.C. § 346a(b)(2)(F). When the agency chooses to rely upon data indicating the percentage of food actually treated, it thus has the authority to ensure that the exposure estimate does not understate exposure to communities of color and low-income communities.

5. Mechanisms for Agency Action on a Tolerance or Exemption

Petitions to establish pesticide tolerances or exemptions typically accompany applications for registration. However, the petition procedure actually is much broader in scope. Under **Section 408(d)** of the FFDCA, “any person” may file a petition proposing the issuance of a regulation that establishes, modifies, or revokes a tolerance or an exemption. 21 U.S.C. § 346a(d)(1). After considering the petition and “any other information available to the Administrator,” EPA must (1) issue a final regulation establishing, modifying, or revoking a tolerance or an exemption; (2) issue a proposed regulation; or (3) issue an order denying the petition. 21 U.S.C. § 346a(d)(4)(A). The agency also may act on its own initiative to issue a regulation establishing, modifying, suspending, or revoking a tolerance or an exemption, or establishing general procedures and requirements to implement this section. 21 U.S.C. § 346a(e)(1).

Similarly, pursuant to **Section 408(g)** of the FFDCA, any person may file objections within 60 days after issuance of a regulation or order concerning pesticide tolerances or exemptions. 21 U.S.C. § 346a(g)(2)(A). EPA, upon the agency’s own initiative or upon the request of an interested person and after due notice, must hold a public evidentiary hearing if necessary and receive factual evidence relevant to material issues of fact raised by the objections. 21 U.S.C. § 346a(g)(2)(B).

These provisions establish a means to seek modification or revocation of tolerances for the residue of pesticides that are having severe adverse impacts on low-income communities or communities of color. EPA is required to consider the contents of the petition, as well as “any other information available,” which provides broad latitude as to information the agency may examine.

Moreover, even absent a petition from the public, the agency may act on its own initiative to address a tolerance or exemption for a pesticide that has come to present unacceptable harms.

C. Pesticide Reregistration

Section 4 of FIFRA, added in 1988, requires EPA to reregister all pesticides containing an active ingredient that was a component of any pesticide initially registered prior to November 1, 1984, with limited exceptions. 7 U.S.C. § 136a-1(a). The purpose of reregistration is to ensure that previously registered pesticides continue to satisfy current data, scientific, and regulatory standards. The agency also is using the pesticide reregistration process to carry out the reassessment of existing pesticide residue tolerances as mandated by the FQPA and described in Part III.B., above. Although the FIFRA reregistration process was initially directed only to certain older pesticides, FIFRA has set a goal of reviewing the registration of each pesticide at least once every 15 years. 7 U.S.C. § 136a(g)(1)(A). The reregistration process has functionally (although not entirely) replaced FIFRA's more costly and time-consuming Special Review process for evaluating pesticide safety. *See* 7 U.S.C. § 136a(c)(8); 40 C.F.R. Part 154.

FIFRA mandates a five-phase process for reregistering all covered pesticides and establishes time frames for compliance and responsibilities for both EPA and registrants. To date, Phases I, II, III, and IV of the statutory reregistration process have been completed. 7 U.S.C. §§ 136a-1(c)-(f). Phase V, which requires the agency to review all of the data for each active ingredient and take appropriate action, is underway. 7 U.S.C. §§ 136a-1(g). In connection with Phase V of the reregistration process, EPA must review all of the data submitted in connection with each active ingredient, as well as “*all other available data found by the Administrator to be relevant.*” 7 U.S.C. § 136a-1(g)(1) (emphasis added). Upon completion of the Phase V review for each active ingredient of a pesticide, EPA must determine whether to reregister the pesticide under the criteria of FIFRA § 3(c)(5) (discussed above). 7 U.S.C. § 136a-1(g)(2)(C).

Reregistration is important from an environmental justice perspective, because it requires that the safety of every pesticide will be reviewed periodically by EPA. Thus, even if a pesticide was initially registered or provided with a tolerance without reference to impacts on communities of color and low-income communities, these concerns can be accounted for during the reregistration process.

D. Experimental Use Permits

For an applicant to generate sufficient data on a pesticide to seek registration, the applicant may need to test – and therefore distribute in limited fashion – an unregistered substance. This can be done pursuant to a **Section 5** experimental use permit, or EUP. *See* 7 U.S.C. § 136c; 40 C.F.R. Part 172. EPA fixes the terms and conditions for use under the permit. 7 U.S.C. § 136c(c). The agency may revoke an EUP at any time upon a finding that its terms and conditions are inadequate to avoid unreasonable adverse effects on the environment. 7 U.S.C. § 136c(e). The agency is authorized to establish a temporary tolerance or exemption for a pesticide under an EUP. 7 U.S.C. § 136c(b); 21 U.S.C. § 346a(r). When an EUP is issued for a pesticide containing a chemical or combination of chemicals that has not been included in any previously registered pesticide, the agency may require that studies be conducted to detect whether use of the pesticide under the permit may cause unreasonable adverse effects on the environment. 7 U.S.C. § 136c(d).

Thus, EPA can incorporate environmental justice concerns into the granting and oversight of an EUP to the same degree as they are addressed in connection with pesticide registrations. In some cases, pesticides covered by EUPs may pose a more serious concern than other pesticides because of the absence of important data at the time the EUP is issued.

IV. DELEGATION OF PROGRAMS TO STATES AND TRIBES

Although primary responsibility for pesticide regulation rests with EPA, states possess limited authority under FIFRA to regulate the use and distribution of pesticides. 7 U.S.C. § 136v. Additionally, FIFRA places primary enforcement authority for pesticide use violations with the states. 7 U.S.C. § 136w-1. States also can obtain approval from EPA to certify pesticide applicators. 7 U.S.C. § 136i. Moreover, a state may seek an exemption from complying with any provision of FIFRA under narrow circumstances. 7 U.S.C. § 136p. Finally, states are authorized to issue experimental use permits. 7 U.S.C. § 136c(f). In each instance where pesticide regulatory or enforcement authority is granted to the states, however, FIFRA also provides for EPA oversight. As discussed below, EPA has ample authority to ensure that state pesticide decision-making appropriately incorporates environmental justice concerns.

A. State Regulatory Authority

A state may regulate the sale or use of any federally registered pesticide or device as long as the state allows no sale or use that is prohibited by FIFRA. Nor may a state impose packaging or labeling requirements that vary from those required by FIFRA. 7 U.S.C. § 136v(a)-(b). Additionally, in the event of a “special local need,” states are authorized by FIFRA to register additional uses for federally registered pesticides, or to register new end-use pesticides that are closely related to federally registered pesticides. *See* 7 U.S.C. § 136v(c)(1); 40 C.F.R. § 162.152(b)(2). A special local need is an existing or imminent intrastate pest problem for which an appropriate federally registered pesticide is not sufficiently available. 40 C.F.R. § 162.151(i).

A state registration generally is considered a federal registration, except that a state registration authorizes use and distribution only within that state. State registration must be consistent with the purposes of FIFRA and is not allowed if registration for the use has been denied, disapproved, or canceled by EPA. *Id.* The process by which a state issues a registration largely parallels the federal regulation process. *See* 40 C.F.R. § 162.153.

Pursuant to **Section 24(c)** of FIFRA, EPA reviews state registrations and may disapprove a state registration for a variety of reasons. 7 U.S.C. § 136v(c)(2)-(3); 40 C.F.R. § 162.154. Of particular importance is the agency’s ability to disapprove any state registration at any time upon determining that use of the pesticide under the state registration would constitute an imminent hazard. 7 U.S.C. § 136v(c)(3); 40 C.F.R. § 162.154(b)(1)(i). Moreover, if EPA determines that a state “is not capable of exercising adequate controls to assure that State registration under this section will be in accord with the purposes of [FIFRA] or has failed to exercise adequate controls, the Administrator may suspend the authority of the State to register pesticides until such time as the Administrator is satisfied that the State can and will exercise adequate controls.” 7 U.S.C. § 136v(c)(4); 40 C.F.R. § 162.155.

State authority to register new pesticide uses, and in some instances even new pesticides, raises the concern that a state might register a pesticide without considering relevant environmental justice concerns. However, FIFRA provides a mechanism for EPA to ensure that states consider potential impacts on communities of color and low-income communities. First, the agency is authorized to disapprove any state registration at any time if use of the pesticide presents an imminent hazard – that is, if continued use of the pesticide would be likely to result in unreasonable adverse effects on the environment. *See* 7 U.S.C. § 136(l). Second, the agency possesses the power to suspend a state’s registration authority altogether when a state continues to make registration decisions that are inconsistent with FIFRA’s purpose of avoiding unreasonable adverse effects to man and the environment. As discussed elsewhere in this chapter, this obligation to prevent unreasonable adverse effects on the environment provides authority for addressing environmental justice concerns.

B. State Enforcement Authority

A state has primary enforcement responsibility for pesticide use violations during any period for which EPA determines that the state: “(1) has adopted adequate pesticide use laws and regulations . . . ; (2) has adopted and is implementing adequate procedures for the enforcement of such State laws and regulations; and (3) will keep such records and make such reports showing compliance” with the first two requirements as EPA may require. 7 U.S.C. § 136w-1(a). A state also may have primary enforcement authority for pesticide use violations as a result of entering into a cooperative agreement with the agency, or by virtue of having in place an approved pesticide applicator certification plan. 7 U.S.C. § 136w-1(b). EPA has primary enforcement responsibility for those states that do not have primary enforcement responsibility under FIFRA. 7 U.S.C. § 136w-1(c).

Under FIFRA **Section 27(a)**, complaints or other information conveyed to EPA alleging pesticide use violations under the Act are referred to the appropriate state officials. However, if the state has not begun appropriate enforcement action within 30 days, EPA may act on the complaint or information. 7 U.S.C. § 136w-2(a).

Section 27(b) directs EPA, upon determining that a state with primary enforcement responsibility for pesticide use violations is not carrying out or cannot carry out its responsibility, to give notice to the state and provide 90 days for the state to cure any inadequacies. If EPA then determines that the state program remains inadequate, the agency may rescind, in whole or in part, the state’s primary enforcement responsibility. 7 U.S.C. § 136w-2(b); 40 C.F.R. Part 173. Notwithstanding this provision, the agency remains free to enforce the pesticide laws upon determining that emergency conditions exist that require immediate action, and that the state is unwilling or unable to respond adequately. 7 U.S.C. § 136w-2(c).

Given the states’ primary role in enforcing pesticide use requirements under FIFRA, EPA’s authority to respond to state shortcomings is significant for environmental justice purposes. Section 27 ensures that the agency, upon learning that a state with primary enforcement authority is not acting on a complaint from an affected community, can take swift action. Moreover, if a state consistently fails to carry out its enforcement authority on behalf of communities of color and low-income communities, the agency can potentially rescind the state’s authority altogether, or use the threat of rescission to change state practices.

C. State Certification of Pesticide Applicators

Pursuant to **Section 11(a)** of FIFRA, states are authorized to certify pesticide applicators after having received EPA's approval of their certification plans. 7 U.S.C. § 136i(a)(2). Tribes may also establish certification plans. 40 C.F.R. § 171.10. The state's or Tribe's plan must, in EPA's judgment, provide that the agency responsible for administering the plan "will make such reports to the Administrator in such form and containing such information as the Administrator may from time to time require." 7 U.S.C. § 136i(a)(2)(D). When EPA determines that a state or Tribe is not administering the certification program pursuant to the approved plan, the agency may, after notice and hearing and if appropriate corrective action is not taken, withdraw approval of the plan. 7 U.S.C. § 136i(b). Here again, in the event that a state or Tribe is conducting its certification program in a manner that does not appropriately address, or that aggravates, environmental justice concerns, the agency can rely upon its statutory oversight authority to raise these concerns with the state or Tribe and, if necessary, withdraw the authority.

D. Emergency Exemption of State and Federal Agencies from FIFRA

Pursuant to **Section 18** of FIFRA, EPA possesses discretion to exempt any federal or state agency from any provision of FIFRA if the agency determines that conditions exist that require the exemption. 7 U.S.C. § 136p; 40 C.F.R. Part 166. In the event that EPA grants such an exemption for a pesticide chemical, the agency must also establish a time-limited tolerance or exemption for the pesticide chemical residue. 21 U.S.C. § 408(j)(6); 40 C.F.R. Part 176. Section 18 is primarily a vehicle for allowing states to use a pesticide for an unregistered use for a limited time if the agency makes a determination that emergency conditions exist. By regulation, the agency may revoke or modify a Section 18 exemption for a number of reasons, including when use of the pesticide under the exemption may cause unreasonable adverse effects on the environment. 40 C.F.R. § 166.35. Thus, EPA retains a means of controlling potentially hazardous state activity under Section 18 in the event that communities of color and low-income communities are disproportionately bearing the burden of the unregistered pesticide use.

E. State Authority to Issue Experimental Use Permits

FIFRA authorizes states to issue experimental use permits, or EUPs, pursuant to regulations prescribed by EPA. 7 U.S.C. § 136c(f); 40 C.F.R. §§ 172.20-172.26. The agency reviews state-issued EUPs and may revoke an EUP for various reasons, including if "its terms and conditions are inadequate to avoid unreasonable adverse effects on the environment." 40 C.F.R. § 172.25. EPA's review of state-issued EUPs can be used to ensure that environmental justice concerns with an EUP, if any, have been incorporated at the state level.

V. ENFORCEMENT

The general rule under FIFRA is that "no person in any State may distribute or sell to any person any pesticide that is not registered." 7 U.S.C. § 136a(a). Unless otherwise authorized, it is unlawful to distribute or sell any unregistered pesticide, or any pesticide whose registration has been canceled or suspended. 7 U.S.C. § 136j(a)(1)(A); 7 U.S.C. § 136a(a). It is unlawful to distribute or sell any pesticide that is adulterated or misbranded. 7 U.S.C. § 136j(a)(1)(E). It is also unlawful to

use any pesticide in a manner inconsistent with its labeling. 7 U.S.C. § 136j(a)(2)(G). The Secretary of Health and Human Services, via the Food and Drug Administration, possesses enforcement authority under the FFDCA. As discussed above, states have primary enforcement responsibility for pesticide use violations under FIFRA, but the Act gives EPA an active role in overseeing state enforcement, and provides EPA with a number of enforcement tools. For a fuller discussion of statutory enforcement authorities for promoting environmental justice, see Chapter 5.

Section 9(a) of FIFRA authorizes EPA, at reasonable times, to enter and inspect establishments or places where pesticides are located for purposes of inspection, taking of samples, and compliance assurance. *See* 7 U.S.C. § 136g(a).

Section 13(b) of FIFRA authorizes EPA to seek seizure through *in rem* condemnation proceedings of any pesticide or device if, when used in accordance with the requirements of FIFRA and as directed by its labeling, the pesticide or device “nevertheless causes unreasonable adverse effects on the environment.” 7 U.S.C. § 136k(b)(3). Thus the agency may take immediate action against a pesticide, even one that may be in technical compliance with FIFRA, if use of the pesticide is resulting in harmful impacts to communities of color and low-income communities.

Section 14(a) of FIFRA authorizes EPA to assess a civil penalty of not more than \$5,000 per offense against any registrant, commercial applicator, wholesaler, dealer, retailer, or other distributor for violations of FIFRA. 7 U.S.C. § 136l(a)(1). Private applicators and others violating these laws are subject to lesser civil penalties. 7 U.S.C. § 136l(a)(2). Persons charged must be given notice and an opportunity for a hearing. 7 U.S.C. § 136l(a)(3). In determining the amount of the penalty, one factor EPA must consider is “the gravity of the violation.” 7 U.S.C. § 136l(a)(4). In assessing gravity, EPA could consider whether the harm is disproportionately suffered by communities of color or low-income communities, particularly agricultural worker communities, which often lack the information, financial resources, and political power necessary to prevent or address violations of the pesticide laws.

Section 19(d) of FIFRA authorizes EPA to pursue a broad array of remedies upon a person’s failure to comply substantially with a recall, or with a regulation or order dealing with the storage, transportation, or disposal of pesticides whose registration has been suspended or canceled. These include issuance of a stop sale, use, or removal order; seizure; assessment of civil penalties; initiation of criminal proceedings; and requests for injunctive relief. 7 U.S.C. § 136q(d)(4). This section provides the agency with a wide range of options for addressing harmful impacts on communities of color and low-income communities that may result from the improper disposition of the dangerous subset of pesticides whose registration has been suspended or canceled, or which are the subject of recall orders.

VI. INFORMATION GATHERING (RESEARCH, MONITORING, AND REPORTING)

In order to incorporate environmental justice into decision-making under FIFRA and the FFDCA, it is important that EPA possess relevant, reliable, extensive, and timely information. As set forth below, these statutes supply the agency with many means of gathering many different types of information. These tools complement the various pesticide data submission requirements authorized

in connection with the establishment of pesticide tolerances and the registration of pesticides, discussed in Part III, above.

A. Research

Section 20(a) of FIFRA requires EPA to undertake research, including research by grant or contract with other federal agencies, universities, or others, “as may be necessary to carry out the purposes of [FIFRA].” 7 U.S.C. § 136r(a). Given the unambiguous statutory purpose of preventing unreasonable adverse effects on the environment, the agency enjoys broad discretion in determining the nature of the research to be carried out pursuant to this section. EPA thus could promote environmental justice by conducting research that will help prevent and address the most pressing pesticide risks to communities of color and low-income communities.

EPA is further directed by Section 20(a) to conduct research into integrated pest management (IPM) in coordination with the Department of Agriculture. 7 U.S.C. § 136r(a). IPM is a sustainable approach to pest management that combines “biological, cultural, physical, and chemical tools in a way that minimizes economic, health, and environmental risks.” 7 U.S.C. § 136r-1. FIFRA further directs the Department of Agriculture, in cooperation with EPA, to implement research, demonstration, and education programs to support the adoption of IPM. 7 U.S.C. § 136r-1. This section, which was added by the FQPA, also provides that the two agencies shall make information on IPM widely available to pesticide users. *Id.* **Section 11(c)** of FIFRA provides that all state and federal programs for the certification of pesticide applicators shall include provisions for making instructional materials on IPM techniques available to interested individuals upon request, and shall notify all such individuals of the availability of these materials. 7 U.S.C. § 136i(c).

FIFRA’s mandate that federal agencies embrace and promote IPM is of great importance to environmental justice. Integrated pest management techniques rely on chemical pesticides as merely one tool among many to be used for pest control and eradication, so by definition less pesticide is applied. EPA could conduct research that continues to link IPM and reduced pesticide impacts in communities of color and low-income communities.

Section 23(c) of FIFRA provides that EPA, in cooperation with the Secretary of Agriculture, shall use the cooperative state extension services to inform and educate pesticide users about accepted uses and FIFRA regulations. 7 U.S.C. § 136u(c). This section provides a tool for ensuring that affected communities are aware of their rights under FIFRA. For example, this provision creates a mechanism for disseminating information directly to agricultural workers about the protections afforded to them by the Worker Protection Standard.

B. Monitoring and Data Collection

Section 20(b) of FIFRA provides that EPA, in cooperation with other federal, state, and local agencies, shall formulate and periodically revise a national plan for monitoring pesticides. Additionally, under **Section 20(c)** of FIFRA, EPA must undertake

such monitoring activities, including, but not limited to monitoring in air, soil, water, man, plants, and animals, as may be necessary for the implementation of [FIFRA] and of the national pesticide monitoring plan. The Administrator shall establish

procedures for the monitoring of man and animals and their environment for [incidental] pesticide exposure, including, but not limited to, the quantification of incidental human and environmental pesticide pollution and the secular trends thereof, and identification of the sources of contamination and their relationship to human and environmental effects. Such activities shall be carried out in cooperation with other Federal, State, and local agencies.

7 U.S.C. § 136r(c). These provisions grant EPA extensive authority to monitor the direct and indirect effects of pesticides. EPA can prioritize and carry out monitoring that accounts not only for exposures to the general population, but also to particular communities – defined, for example, by geography, income level, or racial composition. Moreover, under the authority to monitor “man and animals and their environment” for incidental pesticide exposures, EPA could address the reliance by some communities on fish and other wildlife for sustenance by conducting biological monitoring of specific ecosystems and food chains. OGC 1994 Memorandum.

The Department of Agriculture, in consultation with EPA, must require all certified applicators of restricted-use pesticides to maintain detailed application records. 7 U.S.C. § 136i-1(a)(1). These records are to be available upon request to any federal or state agency that deals with pesticide use or related health or environmental issues. 7 U.S.C. § 136i-1(b). Each such agency is further directed to conduct surveys and record data from individual applicators to facilitate statistical analysis for environmental and agronomic purposes. *Id.* Although enforcement of these provisions is left to the Department of Agriculture, 7 U.S.C. § 136i-1(d), EPA could use its consultative role to ensure that records kept by applicators of restricted-use pesticides contain sufficient detail to ascertain the extent to which these pesticides are applied in communities of color and low-income communities. The two agencies also must survey the records maintained under this section to develop and maintain a database sufficient to enable them to publish annual comprehensive reports concerning agricultural and nonagricultural pesticide use. These provisions allow EPA to play a role in organizing the database and the required reports in such a way as to incorporate geographic and demographic information that expands our understanding of pesticide exposures in communities of color and low-income communities.

FIFRA requires the Department of Agriculture to collect “data of statewide or regional significance on the use of pesticides to control pests and diseases of major crops and crops of dietary significance, including fruits and vegetables.” 7 U.S.C. § 136i-2(a). Data is to be collected by surveys of farmers “or from other sources offering statistically reliable data.” 7 U.S.C. § 136i-2(b). The Department must, as appropriate, coordinate with EPA in the design of the surveys and make the aggregate result of such surveys available to EPA. 7 U.S.C. § 136i-2(c). This section, which was enacted pursuant to the FQPA, could provide a tool for examining state and regional data concerning the impacts of pesticides on communities of color and low-income communities. Although the provisions are directed primarily to the Department of Agriculture, EPA plays an important role in participating in the design of the surveys and receives the results. Additionally, this provision would seem to allow environmental justice experts and advocates to provide survey data as appropriate, so long as the data is statistically reliable.

Section 25(d)(1) of FIFRA directs EPA to submit to a scientific advisory panel for review notices of the proposed and final form of regulations, as well as notices of intent to cancel a pesticide’s registration or change its classification. The panel’s task is to “comment as to the impact

on health and the environment of the action proposed.” 7 U.S.C. § 136w(d)(1). The agency must also solicit from the advisory panel “comments, evaluations, and recommendations for operating guidelines to improve the effectiveness and quality of scientific analyses” made by EPA personnel that lead to decisions under FIFRA. *Id.* The chairman of the advisory panel may, after consultation with EPA, create temporary subpanels with regard to specific projects to assist the full panel. The advisory panel consists of seven members appointed by EPA from a list of 12 nominees – six nominated by the National Institutes of Health, and six nominated by the National Science Foundation. Members are selected “on the basis of their *professional qualifications to assess the effects of the impact of pesticides on health and the environment.* To the extent feasible to ensure *multidisciplinary representation*, the panel membership shall include representation from the disciplines of toxicology, pathology, environmental biology, and *related sciences.*” 7 U.S.C. § 136w(d)(1) (emphasis added). FIFRA also mandates establishment of a science review board, consisting of 60 scientists, to be available to assist in reviews conducted by the advisory panel. 7 U.S.C. § 136w(d)(2).

Section 25(e) directs EPA, through written procedures, to provide for peer review “with respect to the design, protocols, and conduct of major scientific studies” conducted under FIFRA by EPA and other federal agencies, states, or individuals or other entities working under a grant, contract, or cooperative agreement from or with EPA. The agency must use the advisory panel, discussed above, to provide for peer review with respect to the results of scientific studies relied upon by EPA in connection with cancellation or suspension of a pesticide registration, or change in classification of a pesticide. The term “peer review” means “an independent evaluation by scientific experts, either within or outside the [EPA], in the appropriate disciplines.” 7 U.S.C. § 136w(e).

The Scientific Advisory Panel, as well as any subpanels, the science review board, and other sources of peer review, present an excellent vehicle for incorporating environmental justice concerns into the FIFRA scientific peer review processes. For example, given the multidisciplinary nature of the panel, and the fact that the list of disciplines to be represented on the panel is not exclusive, EPA possesses the authority to ensure that at least one panel appointee possesses expertise or experience on pesticide issues affecting communities of color and low-income communities. The panel’s broad mandate to comment on an action’s likely impact on health and the environment allows a means by which the panel can, in appropriate instances, factor environmental justice considerations into its assessment.

Section 408(p) of the FFDCA, which was added by the FQPA, requires EPA, in consultation with the Department of Health and Human Services, to develop a screening program to determine whether certain substances may have an effect in humans similar to an effect produced by naturally occurring estrogen, or such other endocrine effect as EPA may designate. 21 U.S.C. § 346a(p). Both in carrying out the this mandate and in reporting on its results, the agency has the opportunity to promote environmental justice by incorporating concerns about how endocrine disruption affects residents communities of color and low-income communities, such as the children of agricultural workers.

Section 301 of the FQPA requires the Department of Agriculture, in consultation with EPA and the Department of Health and Human Services, to coordinate the development and implementation of survey procedures to ensure that adequate data on food consumption patterns of infants and children are collected. The Department of Agriculture furthermore must ensure that the three agencies’ residue data collection activities provide for “the improved data collection of pesticide

residues, including guidelines for the use of comparable analytical and standardized reporting methods, and the increased sampling of foods most likely consumed by infants and children.” FQPA Section 301, 21 U.S.C. § 346a note. The Department of Agriculture has incorporated the FQPA mandate to improve data collection on pesticide residues with regard to infants and children into its pre-existing Pesticide Data Program.

EPA could use its consultative role in part to ensure that survey and data collection techniques fully account for children in communities of color and low-income communities, who are likely to have different food consumption patterns or face increased exposure to pesticide residues compared to children in other communities. Survey procedures and data collection with regard to infants and children can take these disparities into account.

Under **Section 408(b)** of the FFDCA, the three agencies must conduct surveys to document dietary exposure to pesticides among infants and children. 21 U.S.C. § 346a(b)(2)(C). EPA can use its consultative role to ensure that these surveys target dietary exposure information for infants and children in low-income communities and communities of color. As has been mentioned, this is particularly important with respect to agricultural worker communities.

C. Reporting

Section 6(a) of FIFRA provides that “[i]f at any time after the registration of a pesticide the registrant has additional factual information regarding unreasonable adverse effects on the environment of the pesticide, the registrant shall submit such information to the Administrator.” 7 U.S.C. § 136d(a)(2); 40 C.F.R. § 152.125. EPA interprets this reporting provision broadly. See 40 C.F.R. Part 159. For example, the agency requires registrants to submit information other than that explicitly set forth in the regulations “if the registrant knows, or reasonably should know, that if the information should prove to be correct, EPA might regard the information alone or in conjunction with other information about the pesticide as raising concerns about the continued registration of a product or about the appropriate terms and conditions of registration of a product.” 40 C.F.R. § 159.195. This provision gives EPA broad authority to collect information about a pesticide’s adverse effects and to use that information in agency decision-making.

Pursuant to **Section 11(a)** of FIFRA, states and Tribes are authorized to certify pesticide applicators after having received EPA approval of their certification plans. 7 U.S.C. § 136i(a)(2); see discussion of EPA’s oversight authority in Part IV.C., above. The plan must provide that the state or Tribe “will make such reports to the Administrator in such form and containing such information as the Administrator may from time to time require.” 7 U.S.C. § 136i(a)(2)(D); 40 C.F.R. § 171.7. In states for which a plan has not been approved, EPA conducts a certification program in consultation with the state governor, and may require regulated persons “to maintain such records and submit such reports concerning the commercial application, sale, or distribution of such pesticide as the Administrator may by regulation prescribe.” 7 U.S.C. § 136i(a)(1). Thus, whether certification of pesticide applicators takes place under an approved state plan or EPA’s own program, FIFRA provides for broad reporting that can assist EPA in determining where and to what extent pesticide application is occurring in communities of color and low-income communities.

Section 8(a) of FIFRA authorizes EPA to prescribe regulations “requiring producers, registrants, and applicants for registration to maintain such records with respect to their operations

and the pesticides and devices produced as the Administrator determines are necessary for the effective enforcement of [FIFRA] and to make the records available for inspection and copying” 7 U.S.C. § 136f(a); 40 C.F.R. Part 169. Under the regulations, one important category of records that must be provided addresses pesticide disposal. Producers must keep records on the method and date of disposal, the location of disposal sites, and the types and amounts of pesticides or active ingredients disposed of. Compliance with related rules under RCRA excuses compliance from these record-keeping requirements. *See* 40 C.F.R. § 169.2(i). Review of disposal records by EPA can be important in identifying the extent to which communities of color or low-income communities bear a disproportionate burden in this regard.

Section 408(o) of the FFDCA directs EPA, in consultation with the Departments of Agriculture and Health and Human Services, to publish and provide to large retail grocers for public display, “in a format understandable to a lay person,” a document that (1) discusses the risks and benefits of chemical residues in or on food, (2) lists pesticides for which there are benefit-based tolerances and the foods that may contain these residues, and (3) makes recommendations for reducing dietary exposures to pesticide residues consistent with maintaining a healthy diet. This must be done annually. 21 U.S.C. § 346a(o). This section gives EPA a practical vehicle for disseminating pesticide information. The agency can promote environmental justice by supplementing the brochure to address pesticide issues of particular concern to low-income communities and communities of color and by making it available in multiple languages.

VII. FINANCIAL ASSISTANCE

Pursuant to **Section 23(b)** of FIFRA, EPA is authorized to enter into cooperative agreements with states and Tribes for purposes of delegating enforcement authority to them, and of assisting them to train and certify pesticide applicators. 7 U.S.C. § 136u(a). The agency may also provide funding through cooperative agreements, id., or enter into contracts with federal, state, or tribal agencies to encourage the training of certified applicators. 7 U.S.C. § 136u(b). Through the vehicle of cooperative agreements, EPA has a means of encouraging and assisting delegated programs to address and respond to environmental justice issues.

CHAPTER 15

SAFE DRINKING WATER ACT (“SDWA”)

42 U.S.C. §§ 300f to 300j-26

The Safe Drinking Water Act (SDWA) was enacted in 1974 and amended in 1986 and 1996. The Act has two principal programs: (1) regulating public water systems and the quality of water they provide for human consumption; and (2) protecting underground sources of drinking water from contamination. Environmental justice goals present an important challenge in implementing the public health protection provisions of the Act. Many people in the United States – including residents of *colonias* along the U.S.-Mexico border and farmworker communities – still live without access to safe drinking water. Contaminated drinking water supplies may present particularly high risks to children and other sensitive populations. In addition, public drinking water systems in small, low-income communities are least able to meet stringent health-based standards for drinking water and to afford to fix problems with drinking water quality.

This chapter describes the key provisions of the Act authorizing EPA to advance environmental justice goals when carrying out its regulatory functions to protect drinking water quality. The discussion of statutory authorities presented in this chapter is intended to provide the public with a foundation for further inquiry into the political, technical, legal and other considerations involved in pursuing action to address environmental justice issues under a particular area of authority. Following Part I, which highlights specific mechanisms under the Act for EPA to respond to environmental justice concerns, Part II discusses EPA’s authority to set the standards that underlie EPA and state drinking water programs – standards for drinking water quality that must be met by public water systems, as well as standards governing underground injection of contaminants. Parts III through V describe permitting authorities under the Act, opportunities for advancing environmental justice goals in EPA’s oversight of state programs, and enforcement authorities. Part VI discusses SDWA’s extensive information gathering authorities, such as the requirement of a “consumer confidence report,” and research focusing on vulnerable subpopulations. The chapter concludes with a review of the agency’s authority to promote environmental justice through its provision of financial assistance to states and Tribes.

I. GENERAL PROVISIONS

Unlike the Clean Water Act and other federal environmental statutes, the Safe Drinking Water Act has no provisions setting out overall goals or policies. In passing the Act in 1974, Congress included no findings about the conditions establishing the need for the statute nor any codified statement of goals and purposes to provide direction in interpreting the provisions of the statute. Although it has no overall statement of goals, the SDWA is, nonetheless, clearly focused on protecting public health from contaminated drinking water.

As discussed throughout this chapter, EPA has authority to protect public health through its standard setting, permitting, enforcement, information gathering, and financial assistance activities under SDWA. In addition, the following provisions create specific mechanisms for EPA to respond

to community public health needs and concerns.

A. Imminent and Substantial Health Threats

SDWA **Section 1431(a)** provides that whenever the agency receives “information that a contaminant [that] is present in or is likely to enter a public water system or an underground source of drinking water may present an imminent and substantial endangerment to the health of persons,” EPA is authorized to “take such actions as he may deem necessary to protect the health of such persons.” 42 U.S.C. § 300i(a). This provision gives EPA broad authority to promote one of the principal goals of environmental justice, protection of public health, by taking whatever action is necessary to protect anyone whose health is in imminent and substantial danger due to a contaminant in drinking water.

B. National Drinking Water Advisory Council

SDWA **Section 1446** establishes a National Drinking Water Advisory Council. 42 U.S.C. § 300j-5. The Council is composed of 15 members, five of which “shall be appointed from the general public,” five from state and local agencies concerned with water hygiene and public water supply, and five from private organizations or groups with an active interest in water hygiene and public water supply. The purpose of the Council is to advise EPA about matters relating to the “activities, functions, and policies of the Agency” under the Act. 42 U.S.C. § 300j-5(b). Thus, the provision gives EPA authority to involve communities of color and low-income communities in decision-making under SDWA, through membership in the Advisory Council.

II. STANDARD SETTING/RULE-MAKING

A. Public Water Systems

1. National Primary Drinking Water Regulations

Under the Safe Drinking Water Act, EPA adopts national primary drinking water regulations for public water systems. **Section 1412** requires EPA to promulgate these regulations for any contaminants that EPA determines: “may have an adverse effect on the health of persons;” are known to occur, or there is a substantial likelihood that they will occur, in public water systems with a frequency and at levels of public health concern; and present a meaningful opportunity for health risk reduction through regulation. 42 U.S.C. §§ 300g-1(b)(1)(A). For each contaminant, the primary drinking water regulation either sets a “maximum contaminant level” (MCL) or specifies each treatment technique that reduces the level of the contaminant so that it satisfies Section 1412. 42 U.S.C. § 300f(1). The regulation also contains criteria and procedures – for example, quality control, testing, and operations and maintenance procedures – to assure a supply of drinking water that dependably complies with the MCL. *Id.*

At the same time that EPA publishes a national primary drinking water regulation for a contaminant, the agency must also publish a maximum contaminant level goal (MCLG), set at the level “at which no known or anticipated adverse effects on the health of persons occur and which allows an adequate margin of safety.” 42 U.S.C. §§ 300g-1(b)(4)(A). A national primary drinking water regulation must specify an MCL that is “as close to the maximum contaminant level goal as is feasible.” 42 U.S.C. §§ 300g-1(b)(4)(B). The Act defines the term “feasible” for this purpose as “feasible [sic] with the use of the best technology, treatment techniques and other means which the Administrator finds, after examination for efficacy under field conditions. . . . are available (taking cost into consideration).” 42 U.S.C. § 300g-1(b)(4)(D).

Thus, MCLGs set contaminant levels that protect against all known or anticipated health effects with an adequate margin of safety, while the MCLs included in primary drinking water regulations establish contaminant levels that factor in technological and financial considerations. These SDWA standard setting provisions give EPA authority to act in two important ways. First, the agency can identify any drinking water contaminants that may adversely affect the health of communities of color and low-income communities and ensure that MCLs and MCLGs are adopted to reduce those risks. Second, EPA can ensure that MCLGs reflect health risks that may be of particular concern to communities of color and low-income communities, due to cumulative impacts of pollutants, or due to the effects of drinking water pollutants on sensitive populations.

Under **Section 1412(b)(5)**, exceptions from the feasible level are allowed for MCLs if the means used to determine the feasible level would increase the concentration of other contaminants in drinking water or interfere with techniques or processes used to comply with other primary drinking water regulations. In these cases the MCL or alternative treatment technique(s) required must “minimize the overall risk of adverse health effects by balancing the risk from the contaminant and the risk from other contaminants” that would have been affected by the feasible level. 42 U.S.C. § 300g-1(b)(5). Provisions such as this one allowing exceptions from health-based standards can raise environmental justice concerns because they might allow communities of color and low-income communities to be subject to less-protective standards. In this case, however, EPA could use its mandate to “minimize the overall risk of adverse health effects” to reduce environmental justice concerns that might otherwise arise.

Under **Section 1412(b)(1)(D)**, EPA is authorized to adopt an interim national primary drinking water regulation to “address an *urgent threat to public health* as determined by the Administrator” after consultation with the Centers for Disease Control and Prevention or the National Institutes of Health. 42 U.S.C. § 300g-1(b)(1)(D) (emphasis added). In adopting the interim regulation, EPA is not required to complete the benefit/cost analysis or make the determination that the benefits justify the costs of the regulation as described below. *Id.* That benefit/cost analysis and determination must be made within three years of the issuance of the interim regulation, and the regulation must be repromulgated or revised no later than five years after that date. *Id.* Under this provision, EPA can promote environmental justice by responding expeditiously to an urgent threat to public health in low-income communities or communities of color due to contaminants in their drinking water.

When EPA adopts regulations for contaminants in public water systems, the agency is required under **Section 1412(b)(3)(B)** to present information on public health effects in a manner that is “comprehensive, informative, and understandable.” 42 U.S.C. § 300g-1(b)(3)(B). In the

documents that EPA makes available to the public in support of national drinking water regulations, the agency must to the extent practicable specify: (1) each population addressed by any estimate of public health effects, (2) the expected risk for the specific populations, (3) each appropriate upper or lower-bound estimate of risk, (4) each significant uncertainty identified in assessing the public health effects and studies that would help resolve the uncertainties, and (5) peer-reviewed studies that are directly relevant to or support or fail to support any estimate of public health effects. *Id.*

When read together with later paragraphs of Section 1412 (discussed below), the term “population” refers to groups or subpopulations within the general population that are likely to be at greater risk than the general population. Thus, if communities of color or low-income communities are likely to be at greater risk from certain pollutants than the general public, this provision requires EPA to provide information about those risks. In light of the mandate to provide the information in an “understandable” way, EPA has broad discretion to make sure that this information is disseminated in a way that is meaningful to the affected communities.

2. Cost/Benefit Analyses

Section 1412(b)(3)(C) requires EPA to use cost/benefit analyses when proposing a national primary drinking water regulation. 42 U.S.C. § 300g-1(b)(3)(C). An unusual provision, however, requires those analyses to consider the health risks to groups that are likely to be at greater risk than the general population. Any proposal for a primary drinking water regulation that includes an MCL must publish, seek public comment on, and use analyses of, among other things, “the effects of the contaminant on the general population and on *groups within the general population* such as infants, children, pregnant women, the elderly, individuals with a history of serious illness, or *other subpopulations that are identified as likely to be at greater risk of adverse health effects due to exposure to contaminants in drinking water than the general population.*” 42 U.S.C. § 300g-1(b)(3)(C)(i) (emphasis added). Proposals for primary drinking water regulations that include treatment techniques in place of MCLs must also include analyses of the health risk reduction benefits and costs likely to result from compliance with the treatment technique, taking the above factors into account. 42 U.S.C. § 300g-1(b)(3)(C)(ii).

Therefore, for each EPA regulation setting a standard for a contaminant in public water systems, the agency is required to study, publish, seek comment on, and consider the effects of the contaminant on the health of groups that are likely to face greater risks than the general public. EPA can further environmental justice by specifically considering the adverse health effects of contaminants on low-income communities or communities of color when proposing MCLs.

In addition to being required to “use” the above analyses, when proposing a primary drinking water regulation EPA is required by **Section 1412(b)(4)(C)** to publish a determination that the benefits of the MCL justify or do not justify the costs based on the above analyses. 42 U.S.C. § 300g-1(b)(4)(C). If EPA determines that the benefits do not justify the costs, then the agency is authorized to promulgate an MCL that maximizes the health risk reduction benefits at a cost that is justified by the benefits. 42 U.S.C. § 300g-1(b)(6)(A). This provision authorizes EPA to establish MCLs that protect health to a lesser degree than would be required by this section if the benefits do not “justify the costs of complying with the level.”

The Act’s requirement to consider the effects of a contaminant on subpopulations allows

EPA to incorporate specifically the environmental and health benefits to communities of color and low-income communities in considering whether the benefits of a more protective level justify the costs of compliance. EPA can promote environmental justice by assuring that these benefits are fully considered.

3. Variances

a. Variance technologies

Section 1412(b)(15) requires EPA to issue guidance describing the best treatment technologies, treatment techniques, or other means (“variance technologies”) for each contaminant for which it issues a primary drinking water regulation, at the same time that it promulgates the regulation. 42 U.S.C. § 300g-1(b)(15)(A). EPA must find, after consulting with the states, that the technologies are available, effective under field conditions, and affordable for public water systems of varying sizes. If, considering the quality of the source water, no treatment technology is included in the agency’s list of technologies for small systems, EPA also must identify variance technologies for systems serving populations of: 1) 10,000 or fewer but more than 3,300; 2) 3,300 or fewer but more than 500; and 3) 500 or fewer but more than 25. *Id.*

These variance technologies are allowed to not achieve compliance with the MCL or treatment technique required by the regulation, but must achieve the maximum reduction in the contaminant that is affordable considering the size of the system. *Id.* However, no variance technology may be identified unless it “*is protective of public health.*” 42 U.S.C. § 300g-1(b)(15)(B) (emphasis added). Thus, the Act raises environmental justice concerns because it potentially allows variances from health-based MCL standards in those communities that cannot afford to further reduce contaminant levels. EPA can address this concern through its strict implementation of the requirement that any variance technology be “protective of public health.” Additionally, this requirement gives EPA authority to identify and consider fully any potential health impacts on small, low-income communities connected with use of the technology – for example, impacts of drinking water contaminants on populations that are more likely to suffer from poor nutrition and other health-related conditions, and to have limited access to health care.

b. Variances from primary drinking water regulations for small systems

As discussed below in Part IV, some states have primary responsibility for enforcing SDWA requirements for public water systems. **Section 1415(e)** establishes the requirements for such states to grant variances from MCLs and treatment techniques to systems that serve fewer than 10,000 persons. 42 U.S.C. § 300g-4(e). Variances under this section use the variance technologies described by EPA under Section 1412(b)(15), and are available to a small system only if it cannot afford to comply with a primary drinking water regulation and the state or EPA (whichever is applicable) determines that the terms of the variance ensure “*adequate protection of human health.*” 42 U.S.C. § 300g-4(e)(2)&(3) (emphasis added). The statute thus mandates that even small public water systems serving fewer than 10,000 persons must at a minimum protect public health.

EPA must separately approve any variance proposed by a state for a system that serves more than 3,300 but fewer than 10,000 persons. Therefore, EPA can further environmental justice by using

its oversight role to ensure that variances are not issued to small systems serving low-income communities or communities of color if the variance would not assure the protection of public health.

Section 1415(e)(10)(A) also authorizes EPA to “review and object to any variance proposed to be granted by a State” to a small water system if the objection is made within 90 days of the proposal. 42 U.S.C. § 300g-4(e)(10)(A). If it objects to the variance, EPA is required to propose modifications to resolve its concerns and the state is required to either adopt the modifications or explain its reasons for not doing so. EPA also is authorized to overturn a variance if the state does not resolve the concerns and EPA determines that the state did not comply with the statute. *Id.* Moreover, any person served by a system for which a variance has been proposed may petition EPA to object to the variance, and EPA is required to respond and decide whether to object within the 90-day period. 42 U.S.C. § 300g-4(e)(10)(B).

This section of the Act provides EPA with authority to promote environmental justice by objecting to any variance proposed by a state that would not protect the health of the affected community. The citizen petition provision is an important mechanism for ensuring that EPA reviews variances that raise environmental justice concerns.

SDWA **Section 1415(e)(8)(A)** requires EPA to “periodically review the program of each State that has primary enforcement responsibility for public water systems . . . with respect to variances to determine whether the variances granted by the state comply with the requirements of this *subsection*.” 42 U.S.C. § 300g-4(e)(8)(A) (emphasis added). This statutory authorization for EPA to review state-issued variances is limited to variances for small systems. If EPA determines that variances granted by a state to small systems do not comply with the requirements of the provision and the affordability criteria established by the state, it must notify the state of the deficiencies and make its determination public. 42 U.S.C. § 300g-4(e)(8)(B); see also 40 C.F.R. § 142.313(b). EPA can further environmental justice by implementing this provision to oversee state programs to ensure that variances issued by states to small public water systems protect the health of low-income communities and communities of color.

c. Variances from primary drinking water regulations generally

In general, SDWA **Section 1415(a)(1)** authorizes states with primary enforcement responsibility to grant variances from national primary drinking water regulations under specific circumstances if the state follows procedures including providing notice and opportunity for public hearing on the proposed variance. 42 U.S.C. § 300g-4(a)(1). A variance is allowed where a public water system cannot meet the MCL due to the characteristics of the raw water sources that are reasonably available to the system. 42 U.S.C. § 300g-4(a)(1)(A).

A state may issue a variance to a public water system on condition that it install the best technology, treatment techniques, or other means that EPA finds are available taking costs into consideration, but the state must first find that the variance “*will not result in an unreasonable risk to health.*” *Id.* (emphasis added). A state also may issue a variance from a required treatment technique for a contaminant if a system shows that such treatment technique “*is not necessary to protect the health of persons* because of the nature of the raw water source of such system.” 42 U.S.C. § 300g-4(a)(1)(B). The same standards for issuing variances apply to EPA. 42 U.S.C. § 300g-4(a)(2)&(3). In states

where EPA has primary enforcement responsibility, the Act again provides EPA with authority to fully evaluate the potential health effects associated with the variance and to ensure that the resulting standard or treatment technique will protect the health of low-income communities and communities of color in accordance with the Act.

Where states have primary enforcement responsibility, SDWA provides a check on the broad authority to grant variances from the standards protecting human health. **Section 1415(a)(1)(F)** requires EPA to conduct a “comprehensive review of the variances granted . . . by the States” beginning 18 months after the effective date of interim national primary drinking water regulations and then as necessary, but at least within three years following the previous review. 42 U.S.C. § 300g-4(a)(1)(F). The review of state-issued variances is subject to procedural requirements including publishing notice in the Federal Register and allowing for public comment. *Id.* If EPA finds that a state has abused its discretion in granting variances in a substantial number of instances, EPA may, after notifying the state and holding a public hearing, revoke specific variances or prescribe revised schedules for specific public water systems. 42 U.S.C. § 300g-4(a)(1)(G). EPA thus has authority to ensure that states have not issued variances that pose an unreasonable risk to the health of communities of color and low-income communities, as required by the Act. Moreover, the Act’s requirement for public comment during the variance review process provides a potentially significant mechanism for EPA to identify and address environmental justice issues.

4 Exemptions

Section 1416 authorizes a state to exempt any public water system in that state from any MCL or treatment technique if it finds that:

(1) due to compelling factors . . . [the system] is unable to comply . . . or . . . to develop an alternative source of water supply, (2) [the system] was in operation on the effective date of such . . . requirement, or, for a system that was not in operation by that date, only if no reasonable alternative source of drinking water is available to such new system, (3) the granting of the exemption *will not result in an unreasonable risk to health*, and (4) management or restructuring changes (or both) cannot reasonably be made that will result in compliance . . . or, if compliance cannot be achieved, improve the quality of the drinking water.

42 U.S.C. § 300g-5(a) (emphasis added).

The “compelling factors” may include economic factors, such as the fact that the system serves a “*disadvantaged community*.” 42 U.S.C. § 300g-5(a)(1) (emphasis added). A “disadvantaged community” is one that is eligible for loan forgiveness under Section 1452(d), as described below. Whenever a state grants an exemption, it must also prescribe, after notice and opportunity for a public hearing, a schedule for the system to comply and interim control measures as determined by the state. 42 U.S.C. § 300g-5(b)(1). The same standards and procedures for granting exemptions

apply to EPA if a state does not have primary enforcement responsibility for public water systems. 42 U.S.C. § 300g-5(f).

This section allows a state or EPA to exempt any system from the basic standards protecting public health, subject to the fallback standard that the exemption not result in an unreasonable risk to health. The exemption authority itself raises environmental justice concerns that exemptions will be granted that result in lower standards being applied to low-income communities or communities of color. EPA has authority under the Act to address these concerns by applying a higher standard of assuring protection of human health when it grants exemptions rather than granting them if they “will not result in an unreasonable risk to health.” EPA also can address environmental justice concerns when it does grant exemptions in “disadvantaged communities,” other low-income communities, and communities of color by prescribing strict schedules for compliance and other measures to protect public health in the interim.

As a check on this broad authority to states to exempt systems from the standards protecting human health, **Section 1416(d)** requires EPA to conduct a “comprehensive review of the exemptions granted . . . by the States” beginning 18 months after the effective date of interim national primary drinking water regulations and then as necessary, but at least within three years following the previous review. 42 U.S.C. § 300g-5(d)(1). The review of state-issued exemptions is subject to the same procedural requirements as EPA review of state-issued variances under Section 1415(a), and EPA has promulgated a single set of regulations governing reviews of both variances and exemptions. 40 C.F.R. §§ 142.22-142.24. EPA can promote environmental justice by implementing these exemption oversight procedures to assure that states do not exempt public water systems that serve communities of color and low-income communities from regulations in a manner that subjects those communities to greater risks of adverse health effects than the general population.

B. Protection of Underground Sources of Drinking Water

SDWA **Sections 1421** through **1429** address protection of underground sources of drinking water. The Act is oriented toward state implementation of programs to control underground injection of contaminants, requiring EPA to promulgate regulations for such state programs. 42 U.S.C. § 300h (a)(1). Those regulations must include “minimum requirements for effective programs to *prevent underground injection which endangers drinking water sources.*” 42 U.S.C. § 300h (b)(1) (emphasis added). **Section 1421(d)(2)** provides that underground injection endangers drinking water sources if it “*may result in the presence in underground water which supplies or can reasonably be expected to supply any public water system of any contaminant, and if the presence of such contaminant may result in such system’s not complying with any national primary drinking water regulation or may otherwise adversely affect the health of persons.*” 42 U.S. C. § 300h(d)(2) (emphasis added).

Thus, EPA is charged with setting the minimum standards for states to meet in order for their programs to prevent underground injection that (1) may result in contaminants being present in underground water that may cause a public water system that uses that water to violate a national primary drinking water regulation or (2) may adversely affect the health of people who use that water. EPA regulations reiterate this standard, stating that no underground injection activity may be carried out

in a manner that allows the movement of fluid containing any contaminant into underground

sources of drinking water, if the presence of that contaminant may cause a violation of any primary drinking water regulation. . .or may *otherwise adversely affect the health of persons*. The applicant for a permit shall have the burden of showing that the requirements of this paragraph are met.

40 C.F.R. § 144.12 (emphasis added). The regulations create five classes of underground injection wells, which are each subject to regulation depending on their potential to endanger sources of drinking water. 40 C.F.R. §

The standard set out in the Act and the regulations provides EPA with broad authority to adopt regulations designed to ensure that state programs do not allow underground injection that may result in adverse effects on human health in communities of color and low-income communities. For example, the regulations could include provisions aimed at addressing situations in which underground injection wells might contribute to cumulative health effects from multiple sources of hazardous substances.

III. PERMITTING AND OTHER APPROVALS

The only permitting program created by the SDWA is the underground injection control (UIC) program. **Section 1421(b)(1)** provides that the regulations governing state programs must prohibit any underground injection in a state after the date a UIC program becomes effective in that state unless that injection is authorized by a permit. 42 U.S.C. § 300h (b)(1)(A). EPA also may allow states to authorize underground injection by rule. *Id.* The permit applicant must satisfy the state that the injection will not endanger drinking water sources. 42 U.S.C. § 300h (b)(1)(B). Similarly, no authorization by rule may allow any injection that endangers drinking water sources. *Id.*

Unlike some other federal environmental statutes, the SDWA provides no authority for EPA to review, comment, or object to state-issued UIC permits. However, under **Section 1422(c)**, EPA may issue UIC permits in a state that has not received approval of its UIC program (or part of its program), or not submitted a UIC program (or part of a program). 42 U.S.C. § 300h-(c). EPA regulations apply the same requirements to UIC programs whether implemented by a state or EPA. 40 C.F.R. § 144.1(b)(2)&(f). EPA thus has an opportunity in its own permitting decisions to ensure that concerns about health impacts on communities of color and low-income communities are addressed.

The Environmental Appeals Board (EAB) considered environmental justice claims in one challenge to a UIC permit approval decision by EPA. *In re Envotech L.P.*, 6 E.A.D. 260 (Feb. 15, 1996). Local residents argued that the permits for two hazardous waste injection wells should be denied under Executive Order 12898 because the area surrounding the site was already host to a number of other burdensome land uses. *Id.* at 276. The residents raised a variety of reasons for denying the permit, including the company's compliance history, strong community opposition, and errors in technical assessments underlying the issuance of the permit. *Id.* at 283-299.

The EAB rejected the challenge to the permit, finding that “the agency has no authority to deny or condition a permit where the permittee has demonstrated full compliance with the federal regulatory standards for issuance of the permit.” *Id.* at 280. However, the EAB interpreted the UIC

scheme as including two areas under which EPA could implement the Executive Order. In this respect, *Envotech* followed closely an earlier EAB decision, *In re Chemical Waste Management of Indiana, Inc.*, 6 EAD 66 (EAB 1995), which considered application of the Executive Order in the issuance of a RCRA permit. In *Envotech*, the EAB found that the first area for implementing the Executive Order was in providing an opportunity for public participation in permit decisions:

We therefore hold that if a Region has a basis to believe that a proposed underground injection well may somehow pose a disproportionately adverse effect on the drinking water of a minority or low-income population, the Region should as a matter of policy, exercise its discretion to assure early and ongoing opportunities for public involvement in the permitting process.

Id. at 281.

Second, the EAB referred to the “omnibus authority” contained in EPA regulations that direct EPA to “impose, on a case-by-case basis such additional conditions as are necessary to prevent the migration of fluids into underground sources of drinking water.” 40 C.F.R. § 144.52 (a)(9). The Board found that under this provision, EPA could exercise its discretion to include in its assessment of the proposed well, an analysis focusing on whether the well threatens the health of communities of color or low-income communities. *Envotech* at 282. In rejecting the residents’ challenge to the permit, the Board determined that EPA had taken adequate steps to ensure public participation and to analyze the impacts of the wells on affected communities.

Previous commentators have suggested that the EAB’s decision in *Envotech* shows its “willingness to find that the Agency can ground discretionary authority to promote environmental justice in the Agency’s regulations.” Richard Lazarus & Stephanie Tai, *Integrating Environmental Justice into EPA Permitting Authority*, 26 *ECOLOGICAL L.Q.* 617 (1999) at 667. These commentators further argue that the EAB’s decision opens the possibility that similar omnibus authority can be found in other statutes and regulations because the regulatory language relied on by the Board was general. Id. at 668. In the context of the Safe Drinking Water Act, *Envotech* demonstrates that EPA has considerable discretion to address adverse health impacts on communities of color and low-income communities in implementing its statutory and regulatory authority.

IV. DELEGATION OF PROGRAMS TO STATES AND TRIBES

Like other federal environmental statutes, the Safe Drinking Water Act provides for states to take over primary responsibility for implementing and enforcing the Act’s requirements. SDWA **Section 1451** authorizes EPA to “treat Indian Tribes as States” under the Act, including delegating to Tribes primary enforcement authority for either SDWA program. 42 U.S.C. § 300j-11. As discussed in Part II, states or Tribes with primary enforcement responsibility are authorized to issue variances under certain circumstances; nevertheless, SDWA provides EPA with oversight authorities to ensure that state-issued variances comply with the Act.

A. Public Water Systems

Section 1413(a) provides that a state has “primary enforcement responsibility for public

water systems during any period for which” EPA determines that the state:

- has adopted drinking water regulations that are no less stringent than the national primary drinking water regulations;
- has adopted, and is implementing, adequate procedures for the enforcement of such state regulations, including monitoring and inspections;
- will keep records and make reports on its activities as required by EPA;
- if it permits variances or exemptions, does so under conditions and in a manner that is not less stringent than provided by the Act;
- has adopted and can implement an adequate plan for providing safe drinking water in an emergency; and
- has adopted authority for administrative penalties (unless the constitution of the state prohibits this) in a maximum amount not less than \$1,000 per day per violation for a system serving more than 10,000 people, and, for any other system, that is adequate to ensure compliance as determined by the state.

42 U.S.C. § 300g-2(a).

Under **Section 1413(b)(1)**, EPA is required to promulgate regulations establishing procedures for states to apply for a determination that the first four requirements are met, including providing an opportunity for a public hearing. 42 U.S.C. § 300g-2(b)(1). **Section 1413(a)(2)** requires states with primary enforcement responsibility to adopt and implement adequate procedures for enforcing the state’s drinking water regulations, including conducting monitoring and making inspections as required by EPA’s regulations. 42 U.S.C. § 300g-2(a)(2).

The U.S. Court of Appeals for the D.C. Circuit has held that Section 1413(a) envisioned that EPA also is authorized to monitor a state’s implementation of its primary enforcement responsibility. *National Wildlife Federation v. EPA*, 980 F.2d 765, 771 (D.C. Cir. 1992). Although EPA retains substantial discretion in making the determination that a state meets or does not meet the criteria, the court held that Section 1413(a) requires EPA to withdraw a state’s primary enforcement responsibility once the agency determines the state no longer meets the criteria. *Id.* at 767-68, 771.

EPA thus has authority to review the key aspects of a state’s public water system program— for example, its standard setting, monitoring, inspection, and enforcement activities, as well as its approval of variances – to ensure that the state is implementing its program in a manner that protects the health of communities of color and low-income communities, as well as other

communities. Moreover, EPA has authority under Section 1412 to require the states to maintain records and submit reports that will facilitate EPA oversight.

B. Protection of Drinking Water Sources

1. Underground Injection Control

The structure of the SDWA suggests that Congress had a particularly strong intention that the UIC program be administered by the states. The first section in this part of the Act, **Section 1421(a)**, requires EPA to promulgate regulations for state UIC programs. 42 U.S.C. § 300h(a). EPA also was required to list the states that the agency determined might need a UIC program. 42 U.S.C. § 300h-1(a); *see* 40 C.F.R. § 144.1(e) (noting that EPA listed all of the states). Further, the statute seems to *require* states to apply for approval of a UIC program if EPA determines they need one, as it provides that each listed state “*shall* . . . submit to the Administrator an application.” 42 U.S.C. § 300h-1(b)(1)(A) (emphasis added). **Section 1422(c)** provides EPA residual authority to implement a UIC program in a state if EPA disapproves the state’s program, if EPA determines the state no longer meets the requirements for an approved program, or if the state does not submit a program. 42 U.S.C. § 300h-1(c).

Pursuant to **Section 1422(b)**, a state’s application must show that the state “has adopted after reasonable notice and public hearings, and will implement, an underground injection control program [that meets the requirements of EPA’s regulations for state programs]; and will keep such records and make such reports with respect to its activities under [this program] as the Administrator may require.” 42 U.S.C. § 300h-1(b)(1)(A). If a state’s UIC program is approved, it has “primary enforcement responsibility for underground water sources until such time as the Administrator determines, by rule, that such State no longer meets the requirements [for approval of the program].” 42 U.S.C. § 300h-1(b)(3).

EPA has promulgated regulations that list some of the circumstances of non-compliance in which the agency may withdraw state UIC approval. These include failure of the state UIC program to:

- issue permits or repeated issuance of permits that do not conform to the requirements of the regulations;
- comply with the public participation requirements of the regulations;
- act on violations of permits or other program requirements;
- seek adequate enforcement penalties or to collect administrative fines when imposed; and
- inspect and monitor activities subject to regulation.

40 C.F.R. § 145.33. The regulations set forth the minimum required elements for these and other program functions. *See* 40 C.F.R. Part 144. Thus, the statute and the regulations provide EPA with ample authority to ensure generally that all state UIC programs are implemented consistently with

federal standards, and to review individual programs to address concerns about protection of public health in communities of color and low-income communities.

In addition, EPA is required to approve, disapprove, or approve in part and disapprove in part the state's UIC program after "*reasonable opportunity for presentation of views*" and within ninety days after the state submits its application. 42 U.S.C. § 300h(b)(2) (emphasis added). The wording of this requirement is unusual, and presumably intended to mean something other than the typical requirement of public notice and opportunity for comment. The same provision also specifies that EPA make this decision "by rule," and a later section requires the agency to provide an opportunity for a public hearing on the decision to approve or disapprove a state UIC program. 42 U.S.C. § 300h(b)(2)&(4). This section provides EPA broad authority to seek and consider views and comments regarding environmental justice issues when EPA is deciding whether to approve a state's program.

2 Wellhead Protection Program

Under SDWA **Section 1428**, states are required to submit to EPA for approval a program to protect wellhead areas from contaminants that might adversely affect human health. 42 U.S.C. § 300h-7(a). The Act defines "wellhead protection area" as "the surface and subsurface area surrounding a water well or wellfield, supplying a public water system, through which contaminants are reasonably likely to move toward and reach such water well or wellfield." 42 U.S.C. § 300h-7(e). The Act sets out the minimum requirements for state programs, including:

- specifying the responsibilities of state and local governments, as well as public water supply systems, in developing and carrying out wellhead protection programs;
- determining the wellhead protection area for each wellhead;
- identifying all potential man-made sources of contaminants within each wellhead protection area that may adversely affect human health;
- establishing appropriate measures (such as technical and financial assistance, education, control measures, and demonstration projects) to protect the water supply within wellhead protection areas from contaminants;
- developing contingency plans for providing alternate drinking water supplies in the event of well or wellfield contamination; and
- establishing a requirement to consider all potential sources of contaminants within the expected wellhead area of a new water well serving a public water supply system.

42 U.S.C. § 300h-7(a). SDWA further directs states to "make every reasonable effort to implement the State wellhead area protection program" within two years of submitting the program to EPA, and to submit to EPA a biennial status report describing progress in implementing the program. 42 U.S.C. § 300h-7(g).

State wellhead protection programs provide an important vehicle for protecting underground

sources of drinking water by preventing pollution and by controlling contaminants that threaten water supplies. EPA has approved all but two state programs, and the agency notes that the programs vary widely. U.S. EPA Office of Water, Summary of State Biennial Reports of Wellhead Protection Program Progress, at <http://www.epa.gov/safewater/protect/gwr/biennial.html> (last modified Nov. 2, 2000). While the Act does not mandate the content of these state programs, EPA has a role to play in providing guidance and technical support to states and local governments in carrying out their programs. EPA can promote environmental justice by targeting this assistance to, for example, state and local efforts to control contaminants affecting the drinking water supplies of communities of color and low-income communities. EPA also can further such efforts through its financial assistance programs, discussed in Part VII, below.

3. Source Water Quality Assessment

SDWA **Section 1453** requires EPA to develop guidance for states with primary enforcement responsibility to carry out a source water assessment program. 42 U.S.C. § 300j-13. The purpose of such programs is to identify areas that supply drinking water within the state and determine the extent to which the public water systems in those delineated areas are susceptible to contaminants. 42 U.S.C. § 300j-13(a)(2). The Act requires states to submit their programs to EPA for approval. 42 U.S.C. § 300j-13(a)(3). The Act also requires, “to the maximum extent possible,” that states establish technical and citizens’ advisory committees and other procedures “to encourage the public to participate in developing” the program. 42 U.S.C. § 300h-7(b). EPA published its guidance in 1997 and has approved programs for all states, as well as Puerto Rico and the District of Columbia. See U.S. EPA Office of Water, Source Water Assessment Program, *available at* <http://www.epa.gov/safewater/protect/swap.html> (last modified July 23, 2001).

The state source water assessment programs provide an important mechanism for identifying and addressing pollutants that threaten drinking water supplies in low-income communities and communities of color – for example, through detailed delineation of the areas that contribute to contamination and full consideration of potential sources of contamination. Participation in the programs by residents of affected communities can help ensure that relevant information is incorporated into the assessments. While EPA has already approved state programs, the agency can advance environmental justice goals by continuing to provide guidance and assistance to states and to citizens to ensure that the assessments identify significant threats to drinking water systems serving communities of color and low-income communities.

4. Sole Source Aquifer Protection

SDWA **Section 1424(e)** provides that: “If the Administrator determines, on his own initiative or upon petition, that an area has an aquifer which is the sole or principal drinking water source for the area and which, if contaminated, would create a significant hazard to public health, he shall publish notice of that determination in the Federal Register.” 42 U.S. C. § 300h-3(e). Once an aquifer is so designated, no federal financial assistance may be provided for any project which EPA determines may contaminate the aquifer through a recharge zone, thereby creating a “significant hazard to public health.” *Id.* The sole source aquifer designation thus provides a potentially powerful tool for EPA to protect critical drinking water sources. EPA can facilitate community input into both the designation process and the subsequent review of federally assisted projects in designated areas.

V. ENFORCEMENT

The Safe Drinking Water Act is based on the presumption that states will have primary enforcement responsibility for public water systems and for underground injection control. The federal government nevertheless exercises an important role as a backstop to state enforcement. In addition, EPA is authorized to take direct enforcement action in states that do not have primary enforcement responsibility for public water systems or for underground injection control. For a fuller discussion of statutory enforcement authorities for promoting environmental justice, see Chapter 5.

A. Public Water Systems

SDWA **Section 1414** authorizes EPA to issue orders or to bring a civil action in federal district court to compel compliance with any requirement of the public water systems program after meeting certain notification requirements. In a state that has primary enforcement responsibility, EPA must notify the state and the noncomplying public water system whenever it finds that a system is not in compliance with a requirement. If the state does not begin appropriate enforcement action within 30 days of the notice, EPA is required to issue an order or bring a civil action compelling the system to comply. 42 U.S.C. § 300g-3(a)(1)(B). In a state that does not have primary enforcement responsibility, EPA is required to notify “an appropriate local elected official, if any, with jurisdiction over the public water system” prior to taking enforcement action. 42 U.S.C. § 300g-3(a)(2)(B).

B. Underground Injection Control

SDWA **Section 1423(a)** provides EPA with similar enforcement authority for protection of underground sources of drinking water as is provided for public water systems. 42 U.S.C. § 300h-2(a). In addition to these civil enforcement provisions, a person who wilfully violates a UIC requirement or order may be imprisoned for not more than three years and fined under federal criminal sanction authority. 42 U.S.C. § 300h-2(b). EPA also is authorized under **Section 1423(c)** to issue administrative orders and assess civil penalties of not more than \$10,000 per day of violation. 42 U.S.C. § 300h-2(c).

C. Citizen Suits

The SDWA has a relatively broad citizen suit provision. **Section 1449(a)** authorizes any person to bring an action against any other person, including the United States, who is alleged to be in violation of any requirement under the Act. 42 U.S.C. § 300j-8(a). Such citizen suits are subject to requirements of prior notice to the EPA, the alleged violator, and to the state in which the violation occurs. 42 U.S.C. § 300j-8 (b).

VI. INFORMATION GATHERING (RESEARCH, MONITORING, AND REPORTING)

The Safe Drinking Water Act has extensive information and reporting requirements,

particularly under the Public Water System program. Additionally, the statute's general provisions include several that authorize research, studies, and information collection and dissemination.

A. Monitoring

SDWA **Section 1445** includes several general record-keeping, monitoring, and reporting requirements. First, “every person who is subject to *any requirement* of [the SDWA] or *who is a grantee*, shall establish and maintain such records, make such reports, conduct such monitoring, and provide such information as the Administrator may reasonably require.” 42 U.S.C. § 300j-4(a)(1)(A) (emphasis added). EPA may use the above information in rule-making, determining compliance, administering financial assistance, “*evaluating the health risks of unregulated contaminants, or in advising the public of such risks.*” *Id.* (emphasis added). Thus, EPA has a powerful tool enabling it to gather information that it could use to address environmental justice concerns, including violations in low-income communities or communities of color and health risks of unregulated contaminants in those communities, and informing community residents about risks from contaminants in their public water system.

Section 1445(a)(2) also requires EPA to promulgate regulations establishing criteria for monitoring programs that public water systems must implement for unregulated contaminants, varying the frequency and schedule based on the number of persons served, the source of supply, and the contaminants likely to be found. 42 U.S.C. § 300j-4(a)(2)(A). EPA must ensure that such monitoring is required only of a representative sampling of systems that serve 10,000 persons or fewer. *Id.* The people served by a system that conducts monitoring under this section are required to be notified of the availability of monitoring results. 42 U.S.C. § 300j-4(a)(2)(E). This section provides EPA authority to require public water systems to monitor for contaminants that are not regulated but that might cause health risks, including those that might cause greater risks in communities of color and low-income communities.

In addition, under **Section 1445(g)**, EPA is required to establish a national database of the occurrence of regulated and unregulated contaminants in public water systems as determined from the required monitoring and from other reliable sources of information. 42 U.S.C. § 300j-4(g)(1). EPA is required to use the data in determining whether a contaminant occurs in drinking water at a level of public concern, which would require EPA to promulgate a national primary drinking water regulation under Section 1412(b)(1). 42 U.S.C. § 300j-4(g)(3). The information in the database must be available to the public in readily accessible form. 42 U.S.C. § 300j-4(g)(5). This database could allow EPA to collect and analyze information about contaminants of concern to communities of color and low-income communities and to determine whether those contaminants should be regulated under the SDWA.

B. Reporting

Section 1414(c)(4)(A) requires community water systems to mail to each customer of the system at least annually a report on the level of contaminants in the drinking water supplied by the system. 42 U.S.C. § 300g-3(c)(4)(A). A community water system is defined as any public water system that serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents. 42 U.S.C. § 300f(15). The contents of this report, called a “consumer confidence report,” are to be established by EPA by regulation after consultation with public water systems, environmental groups, public interest groups, risk communication experts, the states, and other interested parties. 42 U.S.C. § 300g-3(c)(4)(A). The consumer confidence reports must contain:

- information about the source of the water supplied by the system;
- plain language definitions of MCL, MCLG, variance, and exemption, as provided in the EPA regulations;
- if any regulated contaminant is detected in the water supplied by the system, the MCLG, the MCL, the level of the contaminant in the water system, and, for any contaminant for which there has been a violation of the MCL during that year, a brief statement of the health concerns that resulted in regulation of that contaminant as provided in the EPA regulations;
- information on compliance with primary drinking water regulations, and notice if the system is operating under a variance or exemption and the basis on which it was granted;
- information on the levels of unregulated contaminants for which monitoring is required, including cryptosporidium and radon, where a state determines they may be found; and
- a statement that the presence of contaminants in drinking water does not necessarily indicate that the drinking water poses a health risk.

42 U.S.C. § 300g-3(c)(4)(B).

A brief, plainly worded explanation is also required of the contaminants that reasonably may be expected to be present in drinking water, including bottled water. 42 U.S.C. § 300g-3(c)(4)(A). Through its regulations governing the consumer confidence reports, EPA has an opportunity to require virtually all public water systems to provide easily understood information to their users about contaminants in their water, the risks from those contaminants, the compliance record of the system, and whether it is subject to less stringent regulation due to a variance or exemption. Through review and implementation of its regulations, EPA can ensure that this information, which is important for assessing environmental justice concerns, is accessible to communities of color and low-income communities, including having it translated so that every user can understand the “plainly worded” information in their language.

SDWA **Section 1414(c)** requires public water systems, states, and EPA to prepare and make available to the public annual reports on any violations of the SDWA within their service areas or jurisdictions. 42 U.S.C. §§ 300g-3(c)(2)(D)&(c)(3). In addition, Section 1414(c)(1) requires public water systems to notify persons served by their system of failures to comply with requirements of a national primary drinking water regulation, of variances and exemptions, and of the concentration of any unregulated contaminant for which EPA has required public notice. 42 U.S.C. § 300g-3(c)(1).

Regulations establishing the manner, frequency, form, and content of these notices must provide for different frequencies of notice based on whether the violations are intermittent or infrequent or are continuous or frequent. These regulations also must “take into account the *seriousness of any potential adverse health effects* that may be involved.” 42 U.S.C. § 300g-3(c)(2)(A) (emphasis added). For each violation that has the potential to have serious adverse health effects as a result of short-term exposure, notice must be distributed as soon as practicable after the violation occurs, but not later than 24 hours after the occurrence, and provide a clear and readily understandable explanation of the violation, the potential adverse effects on human health, the steps the system is taking to correct the violation, and the necessity of seeking alternative water supplies until the violation is corrected. 42 U.S.C. § 300g-3(c)(2)(C). The notice must be provided to the head of the agency with primary enforcement responsibility in the state, and be provided to appropriate broadcast media, be prominently published in a newspaper of general circulation serving the area, or be provided by posting or door-to-door notification. *Id.*

According to **Section 1414(c)(3)**, each state that has primary enforcement responsibility must “prepare, make *readily* available to the public, and submit to the Administrator an annual report on violations of national primary drinking water regulations by public water systems in the State.” 42 U.S.C. § 300g-3(c)(3)(A) (emphasis added). EPA likewise is required to prepare and make available to the public an annual report summarizing and evaluating the reports submitted by the states and notices of violations submitted by public water systems serving Tribes. The agency’s report is to include recommendations about resources needed to improve compliance with public water system requirements. 42 U.S.C. § 300g-3(c)(3)(B).

EPA can use reports submitted to it by the states to investigate and determine whether communities of color and low-income communities are subject to greater risks than the general population because the public water systems serving those communities are violating primary drinking water regulations. These reports provide EPA with detailed information that it could use to determine whether communities are being adversely affected by violations of drinking water regulations. Finally, EPA could use its report to make recommendations about how to improve compliance in communities of color and low-income communities, along with recommendations applicable to the general population.

C. Research

SDWA **Section 1442(a)** authorizes EPA to conduct research into various aspects of public health and drinking water. 42 U.S.C. § 300j-1(a). EPA is authorized to “conduct research, studies, and demonstrations relating to the causes, diagnoses, treatment, control, and prevention of physical and mental diseases and other impairments of man [sic] resulting directly or indirectly from contaminants in water, or to the provision of a dependably safe supply of drinking water.” 42 U.S.C. § 300j-1(a)(1). EPA also is authorized to collect and make available information about the research,

demonstrations, and recommendations on providing a dependably safe supply of drinking water. 42 U.S.C. § 300j-1(a)(2)(A). EPA could use this broad research authority to investigate environmental justice concerns with respect to contaminants in drinking water and to research and demonstrate methods of preventing diseases caused by contaminants in drinking water that adversely affect communities of color and low-income communities. This section also could be used by EPA to enable it to demonstrate methods of providing safe drinking water in these communities.

Section 1458 requires EPA to “conduct a continuing program of studies to identify groups within the general population that may be at greater risk than the general population of adverse health effects from exposure to contaminants in drinking water.” 42 U.S.C. § 300j- 18(a)(1). In these studies, the agency is required to examine “whether and to what degree ... *subpopulations that can be identified and characterized* are likely to experience elevated health risks, including risks of cancer, from contaminants in drinking water.” *Id.* (emphasis added). In addition, EPA is required to conduct biomedical studies of “the variations in the effects among humans [of contaminants], *especially subpopulations at greater risk of adverse effects.*” 42 U.S.C. § 300j-18(b)(2) (emphasis added). These biomedical studies are also required to “develop new approaches to the study of complex mixtures, such as mixtures found in drinking water . . .to examine . . .*susceptible individuals and subpopulations.*” 42 U.S.C. § 300j-18(b)(3) (emphasis added).

These provisions mandate that EPA conduct research that specifically addresses environmental justice concerns. These include identifying what groups may be at greater risk from exposure to contaminants in drinking water, understanding the variations in effects among higher risk groups, and studying the effect of mixtures of chemicals found in drinking water on susceptible groups.

VII. FINANCIAL ASSISTANCE

SDWA **Section 1443(a)** authorizes EPA to make grants to states and Tribes to implement public water system supervision programs, which include everything required for a state to have primary enforcement responsibility except the provision of safe drinking water during emergencies. To be eligible for a grant, a state must have both a public water system supervision program and primary enforcement responsibility for public water systems, or expect to have both within one year of the date of the grant. These restrictions do not apply to Tribes. 42 U.S.C. § 300j-2(a)(1)&(2). EPA is required to allot funds appropriated for these grants each year among the states on the basis of regulations that take into account population, geographical area, number of public water systems, and “other relevant factors,” with no state receiving less than one percent of the total. 42 U.S.C. § 300j-2(a)(4). The grants may cover as much as 75 percent of a state’s costs for implementing its public water system supervision program. 42 U.S.C. § 300j-2(a)(3). Given this broad statutory language, a portion of these funds could be earmarked for addressing environmental justice issues, and for grants to assist Tribes in implementing public water system programs..

Similarly, **Section 1443(b)** authorizes EPA to make grants to states to implement underground water supply protection programs. A state is eligible for such a grant if it has primary enforcement responsibility, but this does not apply to Tribes. As with public water systems, EPA is required to promulgate regulations for allotting appropriated funds among the states according to population, geographical area, and other relevant factors, but a state is not guaranteed a minimum

amount under this section. These grants also may cover as much as 75 percent of a state's costs for its underground water supply protection program. 42 U.S.C. § 300j-2(b)(3). EPA could require a state to use a portion of its grant funds to address environmental justice issues. EPA also can provide grants to Tribes to develop and implement UIC programs.

Section 1452 directs EPA to offer to enter into agreements with states to provide grants, including letters of credit, to the states to capitalize revolving loan funds to further the health protection objectives of the Act. 42 U.S.C. § 300j-12(a)(1)(A). In order to be eligible for a capitalization grant, a state must establish a drinking water treatment revolving loan fund and keep it separate from other grant funds. 42 U.S.C. § 300j-12(a)(1)(B). State revolving loan funds are required to include loan repayments and interest, and are required to be used only for loans, loan guarantees, security for leveraged loans, or other financial assistance authorized under this section to community water systems and non-profit, non-community water systems.

Public water systems are allowed to use the financial assistance provided under this section only for types of expenditures that EPA has determined through guidance will facilitate compliance with applicable national primary drinking water regulations or otherwise significantly further the health protection objectives of the program. Fifteen percent of the amount credited to a state revolving loan fund in any fiscal year is required to be available solely for loans to small public water systems that regularly serve fewer than 10,000 persons. 42 U.S.C. § 300j-12(a)(2).

This provision authorizes EPA to exercise substantial discretion in establishing the rules and guidelines states must follow in their loan programs using EPA grants, which EPA could use to promote environmental justice in several ways. First, EPA could ask states to demonstrate how they will use their loan funds to promote environmental justice as part of the initial agreement between EPA and the state making the grant. Second, in its guidance about how state loans may be used, EPA could make environmental justice one of the ways a state could meet the statutory standard to significantly further the health objectives of the SDWA. In addition, EPA's guidance could deal with the potential environmental justice issue that small systems are allowed to comply with national primary drinking water regulations at later dates than larger systems. The specific requirement for financial assistance to such systems could be used to address environmental justice concerns in communities served by such systems, for example, by meeting MCLs before the date required under the law.

Under SDWA **Section 1452(d)**, a state is allowed to provide additional subsidies, including forgiveness of the principal, when it makes a loan to a "disadvantaged community" or to a community that the state expects to become disadvantaged as a result of a proposed project. Disadvantaged communities are to be defined by the state based on affordability criteria after public review and comment. 42 U.S.C. § 300j-12(d). This section allows states to focus a portion of their capitalization grants on projects in low-income communities, with substantial discretion for states to choose projects that address environmental justice concerns. EPA could use its guidance issued under Section 1452(a)(2) to promote environmental justice by emphasizing to states the importance of using their grant funds to provide additional financial assistance to disadvantaged communities.

States are required by **Section 1452(b)** to prepare a plan, after allowing public review and comment, that identifies the intended uses of the state revolving loan fund. The plan must include a list of the projects to be assisted, descriptions of the projects, the terms of assistance provided, the

sizes of the communities served by the projects, the criteria and methods for distributing funds, the financial status of the fund, and the short- and long-term goals of the fund. Priority under the plan must, to the maximum extent practicable, be given to projects that address the most serious risks to human health, are necessary to ensure compliance with the requirements of the public water system program, and assist systems most in need on a per-household basis according to state affordability criteria. 42 U.S.C. § 300j-12(b). This section directs states to give priority to projects that address the most serious health risks and to assist the most needy systems, both of which may correlate closely with environmental justice issues. EPA can promote environmental justice by using its authority to oversee use of federal grants, which provide the capital for state loan funds, to assure that state plans assign appropriate priorities to projects in communities of color and low-income communities.

Section 1452(i) authorizes EPA to set aside 1.5 percent of the annual appropriation for capitalization grants for grants to “Indian Tribes and Alaska Native villages that have not otherwise received grants from the Administrator under this section or assistance from State loan funds established under this section.” The grants may only be used for the types of expenditures established by EPA for state revolving loan funds. 42 U.S.C. § 300j-12(i)(1). In addition, such grants must be used “to address the most significant threats to public health associated with public water systems that serve Indian Tribes, as determined by the Administrator in consultation with the Director of the Indian Health Service and Indian Tribes.” 42 U.S.C. § 300j-12(i)(2).

Section 1456 authorizes EPA and other federal agencies to provide grants to the states of Arizona, California, New Mexico, and Texas for assistance to low-income communities known as *colonias*, which are located along the U.S.-Mexico border and lack a safe drinking water supply or adequate facilities for providing safe drinking water. The grants are required to facilitate compliance with national primary drinking water regulations or otherwise significantly further the health protection objectives of the SDWA. The grants are also required to be used to provide assistance to such communities where the “residents are subject to a significant health risk . . . attributable to the lack of access to an adequate and affordable drinking water supply.” 42 U.S.C. § 300j-16. This section authorizes EPA and other federal agencies to provide grant funds, but does not set aside particular amounts or portions of appropriations, to border states specifically to assist low-income, communities of color with serious drinking water contamination problems.

CHAPTER 16

TOXIC SUBSTANCES CONTROL ACT (“TSCA”)

15 U.S.C. §§ 2601-2692

The Toxic Substances Control Act (TSCA) addresses the risks to health and the environment from existing and new chemical substances. TSCA establishes a framework for identifying potentially harmful chemical substances and regulating their use. This framework includes a variety of regulatory tools, such as screening of new chemical substances, testing of existing substances, and placing restrictions on activities involving substances that present “unreasonable” health or environmental risks

Implementing the broad, prevention-oriented framework of TSCA has been a challenge in light of the volume of manufactured chemicals already in use, the number of new chemicals entering commerce, and the fairly complex process established in the Act for regulating those substances. There are over 80,000 substances on EPA’s inventory of chemicals manufactured or processed in the United States. Through 1997, EPA had required testing of about 550 of these existing chemicals. *See* U.S. EPA OFFICE OF POLLUTION PREVENTION AND TOXICS, FISCAL YEAR 1997 ANNUAL REPORT 31 (1998). Through 1998, the agency also had reviewed “pre-manufacture notices” for over 31,000 new chemical substances and had taken some form of regulatory action to control risks for about ten percent of those. *See* U.S. EPA OFFICE OF POLLUTION PREVENTION AND TOXICS, STRATEGIC AGENDA: 1999 - 2005 at 13 (Draft, August 1998).

These numbers underscore the fact that implementation of TSCA since its enactment in 1976 has involved setting priorities to address health and environmental risks. This chapter discusses the potential for addressing environmental justice in establishing priorities in the principal areas of regulatory authority under TSCA, including Subchapters II, III and IV, which address asbestos, radon and lead, respectively. This discussion is intended to assist the public in future examination of the political, technical, legal and other context for taking action in any of the areas outlined here.

Part I of the chapter describes the policies and goals of TSCA that emphasize the Act’s focus on protecting health and the environment, as well as certain authorities that can be used to provide information and assistance to communities concerning chemical substances regulated under the Act. Part II discusses authorities under TSCA to advance environmental justice through regulation of existing chemical substances that pose an “unreasonable risk” to health or the environment. Part II also addresses EPA’s rule-making authorities with respect to polychlorinated biphenyls (PCBs) and lead hazards specifically.

Part III of this chapter discusses opportunities for advancing environmental justice through EPA’s review of new chemicals or new uses of existing chemicals prior to their manufacture or use. Although TSCA does not establish a general framework for authorizing state programs, Part IV addresses EPA approval and oversight of state lead certification and lead hazard information programs. EPA’s enforcement authorities under TSCA are highlighted in Part V. Part VI discusses EPA’s extensive authorities to gather information about chemical substances, including its authority to promulgate regulations for the testing of existing chemicals. Finally, Part VII includes a number

of financial assistance programs authorized under TSCA that provide an opportunity for promoting environmental justice goals.

I. GENERAL PROVISIONS

A. Policy and Goals of the Act

It is the stated policy of the Toxic Substances Control Act that there be “adequate authority” to regulate chemical substances that present an “unreasonable risk of injury to health or the environment.” 15 U.S.C. § 2601(b)(2). While this authority “should be exercised in such a manner as not to impede unduly or create unnecessary economic barriers to technological innovation,” it is clear that the “*primary* purpose” of the Act is to “assure that such innovation and commerce . . . does not present an unreasonable risk of injury to health or the environment.” 15 U.S.C. § 2601(b)(3) (emphasis added). While TSCA establishes specific requirements for the various regulatory actions described in the Act, the statute’s broad goal provides support for efforts to ensure that health and environmental risks to communities of color and low-income communities are addressed in implementing the Act.

TSCA **Section 2(c)** also states explicitly the intent of Congress that EPA “shall consider the environmental, economic and *social* impact of any action” taken to implement the Act. 15 U.S.C. 2601(c) (emphasis added). The equitable distribution of environmental problems and benefits has become an increasingly important social issue over the past several years. This provision provides general support for EPA to consider fully the impacts of decisions taken under the Act on communities of color and low-income communities.

B. Public Information and Assistance Provisions

TSCA contains a number of different provisions that provide EPA with authority and opportunities to provide information and assistance to communities of color and low-income communities to facilitate their involvement in the regulatory process.

TSCA **Section 21** establishes a mechanism through which citizens may petition EPA to issue, amend, or repeal a rule. Citizens may petition EPA with respect to a number of different types of regulatory actions relating to chemical substances. 15 U.S.C. § 2620(b)(1). EPA thus has authority to pursue specific concerns of communities of color and low-income communities when raised through the petition process. This mechanism was used in 1994, for example, when a citizen petition led to EPA issuance of subpoenas to a number of U.S. companies requesting information on chemical discharges to the New River in the U.S.-Mexico border region. Section 21 gives EPA the authority to hold a public hearing upon receipt of a petition; use of such authority can further increase participation of affected communities in the TSCA regulatory process.

TSCA Subchapter II, which was enacted as the Asbestos Hazard Emergency Response Act (AHERA), contains another mechanism for responding to citizen concerns. **Section 212** establishes an Asbestos Ombudsman to receive and provide assistance regarding “complaints, grievances and requests for information submitted by any person with respect to any aspect” of AHERA. 15 U.S.C. § 2652. An ombudsman can potentially be a tool for greater citizen involvement in the decision-

making process, and can help ensure that EPA takes action when communities raise environmental justice concerns in matters that fall within the scope of AHERA.

TSCA Subchapter IV, “Lead Exposure Reduction,” also contains a number of public information and assistance provisions. For example, **Section 405(d)** requires EPA to sponsor public education and outreach activities to increase awareness of potential exposures to lead, health impacts from exposure, and measures to reduce the risk of exposure. 15 U.S.C. § 2685(d)(1). This section establishes an ongoing program that provides EPA with an opportunity to promote environmental justice by ensuring that appropriate information about lead poisoning is accessible to those most affected by the problem. TSCA **Section 402(c)** provides for the development of information about lead hazards relating to renovation and remodeling practices, and requires dissemination through a variety of channels and through “other appropriate means.” 15 U.S.C. § 2682(c)(1). In addition, **Section 406** requires EPA to publish, and to revise periodically, a lead hazard information pamphlet. 15 U.S.C. § 2686(a). Children in communities of color and low-income communities suffer disproportionately from elevated blood lead levels. *See e.g.*, U.S. EPA, ENVIRONMENTAL EQUITY: REDUCING RISKS TO ALL COMMUNITIES (1992). EPA can help promote environmental justice in revising or updating these materials to ensure that they are serving communities most affected by lead-based paint exposures.

Finally, **Section 405(e)** requires EPA to establish a National Clearinghouse on Childhood Lead Poisoning which, in addition to performing certain information dissemination functions specified in the Act, is required to “perform any other duty that the Administrator determines necessary to achieve the purposes of this Act.” 15 U.S.C. § 2685(e)(1). This section gives EPA broad authority to develop public information and assistance programs to assist communities of color and low-income communities in participating in regulatory decisions relating to lead-based paint activities under the Act, and in taking steps to reduce risks from lead-based paint generally.

II. STANDARD SETTING/RULE-MAKING

Most actions that EPA is authorized to take under the Toxic Substances Control Act must be carried out through formal rule-making. Rule-making activities that relate directly to one of the other Parts of this chapter – *e.g.*, permitting/approvals, information gathering, etc. – are discussed elsewhere. The rule-making activities included here are those provided by TSCA for the regulation of existing chemicals generally, and for the regulation of PCBs and lead hazard activities.

A. Regulation of Existing Chemicals Generally

Under TSCA **Section 6**, if EPA finds that there is a “reasonable basis to conclude” that a chemical substance will present an unreasonable risk of injury to health or the environment, EPA must impose one or more of the requirements listed in the Act. 15 U.S.C. § 2605(a). These requirements include: (1) prohibiting or limiting the manufacture, processing, or distribution of the substance in general or for a particular use; (2) requiring warnings, instructions, or public notice regarding the substance; (3) imposing record-keeping, monitoring, and testing requirements relating to the substance; (4) restricting commercial use of a substance; and (5) regulating the method of disposal of a substance. *Id.*

The Act includes a number of important factors that must be considered by EPA in determining whether to regulate a chemical. First, the Act specifies the costs and benefits that EPA must consider, including: the health and environmental effects and exposures; the benefits of the substance and availability of substitutes; and the “reasonably ascertainable economic consequences of the rule.” 15 U.S.C. § 2605(c). Second, EPA is directed to use the “least burdensome requirements” necessary to protect adequately against the risks to health or environment. 15 U.S.C. § 2605(a). Finally, TSCA states that if EPA determines that the risk could be sufficiently reduced or eliminated by action taken under a different EPA-administered law, then EPA “may not” issue a rule under Section 6 unless EPA makes a finding that such action would be in the public interest. 15 U.S.C. § 2605(c).

EPA has not used this rule-making authority to a great extent. In the wake of a Fifth Circuit decision that struck down a Section 6 rule banning certain asbestos-containing products, EPA has “deemphasized but not eliminated” use of TSCA Section 6 rules. ELIZABETH C. BROWN, *ET AL.*, TSCA DESKBOOK 58 (Environmental Law Institute 1998); see *Corrosion Proof Fittings v. U.S. Environmental Protection Agency*, 947 F. 2d 1201 (5th Cir. 1991). Nevertheless, Section 6 does provide EPA with authority to incorporate environmental justice concerns into any such regulatory actions in the future.

For example, **Section 6(a)** states that any of the requirements EPA imposes on the activities involving a chemical substance “may be limited in application to specified geographic areas.” 15 U.S.C. § 2605(a). Thus, if there is a reasonable basis for EPA to conclude that a chemical substance is posing or will pose an unreasonable risk of injury to health or the environment in a particular low-income community or community of color, EPA could – within the constraints of the Act noted above – issue a rule tailoring restrictions to activities in that specified geographic area.

Section 6(c)(1), directs EPA to consider the “magnitude of the exposure of human beings” to the substance in weighing the costs and benefits of any regulation under this section. 15 U.S.C. § 2605(c)(1). EPA could potentially promote environmental justice in undertaking this cost-benefit analysis by considering more fully the exposure of communities of color and low-income communities to the substance in question, through collection of demographic information, consideration of unique exposure pathways, etc.

Section 6(c)(2) sets out notice and comment requirements for rule-making activities under Section 6. 15 U.S.C. § 2605(c)(2)(C). In place of formal hearing procedures contained in the Administrative Procedure Act, 5 U.S.C. § 553, this section of the Act requires an informal hearing. *Id.* **Section 6(c)(3)** establishes guidelines for conducting the informal hearing, and provides that interested parties are entitled to present their views orally, but authorizes EPA to establish procedures to avoid “unnecessary costs or delay,” including rules to place “reasonable time limits” on oral presentations. 15 U.S.C. § 2605(c)(3)(B). EPA can promote environmental justice by ensuring that implementation of this provision does not result in restricting participation of those who traditionally have lacked access to the regulatory decision-making process.

In addition, **Section 6(c)(4)** authorizes EPA to take action to assist affected communities in participating in the Section 6 rule-making process. According to this provision, EPA may compensate individuals for expert witness fees, attorney’s fees, and other costs of participating if they “represent an interest which would substantially contribute to a fair determination of the issues to be

resolved in the proceeding” and if they demonstrate that they lack sufficient resources adequately to participate. 15 U.S.C. § 2605(c)(4)(A). The Act directs EPA to consider the financial burden of participation and the need for a “fair balance of interests.” *Id.* Furthermore, not more than 25 percent of the total amount paid under this Section may be paid to the regulated community or its representatives. 15 U.S.C. § 2605(c)(4)(B). This TSCA provision is unusual in addressing directly a fundamental problem in effective community participation in the regulatory process.

TSCA **Section 6(b)** provides authority to regulate the manufacture or processing of chemicals at particular facilities. EPA can take action if the agency “has a reasonable basis to conclude that a *particular* manufacturer or processor is manufacturing or processing a chemical . . . in a manner which unintentionally causes the chemical . . . to present or which will cause it to present an unreasonable risk of injury to health or the environment.” 15 U.S.C. § 2605(b) (emphasis added). In such cases, the agency may issue an order requiring the party to submit information about its quality control procedures; if EPA finds such procedures inadequate to prevent the risks, it may order the party to revise its quality control procedures.

This provision authorizes EPA to respond to situations in which a manufacturer or processor located in a community of color or low-income community is operating in an unsafe manner. In addition, if EPA obtains information that the inadequate quality control procedures have resulted in distribution of a chemical that may present a health or environmental risk, EPA is authorized to order the party to give notice of that risk to the public and to any other person “in possession of or exposed to” the substance. 15 U.S.C. § 2605(b)(2)(B).

TSCA **Section 7** authorizes EPA to take action if a chemical substance presents an “imminent and unreasonable risk of serious or widespread injury to health or the environment” that is likely to occur before a final rule to regulate the substance can be issued under Section 6. 15 U.S.C. § 2606(f). In such cases, EPA may bring a court action for seizure of such substances and/or relief against the party who manufactures, processes, distributes, uses, or disposes of the substance. 15 U.S.C. § 2606(a). The statute provides that EPA must take such action if the agency has not made a rule under Section 6 effective immediately. *Id.*

Action under Section 6 can also be triggered by a provision contained in TSCA Section 4. **Section 4(f)** provides that if EPA receives test data or other information that indicates there may be a “reasonable basis to conclude that a chemical substance . . . presents or will present a significant risk of serious or widespread harm to human beings from cancer, gene mutations or birth defects,” EPA must initiate action under the relevant section of the Act – including regulation of existing chemicals under Section 6 – within 180 days. 15 U.S.C. § 2603(f). Thus, for chemicals presenting these specific health risks, Section 4(f) serves as a trigger for the Section 6 regulatory mechanisms described above. In addition, Section 4(f) may trigger action under other sections of TSCA, such as those involving new chemicals and new uses of chemicals (described in Part III, below) or those involving imminent hazards.

B. Polychlorinated Biphenyls (PCBs)

TSCA Section 6 regulates polychlorinated biphenyls, mixtures of synthetic organic chemicals that have been categorized by EPA as persistent, bioaccumulative and toxic. According to the agency, more than 1.5 billion pounds of PCBs were manufactured in the United States prior to 1977

when TSCA was enacted. See U.S. EPA Office of Pollution Prevention and Toxics, PCB Homepage, at [http://www.epa.gov/opptintr/pcb/#BACKGROUND INFORMATION](http://www.epa.gov/opptintr/pcb/#BACKGROUND_INFORMATION) (last modified Oct. 16, 2001).

TSCA **Section 6(e)** prohibits the manufacture, processing, and distribution of PCBs and prohibits the use of PCBs other than in a totally enclosed manner. 15 U.S.C. § 2605(e)(2),(3). The Act does, however, provide for certain exemptions from these prohibitions. **Section 6(e)(2)(B)** allows EPA to authorize the use of PCBs other than in a totally enclosed manner if the agency finds that such use “will not present an unreasonable risk of injury to health or the environment.” 15 U.S.C. § 2605(e)(2)(B). Additionally, **Section 6(e)(3)(B)** establishes a petition procedure through which any person may seek an exemption from the ban on manufacture, processing, and distribution of PCBs; EPA may by rule grant such an exemption if the agency finds that there have been good faith efforts to develop a substitute chemical, and that “an unreasonable risk of injury to health or environment would not result. . . .” 15 U.S.C. § 2605(e)(3)(B).

EPA can promote environmental justice by considering fully the potential risks to affected communities from the proposed activity involving PCBs before granting any exemptions to the TSCA prohibitions. For example, EPA could consider whether the activity presents unreasonable risks due to unique exposure pathways, such as fish consumption, or due to the cumulative and synergistic effects of numerous sources of chemical exposure in the affected communities.

TSCA **Section 6(e)** requires EPA to promulgate regulations prescribing methods for disposal of PCBs. 15 U.S.C. § 2605(e)(1). EPA has issued detailed regulations governing PCB storage and disposal. See 63 Fed. Reg. 35384 (June 29, 1998), codified at 40 C.F.R. Part 761. For example, the regulations place limits on storage of PCBs prior to disposal and establish a variety of restrictions and prohibitions on the manner in which PCBs may be disposed. 40 C.F.R. §§ 761.65, 761.50, 761.60. In light of Section 6(e)’s very general mandate to EPA, the agency has considerable authority to consider the types of risks of concern to communities of color and low-income communities in its review and implementation of these standards.

EPA also has an opportunity to further environmental justice goals in its approval of PCB disposal activities. While EPA does not directly regulate the siting of waste disposal facilities under TSCA Section 6(e), EPA’s regulations do require certain approvals from EPA Regional Administrators. For example, such approval is required prior to disposing of PCBs in a chemical waste landfill. 40 C.F.R. § 761.75(c). EPA may include in its approval “any other requirements or provisions that the Regional Administrator finds are necessary to ensure that operation of the chemical waste landfill does not present an unreasonable risk of injury to health or the environment from PCBs.” 40 C.F.R. § 761.75(c)(3)(ii). EPA thus has wide discretion to establish conditions – for example, monitoring or emergency preparedness conditions – to protect public health and the environment where such landfills are located in already overburdened communities. See also 40 C.F.R. § 761.70 (approval to incinerate PCBs).

In addition, EPA can ensure public input into approval decisions, particular in cases where applicants seek a waiver of any requirements set forth in the regulations. See 40 C.F.R. §§ 761.75(c)(4), 761.70(d)(5) (governing waivers in applications for approval for PCB chemical landfills and incineration). In some cases, EPA may also be authorized to require applicants to submit demographic and other information necessary to assess adequately the risks to health and the

environment prior to issuing an approval. *See, e.g.*, 40 C.F.R. § 761.70(d)(3) (governing applications for approval for PCB incineration).

C. Lead Hazards

Under **Section 403** of TSCA, which falls within Subchapter IV on lead exposure reduction, EPA must promulgate regulations that identify “lead-based paint hazards, lead contaminated dust, and lead contaminated soil.” 15 U.S.C. § 2683. EPA promulgated these regulations in January, 2001. See 66 Fed. Reg. 1206 (January 5, 2001), codified at 40 C.F.R. Part 745. While TSCA Section 403 does not require regulations to mandate specific lead exposure reduction activities, this standard setting provision is important because it establishes national guidance for lead hazard reduction activities that occur in a variety of federal, state, and local programs. Because lead poisoning is a serious health threat to children of color in particular, EPA can promote environmental justice by continuing to ensure that the standards reflect current scientific understanding of the relationship between elevated blood lead levels and lead levels in paint, dust, and soil.

III. PERMITTING AND OTHER APPROVALS

TSCA establishes a scheme for EPA review of new chemicals or new uses of existing chemicals prior to their manufacture or use. While not a formal permitting program, this mechanism does enable EPA to prohibit or condition activity involving a chemical substance before it occurs. This “approval” process for new chemicals and significant new uses thus provides an opportunity for *preventing* unreasonable health and environmental risks from chemical substances.

Under TSCA **Section 5**, it is unlawful to manufacture a chemical substance that is listed on the TSCA chemical inventory without submitting to EPA a “pre-manufacture notice” (PMN) 90 days in advance. 15 U.S.C. § 2604(a). This section also requires a “significant new use notice” when any person seeks to manufacture or process a chemical substance if EPA has, by rule, determined that such a use would constitute a significant new use. In general, these notices must be accompanied by any test data the party already has, knows about, or could reasonably ascertain. 15 U.S.C. § 2604 (d)(10)(B). EPA reviews the notice to determine whether regulatory action is needed to prevent unreasonable risk of injury to health or the environment from the chemical substance. At the end of EPA’s 90-day review period the party may begin the manufacture or new use of the substance unless EPA takes action to restrict use of the substance.

Section 5(e) establishes EPA’s authority to prohibit or place conditions on activities involving new chemical substances or the significant new uses of chemicals while sufficient data about health and environmental effects are being developed. The Act provides that EPA must take action to “prohibit or limit the manufacture, processing, distribution . . . use or disposal” of a substance or any combination of those activities, if EPA makes a finding as specified in the Act. 15 U.S.C. § 2604(e)(1)(A). EPA must find that there is insufficient data to evaluate the health and environmental impacts, and the agency must also find either (1) that the substance may present an unreasonable risk of injury to health or the environment, or (2) that substantial quantities of the substance will be produced and enter the environment or create significant exposure. *Id.*

The prohibition or restrictions authorized under Section 5(e) are applicable only to the party

submitting the PMN. Thus, in certain circumstances EPA has authority to prohibit or place restrictions on the use of a new chemical at a facility located in a particular community – including communities of color and low-income communities – if the chemical may present unreasonable risks, until sufficient data is produced to evaluate the health and environmental effects. This section also authorizes EPA to focus attention in the PMN review process on chemicals or types of chemicals that may be of concern to communities of color and low-income communities generally, and to ensure adequate testing to identify risks that require regulatory controls.

In reviewing a PMN, EPA may consider whether certain uses other than those proposed might raise concerns about environmental or health impacts. This is particularly important in light of the fact that restrictions on new chemicals under Section 5(e) only apply to the party submitting the notice. **Section 5(a)** authorizes EPA to develop rules that specify the uses of a chemical substance that would constitute significant new uses requiring pre-notification through a significant new use notice (SNUN). 15 U.S.C. § 2604(a)(2). The determination of what constitutes a significant new use is important, since review of a SNUN provides EPA with another mechanism for restricting chemical use until sufficient environmental and health data are in hand. In deciding whether to promulgate a significant new use rule, EPA must consider how much of the chemical would be manufactured or processed, as well as changes in the type, magnitude, and duration of exposure to people or the environment. *Id.* EPA could thus promote environmental justice by considering whether the substance is more likely to be used by communities of color or low-income communities or whether new uses might present different types of exposures for sensitive populations.

Section 5(b) gives EPA authority to develop a list of substances “with respect to which the Administrator finds that the manufacture, processing, distribution in commerce, use or disposal, *or any combination* of such activities, presents or may present an unreasonable risk of injury to health or the environment,” including uses of substances that would constitute a significant new use. 15 U.S.C. § 2604(b)(4) (emphasis added). Placement on this list is significant because it triggers a requirement that a party submit data showing that the manufacture, processing, distribution, use or disposal of the chemical, or any combination of those activities (or the intended significant new use of the substance, in the case of a SNUN), will not present an unreasonable risk of injury to health or the environment. 15 U.S.C. § 2604(b)(2)(B). EPA’s authority to list a chemical substance if the various activities associated with the substance (individually or in the aggregate) may present an unreasonable risk potentially enables the agency to take action if it has information that communities of color or low-income communities are likely to be disproportionately exposed to or impacted by such substances.

IV. DELEGATION OF PROGRAMS TO STATES AND TRIBES

TSCA does not provide for delegation to states or Tribes of authority for implementing the general statutory scheme for regulating chemical substances. However, TSCA Subchapter IV, which addresses risks from lead exposure, provides for approval of certain state programs established in that portion of the Act. TSCA **Section 404** allows states to operate two types of programs in place of the federal programs set up in the Act: (1) training and certification of those involved in lead-based paint activities under Section 402, and (2) preparation of lead hazard information under Section 406. 15 U.S.C. § 2684(a).

Within 180 days after receiving a state application for authorization, EPA must approve or disapprove the application; approval is contingent on a finding that the state program (1) is at least as protective of human health as the federal program, and (2) provides for adequate enforcement. 15 U.S.C. § 2684(b). Along with its application, a state may also certify to EPA that its program meets these two requirements; in such a case, the statute provides that the state program is deemed to be authorized until EPA disapproves the application or withdraws the authorization. Withdrawal of authorization is required if, after being given an opportunity to take corrective action, a state program is not administering and enforcing the program in compliance with the provision of the Act. 15 U.S.C. § 2684(c). EPA can promote environmental justice by ensuring adequate review of state certifications and applications for authorization, and by taking steps to identify state programs not in compliance with the federal requirements.

V. ENFORCEMENT

TSCA **Section 15** sets forth the actions that are prohibited under the Act and that trigger EPA's enforcement authorities. Prohibited acts include failure or refusal to comply with test rules, or with statutory requirements, rules, and orders relating to: (1) new chemical pre-manufacture notification; regulation of existing chemicals; or asbestos hazard control. 15 U.S.C. § 2614(1). Section 15 also prohibits non-compliance with record-keeping and reporting requirements, as well as the refusal to grant access for inspections authorized under the Act. 15 U.S.C. § 2614(3).

TSCA **Section 16(a)** provides for a civil penalty of up to \$25,000 per violation, per day, for violations of the Act as specified in Section 15. Among the factors that EPA must consider in determining the amount of the penalty, are: "extent and gravity" of the violation; history of prior violations; and "such other matters as justice may require." 15 U.S.C. § 2615(a). The statute thus provides EPA with considerable discretion to take into account factors of particular concern to communities of color and low-income communities, including economic benefit and compliance history. In 1980, EPA issued Guidelines for Assessment of Civil Penalties under Section 16 of TSCA. See 45 Fed. Reg. 59770 (Sept. 10, 1980).

TSCA **Section 11** authorizes EPA to conduct inspections to ensure compliance with the Act. The EPA Administrator, or her "duly designated representative" may inspect any premises in which chemical substances are manufactured, stored, processed, or held. 15 U.S.C. § 2610(a). EPA can use this authority to promote environmental justice by targeting inspection resources to

communities with high-risk populations and to those that have not been the focus of enforcement resources in the past.

TSCA **Section 20** authorizes citizens' suits to enforce provisions of the Act. 15 U.S.C. § 2619.

For a fuller discussion of statutory enforcement authorities for promoting environmental justice, see Chapter 5.

VI. INFORMATION GATHERING (RESEARCH, MONITORING, AND REPORTING)

Among the Toxic Substances Control Act's most significant provisions are those relating to the generation and collection of information about new and existing chemical substances.

A. Testing Chemical Substances

A central component of TSCA's regulatory scheme is the requirement that manufacturers and processors of certain existing chemical substances undertake testing of those substances and report the test data to EPA. These data may trigger the use of other regulatory tools available under TSCA for addressing risks to health and the environment, and could be useful to regulatory programs under other environmental laws as well.

Given the number of chemical substances already in use, the question arises which chemicals should get priority consideration for the promulgation of testing requirements. TSCA appears to give EPA broad discretion in adopting such priorities consistent with the purposes of the Act. **Section 4(e)** provides one mechanism for priority setting through the creation of an Interagency Testing Committee (ITC), consisting of eight members drawn from EPA and other specified federal offices, which is to make recommendations of specific substances for EPA action. The recommendations take the form of a list of chemicals ranked in order of priority and reviewed every six months, with the committee designating up to 50 chemicals for which EPA should initiate rule-making within a 12-month period. Once a chemical substance has been designated, EPA has 12 months to either initiate rule-making for testing or publish its reasons for not doing so. 15 U.S.C. § 2603(e)(1)(A).

Section 4(e) does not limit EPA development of test rules to those substances designated by the ITC. Indeed, EPA has recently undertaken initiatives aimed at persistent, bioaccumulative and toxic (PBT) chemicals; endocrine disrupting chemicals; chemicals that particularly affect children; and high production volume chemicals. EPA thus has authority to establish additional priorities for testing of those chemical substances or categories of chemical substances that may be of particular concern to communities of color and low-income communities.

TSCA **Section 4(a)** provides that EPA must, by rule, require health and environmental effects testing of chemical substances if the agency makes one of two findings outlined in the Act. EPA must find either: (1) that the substance may present an unreasonable risk of injury to health or the environment or (2) that the substance will be produced in substantial quantities and either may

enter the environment in substantial quantities or will involve substantial human exposure. 15 U.S.C. § 2603(a)(1). In either case, EPA must also find that there are insufficient data for predicting the health and environmental effects and that testing is necessary to develop the data. The testing required by EPA may relate only to those effects for which there is insufficient data. *Id.*

In determining whether to require testing, TSCA directs EPA to consider whether “manufacture, distribution in commerce, processing, use or disposal of a chemical substance or mixture, or . . . *any combination of such activities*” may present unreasonable health risks. 15 U.S.C. § 2603(a)(1) (emphasis added). In determining whether a chemical may pose an unreasonable risk, EPA can promote environmental justice by considering fully the potential health and environmental risks to communities of color and low-income communities – for example, by considering whether unique exposure pathways exist, whether multiple sources of exposure may produce cumulative and synergistic effects, or whether sensitive populations are exposed.

Section 4(b) establishes the requirements for promulgating test rules once EPA has made the necessary findings under Section 4(a). **Section 4(b)(2)** sets out the types of health and environmental effects for which EPA may prescribe standards on developing test data. The Act specifically includes “cumulative or synergistic effects, and any other effect which may present an unreasonable risk of injury to health or the environment.” 15 U.S.C. § 2603(b)(2)(A). The law thus gives EPA explicit authority to require testing to obtain information on the types of health effects that are of particular concern to heavily impacted communities.

Section 4(b)(5) requires that test rules be issued in conformity with the Administrative Procedure Act and establishes specifically that EPA must provide an opportunity for interested persons to make written and oral presentations of information. 15 U.S.C. § 2603(b)(5). EPA regulations also state that prior to making a determination of the need for testing, EPA will hold a public “focus meeting” to discuss and obtain comments on the testing recommendations of the ITC. 40 C.F.R. § 790.22(a). The agency will then hold a public meeting to announce its preliminary testing determinations. These provisions potentially give affected communities an opportunity for input into the scope of a test rule and the type of information that will be developed.

Another opportunity for community participation in decisions about chemical testing exists in an area of EPA activity that has been created wholly through regulation – the negotiation of testing consent agreements. See 40 C.F.R. § 790. While all negotiating meetings are open to the public and the documents pertaining to the meetings are placed in the agency’s public file, the regulations only require EPA to send notice of negotiating meetings and copies of key documents to those “interested parties” who responded to EPA’s initial Federal Register notice about the Interagency Testing Committee’s testing recommendations. 40 C.F.R. § 790.22(b). EPA could promote environmental justice by taking steps to identify interested parties from communities that traditionally have been excluded from the decision-making process.

B. Reporting and Record-keeping

TSCA provides EPA with broad authority to require manufacturers and processors of chemical substances to report information about those substances. This authority is important because such information can provide a foundation for taking action to reduce or eliminate risks for chemical substances in all agency programs, and can also assist community members in taking action

to address risks.

Section 8(a) requires EPA to promulgate rules under which chemical manufacturers and processors “shall maintain such records, and shall submit to the Administrator such reports, as the Administrator may reasonably require” 15 U.S.C. § 2607(a)(1)(A). This provision, which exempts small manufacturers or processors, authorizes EPA to require information that is known or reasonably ascertainable, including: (1) how the chemical is used; (2) how much is manufactured or processed; (3) the by-products created; (4) health and environmental effects data; (5) the number of people exposed in the workplace; and (6) the methods of disposal of the chemical. 15 U.S.C. § 2607(a)(1)(B).

EPA has implemented this provision by creating a standard form (known as the “PAIR”) that must be completed for any chemical on EPA’s PAIR list. The PAIR list includes chemicals recommended by the ITC, as well as other chemicals EPA places on the list. In addition to requiring reporting through the PAIR form, EPA can also use Section 8(a) to require more detailed information on a specific chemical or reporting from a particular manufacturer or processor. While TSCA lists types of information that EPA may request, the Act does not preclude EPA from requiring regulated parties to maintain and report other types of records. Thus, EPA could require additional information about exposure, such as demographic information or unique exposure pathways, if such information would assist in identifying unreasonable risks to health from the chemical substance.

Section 8(c) contains another important record-keeping requirement. Those who manufacture or process a chemical substance must maintain records of any “significant adverse reactions to health or the environment*alleged* to have been caused by the substance or mixture.” 15 U.S.C. § 2607(c) (emphasis added). This requirement applies to allegations about such adverse reactions from any source, though EPA’s regulations exclude allegations of adverse reactions that are already known – for example, those that are reported in the literature or included in a product label or material safety data sheet. 40 C.F.R. §§ 717.12(b), 717.3(c). Parties who are required to maintain the records must make them available for inspection to any “duly designated representative” of EPA. *Id.* This broad authority on the part of EPA to inspect and obtain records about reported significant adverse reactions to chemical substances could be used to assist in investigating concerns about health and environmental impacts in specific communities of color or low-income communities.

Under TSCA **Section 8(d)** EPA must promulgate rules requiring chemical manufacturers and processors to submit to EPA any health and safety studies relating to the chemical substance that they have conducted, that they know about, or that they can reasonably ascertain. 15 U.S.C. § 2607(d). While the provision does not generate new information about chemicals, it does give EPA broad authority to act, via rule-making, to ensure that health and safety studies already completed are collected and integrated into EPA regulatory activities (under TSCA and other laws) and made available to the public.

TSCA **Section 8(e)** contains another requirement for submitting information to EPA regarding health effects of chemicals. This provision is self-enforcing, and requires chemical manufacturers, processors, and distributors to inform EPA immediately if that person obtains “information which reasonably supports the conclusion that such substance or mixture presents a substantial risk of injury to health or the environment . . .” 15 U.S.C. § 2607(e). This requirement, which does not include information that the person knows that EPA already has, covers all chemicals regulated under TSCA and all those who process, manufacture, and distribute those chemicals. The requirement is important to EPA’s ability to assess risks posed by chemicals, and EPA can promote environmental justice by ensuring that appropriate enforcement action is taken when parties fail or refuse to report information about health or environmental risks affecting communities of color and low-income communities.

Finally, **Section 11** gives EPA authority to subpoena the testimony of witnesses and the production of information such as reports, papers, documents, and answers to questions. 15 U.S.C. § 2610. This section provides EPA with authority to obtain information on possible health or environmental risks in communities of color and low-income communities. As mentioned earlier, EPA used such authority in 1994 to subpoena answers to questions from 95 companies about chemicals released into the New River.

C. Research

TSCA grants broad research authority to EPA. **Section 10** states that EPA shall “conduct such research, development, and monitoring as is necessary to carry out the purposes of this chapter.” 15 U.S.C. § 2609(a). According to TSCA **Section 2(b)**, the “primary purpose” of the Act is to ensure that the development of and commerce in chemical substances “do not present an unreasonable risk of injury to health or the environment.” Thus, EPA is given considerable discretion in carrying out research and monitoring activities aimed at gaining a fuller understanding of the health risks posed by chemical substances. This could include research and monitoring that relate to chemicals of particular concern to communities of color and low-income communities, or that are aimed at defining more clearly the risks to these communities posed by exposure to chemical substances – for example, by looking at different exposure pathways or considering sensitive populations.

VII. FINANCIAL ASSISTANCE

TSCA **Section 28** authorizes EPA to make grants to states to implement programs that prevent or eliminate unreasonable health and environmental risks relating to a chemical substance, where EPA is “unable or not likely” to take such action itself. 15 U.S.C. § 2627(a). States may only receive a grant if they have demonstrated a “priority need.” EPA establishes by rule the factors to be considered in making this determination, which must incorporate those set out in the Act, including: the seriousness of the health effects; the extent of the exposure; and the extent to which chemical substances are manufactured, processed, used, and disposed of in the state. 15 U.S.C. § 2627(b)(2). This section provides EPA with an opportunity to incorporate environmental justice issues into its evaluation of state grant proposals.

In addition, TSCA **Section 27** authorizes the Department of Health and Human Services

(HHS) to make grants to non-profit organizations to develop inexpensive and efficient methods for determining and evaluating health and environmental impacts of chemical substances that can be used in developing test data. 15 U.S.C. § 2626. While EPA does not administer the grant program, EPA is given a consultative role in making the grants and could therefore bring to the attention of HHS those community research opportunities that might strengthen the chemical testing program.

TSCA Subchapter III, which addresses Indoor Radon Abatement, contains a number of provisions that target resources to low-income communities. For example, TSCA **Section 305** authorizes EPA to provide technical assistance to states to carry out radon-related activities, including demonstration projects for mitigating high radon levels in homes. This section states explicitly that such projects should involve the homes of low-income persons “to the maximum extent practicable.” 15 U.S.C. § 2665(a). Similarly, **Section 306** authorizes EPA to provide grants to states to implement radon programs. That section lists as eligible state activities the purchase of radon measurement devices and the payment of costs of radon mitigation demonstration projects, and directs states to “make every effort . . . to give a preference to low income persons” in carrying out those activities. 15 U.S.C. § 2666(c),(i). Section 306 also provides that one of the activities eligible for state grant assistance is the “survey of radon levels, including special surveys of geographic areas or classes of buildings” 15 U.S.C. § 2666(c). Additionally, EPA’s authority to establish priorities for state radon program activities as “the Administrator deems necessary to promote the goals of the grant program” gives the agency another opportunity to target resources for addressing radon to low-income communities. 15 U.S.C. § 2666(e).

Finally, one provision that involves indirect financial assistance falls under TSCA Subchapter II, the Asbestos Hazard Emergency Removal Act. The purpose of AHERA is to “provide for the establishment of Federal regulations which require inspection for asbestos-containing material and implementation of appropriate response actions . . . in the Nation’s schools.” 15 U.S.C. § 2641(b). **Section 208** provides EPA with authority to act to protect human health or the environment if the presence of asbestos in a school poses “an imminent and substantial endangerment to human health or the environment, and . . . the local educational agency is not taking sufficient action” 15 U.S.C. § 2648(a). This provision gives EPA authority to target its resources to addressing asbestos exposure in low-income communities that lack resources to adequately maintain school facilities.

CHAPTER 17

EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT (“EPCRA”) 42 U.S.C. §§ 11001-11050

The Emergency Planning and Community Right-to-Know Act (EPCRA) was enacted as Title III of the Superfund Amendments and Reauthorization Act of 1986. The law was passed in response to growing public concern about accidental releases of toxic chemicals. In December 1984, an accidental release of toxic chemicals from a Union Carbide pesticide plant in Bhopal, India killed more than 2,000 people and injured over 200,000 more. Following the Bhopal disaster, in August 1985, a Union Carbide plant in Institute, West Virginia released a different type of pesticide into the air, requiring nearly 150 residents to seek medical care.

These chemical release accidents highlighted the need for improved emergency preparedness, including the need for providing information about chemical use and storage to communities and emergency personnel, prior to chemical release accidents. EPCRA was enacted in an effort to address these concerns. *See* JOHN APPLIGATE, *ET. AL*, *THE REGULATION OF TOXIC SUBSTANCES AND HAZARDOUS WASTES* 1139-1141 (2000). EPCRA requires state and local entities to take certain steps to prepare for chemical release emergencies, such as preparing emergency plans. EPCRA also seeks to increase the amount of information available to the public about chemicals in their communities by requiring certain businesses to report information about their use, storage, and release of specific chemicals. This chapter highlights the statutory provisions of EPCRA that provide EPA with authority to advance environmental justice goals. This information provides the public with a foundation for considering the scientific, technological, political and legal factors that will influence future EPA efforts to use individual statutory authorities discussed here to promote environmental justice.

Many provisions of EPCRA grant authority to state and local entities, as opposed to EPA. A brief overview of the state and local entities that are established by the statute is included in this introduction, in an effort to provide background on the EPCRA framework and specific statutory provisions that are discussed. It is important to note, however, that this chapter focuses primarily on the authorities granted to EPA. EPCRA requires the Governor of each state to designate a State Emergency Response Commission (SERC) that in turn is required to designate emergency planning districts within each state. The purpose of the planning districts is to facilitate preparation and implementation of emergency plans. 42 U.S.C. § 11001(a)-(b). In addition, each SERC is required to appoint a local emergency planning committee (LEPC) in each planning district. Each LEPC is responsible for reviewing the information submitted by facilities covered by the emergency planning requirements of the Act, discussed below, and developing a plan to respond to local chemical emergency releases. 42 U.S.C. § 11003. The statute requires that LEPCs include representatives from a wide range of groups including, but not limited to, state and local officials, local environmental groups, and broadcast and media groups. 42 U.S.C. § 11001(c). SERCs are charged with supervising and coordinating the activities of the LEPCs. 42 U.S.C. §§ 11001(a), 11003(e).

EPCRA does not contain any general provisions that state the intent or goals of Congress in

enacting the legislation, as noted in Part I of this chapter. Part II discusses the standard setting and rule-making authority EPCRA grants to EPA that could be used to forward environmental justice goals. For example, EPA determines the list of extremely hazardous substances that are subject to the emergency planning and notification requirements of the Act. EPA also develops guidance documents to assist local entities in preparing and implementing emergency plans. EPCRA also grants authority to EPA to develop some of the key reporting obligations for businesses, such as the toxic release inventory reporting requirements of the Act. Part IV of the chapter discusses some of the duties imposed on state and local entities and highlights how EPA could help guide their efforts in a manner that takes into account environmental justice issues.

Part V of the chapter addresses the enforcement provisions of EPCRA and how they could be used to promote environmental justice, including special enforcement provisions for health professionals and citizen suits by community groups. Part VI outlines the information gathering provisions in EPCRA, including the numerous reporting requirements that are imposed on businesses with respect to the chemicals they use, store, and release in communities across the country. Part VI also discusses the provisions of the Act that require EPA, states, and localities to make reported information available to the public. EPCRA places a strong emphasis on ensuring that the information collected from businesses is available to communities. Part VII addresses the provisions of EPCRA that authorize federal training and education programs for federal, state, and local personnel on emergency preparedness, disaster response, and related areas.

I. GENERAL PROVISIONS

EPCRA does not contain any general provisions that state the intent or goals of Congress in enacting the legislation.

II. STANDARD SETTING/RULE-MAKING

EPCRA establishes programs that impose reporting obligations on owners and operators of certain facilities. The Act includes several specific grants of authority to EPA to develop some of the major components of these reporting programs. The statutory reporting requirements themselves are address in Part VI. This Part discusses EPA's rule-making and standard setting role in those programs. In addition, EPCRA requires local and state authorities to develop plans for responding to chemical release emergencies, as discussed in Part IV. The statute directs EPA and other agencies to establish guidance to assist states and local authorities in implementing such plans.

A. Emergency Planning For Extremely Hazardous Substances

EPCRA **Section 302(a)** requires EPA to publish a list of extremely hazardous substances and to initiate a rule-making establishing a threshold quantity for each substance on the list, taking into account certain criteria. The substances on the list are subject to the emergency planning notification requirements of the Act. EPA may revise the list and thresholds "from time to time." Any revisions to the list must consider the toxicity, reactivity, volatility, dispersability, combustability, or flammability of a substance. The statute explains that the term "toxicity" includes "any short- or long-term health effect which may result from a short-term exposure to the substance." 42 U.S.C. §

11002(a).

This section provides general authority to EPA that could be used to promote environmental justice goals. EPA could review and revise, as appropriate, its list of hazardous substances and their threshold quantities, if additional substances or lowering the threshold amount would help ensure that adequate emergency planning notification requirements are imposed around low-income communities and communities of color.

B. National Response Team Emergency Plan Guidance

Section 303(f) requires the national response team (NRT) to publish guidance documents by March 1987 for the preparation and implementation of emergency plans. 42 U.S.C. § 11003(f). This section provides authority for the development of guidance documents that could take into account environmental justice concerns. The NRT, comprised of EPA and 14 other federal agencies, has issued several documents pursuant to this section. The primary document, “NRT-1,” also known as the “orange book,” was issued in March 1997. This document, titled “Hazardous Materials Emergency Planning Guide,” provides unified guidance for hazardous materials emergency planning and is intended to serve as a consensus on which future guidance, technical assistance, and training will be based. The document states that it reflects comments received from states and local governments, industry, environmental organizations, and members of public. The document covers a wide range of issues including: planning team tasks, emergency plan development, plan elements, plan appraisals, and plan updates.

The NRT has also issued two other documents: “NRT-2,” which was issued in 1990, is titled “Developing A Hazardous Materials Exercise Program: A Handbook for State and Local Officials; and “NRT-1A,” which was issued in 1988, is titled “Criteria for Review of Hazardous Emergency Plans.” The latter document provides guidance to regional response teams that review local emergency plans.

This statutory authority provides considerable opportunity for EPA to incorporate environmental justice concerns in guidance for state and local entities responsible for emergency planning and response. For example, guidance documents could assist localities in determining whether low-income communities and communities of color may require special medical attention in the event of a chemical release, because of cumulative exposures, consumption patterns, or sensitive populations. Guidance documents could also provide suggestions as to how to include and recruit representatives from low-income communities and communities of color on emergency planning teams.

C. Hazardous Chemicals Threshold Quantity Regulations

The statutory sections outlined below relate to two principal reporting obligations on owners and operators of certain facilities. First, facilities required to prepare material safety data sheets under the Occupational Safety and Health Act (OSHA) and its regulations must submit or make

available the sheets to SERCs, LEPCs, and local fire departments. Second, certain facilities must submit emergency and hazardous chemical inventory forms to the same authorities.

Section 311(b) provides that EPA may establish threshold quantities for hazardous chemicals, below which no facility is subject to the material safety data sheet reporting requirements of Section 311. The threshold quantities may, in EPA's discretion, be based on classes of chemicals or categories of facilities. 42 U.S.C. § 11021(b). **Section 312(b)** provides that EPA may also establish threshold quantities for hazardous chemicals, below which no facility is subject to the emergency and hazardous chemical inventory form reporting requirements of Section 312. 42 U.S.C. § 11022(b). Under both provisions, the threshold quantities may, in EPA's discretion, be based on classes of chemicals or categories of facilities. 42 U.S.C. § 11021(b), 11022(b). These general provisions provide substantial discretion to EPA and, therefore, presumably could be used by EPA to consider environmental justice concerns, such as cumulative exposures, in establishing threshold quantities for hazardous chemicals under two key reporting requirements in the Act.

D. Toxic Chemical Release Reporting Authorities

The authorities outlined in this section pertain to the toxic release inventory reporting requirements of the Act, which require owners and operators of certain facilities to submit annual reports on the amounts of toxic chemicals their facilities release into the environment. The substantive reporting requirements are discussed in more detail in Part VI of this chapter. This Part addresses EPA's authority and role with respect to establishing and implementing the reporting program.

Section 313(b) provides authority to EPA to add or delete standard industrial classification (SIC) codes from the list that determines, in part, the facilities that must file toxic chemical release forms. 42 U.S.C. § 11023(b). Additions or deletions to the list are only authorized to the extent necessary to provide that each SIC to which the requirements apply is "relevant for the purposes of this section." *Id.*

Section 313(b)(2) provides that EPA may on its own motion or at the request of a state governor apply the toxic chemical release reporting requirements of Section 313 to the owners and operators of any particular facility that manufactures, processes, or otherwise uses a toxic chemical covered under Section 313(c) of the Act. 42 U.S.C. § 11023(b)(2). EPA may use this authority when it determines that it is warranted on the basis of toxicity of the chemical, proximity to other facilities that release the toxic chemical or to population centers, the history of releases of the chemical at the facility, or "such other factors as the EPA deems appropriate." *Id.*

Section 313(d) provides that EPA may by rule add or delete a chemical from the list of chemicals established by Congress that are subject to the toxic chemical release reporting requirements of EPCRA. 42 U.S.C. § 11023(c)-(d). The statute sets out several circumstances in which a chemical may be added including, but not limited to, when EPA determines there is sufficient evidence to establish that the chemical is known to cause or can reasonably be anticipated to cause significant adverse acute human health effects at concentration levels that are reasonably likely to exist beyond the facility site boundaries as a result of continuous or frequently recurring releases. 42 U.S.C. § 11023(d)(2). The statute states that a determination under this provision must be based on generally accepted scientific principles or laboratory tests, or appropriately designed and

conducted epidemiological or other population studies available to EPA. *Id.*

Section 313(f) provides that EPA may establish a threshold amount for purposes of reporting toxic chemicals that is different from the amount established in the statute. 42 U.S.C. § 11023(f). The revised threshold must obtain reporting of a substantial majority of total releases of the chemical at all facilities subject to the reporting requirement. The statute provides that the amounts established may be based on classes of chemicals or categories of facilities. *Id.*

These provisions grant EPA substantial authority to shape the toxic chemical release reporting program. Environmental justice considerations could be taken into account by EPA in using this authority. EPA has used this authority in recent years to add chemicals to the list of chemicals that are subject to release reporting and to amend the SIC code list that determines which facilities must report. *See, e.g.*, 62 Fed. Reg. 23834 (May 1, 1997) (addition of industry sectors, including metal mining, coal mining, and electric utilities); 59 Fed. Reg. 61432 (November 30, 1994) (addition of 286 chemicals to reporting list). EPA could consider whether any additional changes to the chemical and SIC code lists would be appropriate, in an effort to forward environmental justice goals. Such additions could be based on, for example, epidemiological studies of low-income communities and communities of color. EPA could also apply the toxic chemical release reporting requirements to the owners and operators of particular facilities that use toxic chemicals covered under Section 313, if such facilities pose risks to low-income communities and communities of color. EPA could also use its authority to make additional amendments to threshold reporting amounts. *See, e.g.*, 66 Fed. Reg. 4499 (January 13, 2001) (lowering reporting thresholds for lead and lead compounds because they are persistent, bioaccumulative, and toxic chemicals), codified at 40 C.F.R. Part 372.

E. Regulations on Provision of Information to Health Care Professionals

EPCRA **Section 323** requires owners and operators of facilities to provide information to health professionals, doctors, and nurses for purposes of diagnosis and treatment, response to medical emergencies, and preventative measures. Specifically, **Section 323(a)** requires owners and operators of certain facilities to provide chemical identity information (if known) of hazardous chemicals, extremely hazardous substances, or toxic chemicals to any health professional who requests the information in writing. 42 U.S.C. § 11043(a). The health professional must provide both a written statement that the information is needed for purposes of diagnosis and treatment, and a written confidentiality statement. *Id.*

Section 323(b) requires owners and operators to provide copies of material safety data sheets, inventory forms, or toxic chemical release forms, including specific chemical identities, to any treating physician or nurse who requests such information in a medical emergency. 42 U.S.C. § 11043(b). **Section 323(c)** requires owners and operators to provide the specific chemical identity, if known, of a hazardous chemical, extremely hazardous substance, or a toxic chemical to any health professional that works for the local government or is under contract with the local government. 42 U.S.C. § 11043(c). The statute contains the procedures that must be followed and the contents of the statement of need provided by the health professional. Needs outlined in the statute include use of the information for purposes of conducting or assessing sampling to determine exposure levels of various population groups. *Id.* In addition, EPA is required to issue regulations that describe the criteria and parameters for the “statements of need” and confidentiality agreements that must be

provided by health professionals in order to obtain information from owners and operators of facilities. U.S.C. § 11043(e).

The information that health professionals are authorized to seek under this section, whether for treatment and diagnosis or for conducting activities such as sampling, can be vital to health protection in low-income communities and communities of color. Accordingly, EPA's regulations could help ensure that the procedures that health professionals are required to follow are as streamlined as possible, in order to facilitate their use.

F. Petitions for Deletions and Additions to List of Toxic Chemicals Subject to Toxic Chemical Release Form Reporting Requirements

Section 313(e) provides that any person may petition EPA to add or delete a chemical from the list of chemicals subject to the toxic chemical release form reporting requirements. 42 U.S.C. § 11023(e). The petition must be based on the same criteria that the statute directs EPA to use in making deletions and additions to the list. 42 U.S.C. § 11023(e),(d)(2). Within 180 days after receipt of a petition, EPA must either initiate a rule-making to add or delete the chemical from the list or publish an explanation of why the petition is denied. 42 U.S.C. § 11023(e).

This is a general tool that has been used by industry and environmental groups. It could be used specifically to promote environmental justice, because it authorizes petitions to EPA to list chemicals that may present particular threats to low-income communities and communities of color, due to cumulative exposures, sensitive populations, or consumption patterns.

III. PERMITTING AND OTHER APPROVALS

EPCRA does not contain permitting provisions.

IV. DELEGATION OF PROGRAMS TO STATES AND TRIBES

EPCRA imposes several responsibilities directly on state and local authorities. Because these obligations are imposed directly and are not delegated, EPA's oversight authority is somewhat limited. EPA plays an important role, however, in providing guidance to SERCs and LEPCs. EPA provides this advice through statutorily required guidance, such as the NRT guidance documents required under Section 303(f) and through more informal guidance documents and responses to inquiries. Many of these guidance documents are issued through EPA's Chemical Emergency Preparedness and Prevention Office (CEPPO). The mission of CEPPO is, in part, to provide leadership, build partnerships, and offer technical assistance to LEPCs, SERCs, and communities on the implementation of EPCRA requirements.

EPA could, as needed and appropriate, provide guidance on how to implement effectively the following provisions that are the responsibility of SERCs and LEPCs and which could be used to promote environmental justice. In some cases, EPA has already issued relevant guidance and could review the guidance for possible amendments. *See, e.g.*, NRT-1A Criteria for Review of Hazardous Emergency Plans (1988) [hereinafter "NRT-1A"] (guidance to regional response teams for the review

of LEPC emergency plans). In addition, CEPPPO has provided grants to 47 states and 21 Tribes since 1990 for specific projects in chemical emergency planning and accident prevention. See U.S. EPA Chemical Emergency Preparedness and Prevention Office, EPA's Chemical Emergency Preparedness and Prevention Tribal Grants: Grant Products You Can Use, *available at* <http://www.epa.gov/swercepp/pubs/product.html> (last modified April 23, 1999). It may also be possible for EPA to consider environmental justice factors in determining grant awards or to condition grants in a manner that would further promote environmental justice goals and support low-income communities and communities of color.

A. SERC Procedures for Public Requests

Section 301(a) requires SERCs to establish procedures for receiving and processing certain types of requests for information from the public. The procedures must include the designation of an official to serve as a coordinator for such information. 42 U.S.C. § 11001(a).

B. LEPC Appointments

Section 301(b) requires SERCs to appoint members to LEPCs for each emergency planning district. Each committee must have a range of interests represented, including community groups. Committee rules must include provisions for public notification of committee responses to public comments and distribution of emergency plans. 42 U.S.C. § 11001(b). The LEPC must also establish procedures for receiving and processing requests from the public for information under specific sections of the Act, including Section 304 (emergency notification requirements) and Section 312 (emergency and hazardous chemical inventory form tier II information requirements). 42 U.S.C. § 11001(c).

C. LEPC Emergency Plans

Section 303 requires LEPCs to complete emergency plans and review the plans every year or more frequently. 42 U.S.C. § 11003. This section contains a list of the required contents of local plans, and requires LEPCs to evaluate resource needs with respect to plans and to recommend additional resources needed. 42 U.S.C. § 11003(b)-(c). The section also provides for SERCs to review the LEPC plans, and provides that regional response teams may review and comment on emergency plans or other issues related to the preparation, implementation, or exercise of such plans upon request of LEPCs. 42 U.S.C. § 11003(e)-(g). See also NRT-1A.

D. Petitions to Modify SERCs

Section 301(d) provides that SERCs may revise their designations of emergency planning districts and appointments to LEPCs, as they deem appropriate. Interested persons may apply to SERCs to modify the membership of a LEPC. 42 U.S.C. § 11001(d).

V. ENFORCEMENT

EPCRA contains several enforcement and penalty provisions. For the most part, these are typical environmental enforcement statutory provisions and, therefore, the same considerations apply

with respect to taking environmental justice into account in enforcing EPCRA as apply to most of the environmental statutes. EPCRA does include provisions not commonly found in the environmental statutes that allows health professionals to take enforcement measures in certain circumstances. EPCRA also includes citizen suit provisions that allow citizens to bring legal actions against regulated entities and EPA. For a fuller discussion of enforcement authorities for promoting environmental justice, see Chapter 5.

A. Penalties

EPCRA **Section 325(a)** authorizes EPA to order a facility owner or operator to comply with certain provisions of the Act and to collect civil penalties in United States District Court of not more than \$25,000 for each day in which a violation occurs or failure to comply continues. 42 U.S.C. § 11045(a).

Section 325(b) authorizes civil penalties of not more than \$25,000 per violation to be assessed by EPA for violations of the emergency planning notification provisions of the Act (Section 304). 42 U.S.C. § 11045(b). In determining penalty amounts, EPA must take into account the nature, circumstances, extent, and gravity of the violations. With respect to the violator, EPA must consider the ability to pay, any prior history of violations, the degree of culpability, economic benefit or savings resulting from the violation, and such other matters as justice may require. *Id.* This subsection also authorizes Class II administrative penalties, actions in United States District Court to assess and collect penalties, and criminal penalties for violations of the emergency notification provisions of the Act. *Id.*

Section 325(c) authorizes civil penalties in an amount not to exceed \$25,000 for each violation against any person, other than a governmental entity, for violations of reporting requirements under Section 312 (emergency notification reporting requirements) or Section 313 (toxic chemical release form reporting requirements). 42 U.S.C. § 11045(c). This section also authorizes penalties in an amount not to exceed \$10,000 for violations of any requirement of Section 311 (material safety data sheet reporting requirements) and Section 323(b) (provision of information to doctors and nurses) and for failure to furnish to EPA information required under Section 322(a)(2) (trade secret claim information). EPA may assess penalties by administrative order or by bringing an action in United States District Court. *Id.*

B. Special Enforcement Provisions for Health Professionals

Section 325(e) provides for procedures by health professionals whenever any facility owner or operator required to provide information under Section 323 (provision of information to health professionals, doctors, and nurses), with respect to the specific identity of a chemical, fails or refuses to provide such information. Health professionals may bring an action in United States District Court to require an owner or operator to provide the information. 42 U.S.C. § 11045(e).

C. Citizen Suits

Section 326 authorizes any person to commence a civil action on his own behalf to enforce certain provisions of the Act. The statute is specific about the provisions that can be enforced through citizen suits. Actions may be brought against owners and operators of facilities for failure to

submit follow-up emergency notices, material safety data sheets, inventory forms containing tier I information, or toxic chemical release forms. 42 U.S.C. § 11046.

Citizen suits may be brought against EPA for failure to: (1) publish an inventory form to be used by owners and operators; (2) respond to a petition to add or delete a chemical under the toxic chemical release form reporting provisions; (3) publish a toxic chemical release form; (4) establish the national toxic inventory computer database required under section 313(j); (5) promulgate trade secret regulations; (6) or render a decision in response to a petition for disclosure of a specific chemical identity that has been claimed as a trade secret. 42 U.S.C. § 11046. Actions may also be brought against state governors, SERCs, or EPA for failure to provide a mechanism for public availability of information. This section also provides authority for state and local governments, SERCs, and LEPCs to bring civil actions against owners and operators of facilities for certain violations of the Act. The statute contains venue, notice, diligent prosecution, and other standard citizen suit provisions. *Id.*

VI. INFORMATION GATHERING (RESEARCH, MONITORING, AND REPORTING)

EPCRA imposes several types of reporting requirements on owners and operators of certain facilities. Some of the reporting requirements are focused on emergency planning and require facility owners and operators to notify local authorities prior to an emergency that they produce, use, or store certain types of chemicals. Similar provisions require facilities to submit detailed information to local and state authorities about the chemicals they produce, use, or store, including material safety data sheets, chemical lists, and hazardous chemical inventory forms. EPCRA also contains reporting provisions for accidental releases of certain chemicals. Finally, EPCRA requires facilities to report to EPA the annual amount of toxic chemicals they release into the environment, either routinely or as a result of accidental releases. This information comprises the toxic release inventory which is available to the public in an EPA database that can be accessed on the EPA web site. *See* U.S. EPA, Toxic Release Inventory: Community Right to Know, at <http://www.epa.gov/tri> (last modified Oct. 19, 2001). The current Toxic Release Inventory toxic chemical list includes 582 listed chemicals and 340 chemical categories.

Some of the reporting programs require information to be submitted directly to state and local authorities. Accordingly, EPA's ability to promote environmental justice goals in implementing such provisions is more limited than if the information were reported directly to the agency. EPA plays an important role, however, in several of these reporting programs through issuing implementing regulations that outline reporting requirements and carry penalties for failure to comply and through guidance and implementation tools. *See, e.g.*, NRT-2, Developing A Hazardous Materials Exercise Program: A Handbook for State and Local Officials (1987); NRT-1A; Annual Letter from CEPPPO to SERCs (Sept. 1, 1997); the Computer-Aided Management of Emergency Operations (CAMEO) (computer software that gives first responders tools to better plan and prepare for chemical accidents).

Some of these guidance and implementation tools already consider environmental justice, such as the CAMEO software program, which EPA promotes for use with LandView software to display EPA environmental databases and demographic information to support analysis of

environmental justice issues. See U.S. EPA Chemical Emergency Preparedness and Prevention Office, Computer-Aided Management of Emergency Operations, *available at* <http://www.epa.gov/ceppo/cameo> (last modified Oct. 9, 2001). In addition, EPA has conducted EPCRA compliance assistance and enforcement initiatives relating to the Act's reporting requirements. See, e.g., U.S. EPA, ENFORCEMENT AND COMPLIANCE ASSISTANCE, FY98 ACCOMPLISHMENTS REPORT (U.S. Environmental Protection Agency, pub., EPA 200-R-99-003, June 1999) at 53-54 (describing two-year initiative to address EPCRA Section 311, 312, and 313 reporting violations in industrial organic chemical industry).

A. Emergency Planning Notification Requirements

EPCRA **Section 302(c)** requires owners and operators of facilities with extremely hazardous substances that meet threshold quantities established by EPA to notify SERCs, and in some cases LEPCs, by May 1986, that their facilities are subject to the emergency planning notification requirements of EPCRA. 42 U.S.C. § 11002(c). This section also requires facilities to provide certain updates after the initial notification. **Section 302(d)** requires SERCs to notify EPA of facilities subject to the emergency planning notification requirements. 42 U.S.C. § 11002(d). EPA has issued regulations implementing these reporting requirements. 40 C.F.R. § 355.30.

These are general provisions that could serve to assist low-income communities and communities of color, because they seek to ensure that EPA and local and state authorities are aware of facilities that use extremely hazardous chemicals that could pose a public health or environmental threat to surrounding communities if released. Although EPA does not receive the information directly, EPA could presumably take steps to ensure that SERCs meet their obligations to report to EPA the information they receive from facilities. EPA could also make available to the public in an easily accessible, electronic format, the information that it receives from SERCs, in an effort to increase the availability of emergency planning information to the public, including low-income communities and communities of color.

B. Emergency Notification Release Reporting Requirements

Section 304(a) requires owners and operators of facilities at which hazardous chemicals are produced, used, or stored to report releases of certain chemicals to appropriate local and state authorities. Reporting is required for releases of substances on EPA's list of extremely hazardous substances that are also required to be reported under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 103. 42 U.S.C. § 11004(a)(1). Under certain circumstances, EPCRA also requires reporting of releases of extremely hazardous substances on EPA's list even when those releases are not subject to CERCLA notification requirements. 42 U.S.C. § 11004(a)(2). This section also requires reporting of certain releases that do not involve chemicals on EPA's list of extremely hazardous chemicals when the release requires notification under CERCLA. 42 U.S.C. § 11004(a)(3). EPA has issued regulations implementing these reporting provisions that include penalty provisions for failure to comply. 40 C.F.R. § 355.40.

Section 304(b) sets out the content of and recipients of the notice required when the emergency notification release reporting provisions apply. The owner or operator of the facility must notify the LEPC community emergency coordinator for any area likely to be affected by a release and the state emergency planning commission of any state likely to be affected by a release. With respect

to transportation of a substance or storage incident to transportation, the notice requirements are met by dialing 911. The statute lists the contents of the required notice, including the following: (1) chemical name or identity of any substance involved; (2) an indication of whether the substance is on the EPCRA hazardous substances list; (3) an estimate of the quantity of the substances released; (4) any known or anticipated acute or chronic health risks associated with the emergency; and, (5) where appropriate, advice regarding medical attention necessary for exposed individuals, and proper precautions to take as a result of the release, such as evacuation. 42 U.S.C. § 11004 (b); 40 C.F.R. § 355.40.

Section 304(c) requires follow-up reporting after a release. As soon as practicable, the owner or operator must provide written follow-up emergency notice setting forth and updating the information required under section 304(b), including any information with respect to actions taken to respond to and contain the release, any known or anticipated acute or chronic health risks associated with the release, and, where appropriate, advice regarding medical attention necessary to exposed individuals. 42 U.S.C. § 11004(c); 40 C.F.R. § 355.40.

These general provisions can help protect low-income communities and communities of color, because they aim to ensure that chemical releases that may threaten public health and the environment are reported appropriately and that related information that could help protect communities, such as known or anticipated acute or chronic health risks associated with the emergency, is communicated to appropriate authorities.

This information is reported directly to state and local authorities. However, EPA could provide guidance and, as appropriate, include in its implementing regulations, provisions that direct or encourage state and local authorities to promote environmental justice goals. For example, guidance or regulations could suggest using proactive approaches to disseminating information to low-income communities and communities of color, and making information that is collected easily accessible through electronic and paper copies and telephone hot lines. In addition, EPA is responsible for setting many of the substantive standards (under EPCRA and CERCLA) that determine whether reporting to state and local authorities is required, and the agency has authority to bring enforcement actions for failure to meet reporting requirements.

C. Material Safety Data Sheets

Section 311(a) requires owners and operators of any facility required to prepare or have available a material safety data sheet for a hazardous chemical under OSHA and its regulations to submit a material safety data sheet for each such chemical or a list of such chemicals to the appropriate LEPC, SERC, and local fire department. 42 U.S.C. § 11021(a). This section also includes the requirements that apply to reporting the list of chemicals that may be submitted by owners and operators instead of material safety data sheets. **Section 311(d)** sets out the time frames for providing material safety data sheets and imposes reporting duties when new information is discovered concerning an aspect of a hazardous chemical for which a material safety data sheet was previously submitted. 42 U.S.C. § 11021(d). EPA has issued regulations implementing these provisions. 40 C.F.R. § 370.21.

These provisions can serve to help protect low-income communities and communities of color, because they assist local authorities in preparing for chemical release emergencies. These

provisions may also help make available to communities information about the chemicals that are used at local facilities. This information can be used for a variety of purposes and may help increase facilities' accountability.

As is the case with chemical release reporting requirements, material safety data are reported directly to state and local authorities. Here, too, EPA could provide guidance and, as appropriate, include in its implementing regulations, provisions that direct or encourage state and local authorities to promote environmental justice goals. The statute also provides authority to EPA to modify certain reporting requirements under these provisions. *See* Section 311(a)(2)(B) (providing authority to EPA to modify the categories of health and physical hazards under OSHA by requiring information to be reported in terms of groups of hazardous chemicals which present similar hazards in an emergency). In addition, EPA has the authority to bring enforcement actions to ensure compliance by facilities in low-income communities and communities of color.

D. Emergency and Hazardous Chemical Inventory Forms

Sections 312(a)-(d) require owners and operators of any facility that is required to prepare or have available a material safety data sheet for a hazardous chemical under OSHA to prepare and submit an emergency and hazardous chemical inventory form to the appropriate LEPC, SERC, and fire department. 42 U.S.C. § 11022(a)-(d). The Act sets out time frames for the various types of submissions and establishes the required content of the forms. 42 U.S.C. § 11022(a),(d).

Inventory forms are required to provide information in aggregate for hazardous chemicals in the categories of health and physical hazards as set forth under OSHA. Required information includes: (1) an estimate of the maximum amount of hazardous chemicals in each category present at the facility at any time during the preceding calendar year, (2) an estimate of the average daily amount of hazardous chemicals in each category present at the facility during the preceding calendar year, and (3) the general location of hazardous chemicals in each category. 42 U.S.C. § 11022(d). The statute gives EPA authority to modify the categories of health and physical hazards set forth under OSHA and its regulations by requiring information to be reported in terms of groups of hazardous chemicals that present similar hazards in an emergency or by requiring reporting on individual hazardous chemicals of special concern to emergency response personnel. *Id.*

Section 312(d)(2) provides for the reporting of additional information on each hazardous chemical present at the facility ("tier II information") upon request of state and local authorities. 42 U.S.C. § 11022(d)(2). Tier II information may include a description of the manner of storage of the hazardous chemical and an indication of whether the owner elects to withhold location information

of a specific hazardous chemical from disclosure to the public. *Id.* EPA has issued implementing regulations for these reporting requirements. 40 C.F.R. § 370.25.

These provisions are important for environmental justice purposes because they help local authorities prepare to respond to chemical release emergencies. These provisions also help make available to communities information about the chemicals that are used at local facilities. This information can be used for a variety of purposes and may help increase facilities' accountability. The statute addresses whether and how certain submissions by facilities under these provisions must be made available to the public. Although EPA does not receive and disseminate the information, the agency can encourage and assist in actions to further increase the availability and accessibility of information to low-income communities and communities of color. As discussed earlier, EPA may also establish the threshold quantities for hazardous chemicals below which no facility is subject to the reporting provisions of this section, and the agency may bring enforcement actions to ensure that facilities in low-income communities and communities of color comply.

E. Toxic Chemical Release Forms

Section 313 requires owners or operators of certain facilities to complete a toxic chemical release form. The forms are submitted to EPA and to state officials annually on July 1, for releases during the preceding calendar year. The reporting requirements apply to owners and operators of facilities that have ten or more full-time employees; are in certain SIC codes; and manufactured, processed, or otherwise used a toxic chemical listed under the statute in excess of the established threshold quantities. 42 U.S.C. § 11023(a),(b). The statute sets out the specific information required on the forms, including (1) the name and location of the principal business activities of the facility, (2) an estimate of the maximum amounts, in ranges, of the toxic chemical present at the facility at any time during the preceding calendar year, and (3) the disposal methods or waste treatment employed for each waste stream and the treatment efficiency typically achieved. 42 U.S.C. § 11023(g). See also, Section 313(f) (threshold for reporting); Section 313(c) (establishing chemicals subject to reporting requirements); Section 313(b)(2) (providing authority to EPA to apply the requirements to owners and operators of specific facilities).

According to EPCRA **Section 313(h)**, the toxic chemical release form reporting requirements are intended, in part, to provide information to the public, including the communities surrounding covered facilities. 42 U.S.C. § 11023(h). The release forms must be available to inform persons about releases of toxic chemicals to the environment, to assist governmental agencies, researchers, and other persons in the conduct of research and data gathering and to aid in the development of appropriate regulations, guidelines, and standards. *Id.* **Section 313(j)** requires EPA to establish and maintain in a computer database a national toxic chemical inventory based on data submitted to EPA under the toxic chemical release reporting provisions of the Act. 42 U.S.C. § 11023(j).

The information reported under these provisions, which EPA compiles as the Toxic Release Inventory (TRI), has been credited with substantial reductions in chemical releases. Environmental justice goals could be further advanced to the extent that EPA can use its authorities to facilitate the availability of TRI information. The database required under this section provides a powerful mechanism for making information available to the public. The statute gives EPA broad authority that presumably could be used to design and maintain the database in a manner that facilitates its use

by residents of heavily impacted communities. While new search tools, such as “TRI Explorer,” have been developed in recent years, additional opportunities for increasing user friendliness and proactively disseminating information could be considered. In addition, EPA could consider addressing the lack of Internet access in some low-income communities. The statute’s general statements about the importance of making information available to the public provides additional support for EPA’s efforts to make reported information available to low-income communities and communities of color in such a proactive manner.

F. Public Information Regarding Material Safety Data Sheets

EPCRA **Section 311(c)(2)** requires LEPCs to make available material safety data sheets upon request of any person. 42 U.S.C. § 11021(c)(2). If the LEPC does not have the material safety data sheet requested, the LEPC must request the sheet from the facility owner or operator and then make the sheet available to the person in accordance with Section 324 which states that documents must be made available during normal working hours at the location designated by the EPA, state governor, SERC, or LEPC. *Id.* EPA has issued regulations implementing this provision. See 40 C.F.R. § 370.30. This provision provides a general tool that could be used by low-income communities and communities of color to obtain information about hazardous chemicals in their communities. EPA also has a direct role in implementing this provision by designating the location of certain documents and can use this authority to ensure that low-income communities and communities of color can easily review documents at convenient locations.

G. Provision of Emergency and Hazardous Chemical Inventory Forms Tier II Information

Sections 312(e)(3)(A)&(B) provide that any person may submit a written request to a SERC or LEPC for tier II information relating to the preceding calendar year with respect to a particular facility. 42 U.S.C. § 11022(e)(3)(A)&(B). Any tier II information which a SERC or LEPC has must be made available to a person making a request. If the information is not available, the SERC or LEPC must request the information from the facility, if the facility stored a hazardous chemical in excess of 10,000 pounds at any time during the preceding calendar year. If the facility has not stored a hazardous chemical in excess of 10,000 pounds, the request for information must include a statement of need. The SERC or LEPC may then request the information from the facility, but is not required to make such a request. SERCs and LEPCs must respond within 45 days to requests for tier II information. *Id.* EPA has issued regulations implementing this provision. 40 C.F.R. § 370.30.

This provision can assist communities by making available detailed information about specific chemicals at specific facilities. This mechanism is particularly useful if well-publicized to communities and if assistance is provided in making requests, particularly when a statement of need is required. In addition, EPA could encourage SERCs and LEPCs, through guidance or regulations, to make information more readily available through electronic and other means.

H. Availability of Material Safety Data Sheets, Forms, and Follow-Up Notices

Section 324(a) states that each emergency response plan, material safety data sheet, list of chemicals for which material safety data sheets are required under OSHA, inventory form, toxic chemical release form, and follow-up emergency notice must be made available to the general public during normal working hours at the location or locations designated by EPA or by the appropriate governor, SERC, or LEPC. 42 U.S.C. § 11044(a)&(d). Upon request by an owner or operator of a facility, the SERC and LEPC must withhold from disclosure the location of any specific chemicals required to be contained in an inventory form as tier II information. *Id.* EPA has issued implementing regulations for these provisions. 40 C.F.R. § 370.31.

These are general provisions that facilitate the availability of information about chemicals to affected communities. EPA could encourage, through guidance or regulations, pro-active implementation of the provisions by, for example, publicizing the availability of documents and designating numerous locations for review. For the documents it must make available to the public, EPA could take the same approach. Notably, the citizen suit provisions of the Act authorize actions against EPA “for failure to provide a mechanism for public availability of information” in accordance with this section. 42 U.S.C. § 11046.

I. Notice of Document Availability

Section 324(b) requires that LEPCs must annually publish a notice in local newspapers that emergency response plans, material safety data sheets, and inventory forms have been submitted. The notice must state that follow-up emergency notices may subsequently be issued. 42 U.S.C. § 11044(b). The notice must also announce that members of the public who wish to review any plan, sheet, form, or follow-up notice may do so at the locations designated.

This is a general provision that can promote effective information dissemination to community residents. EPA’s direct role in implementing these provisions may be limited to those situations in which the agency designates the location of documents, but EPA could use guidance and regulations, as appropriate, to promote proactive use of this provision by LEPCs.

J. Petitions for Disclosure of Specific Chemical Identity

Under certain circumstances, facility owners and operators are authorized by EPCRA to withhold certain limited information that would otherwise be required to be reported, if such withholding is necessary to protect trade secrets. **Section 322(c)** requires EPA to issue regulations to implement the provisions of the Act that allow persons submitting information under various provisions to withhold from their submissions specific chemical identities. 42 U.S.C. § 11042(c). **Section 322(d)&(e)** provides that any person may petition EPA for the disclosure of the specific chemical identity of a hazardous chemical, an extremely hazardous substance, or a chemical claimed as a trade secret under Section 322. 42 U.S.C. § 11042(d)&(e). Notably, this section states that nothing in the trade secret provisions of the Act or EPA’s accompanying regulations authorizes any person to withhold information that is required to be provided to a health professional, a doctor, or a nurse under Section 323. *Id.*

In addition, **Section 322(h)(1)** requires the appropriate state governor or SERC to identify

the adverse health effects associated with a hazardous chemical or extremely hazardous substance whose identity is claimed as a trade secret. 42 U.S.C. § 11042(h)(1). The state governor or SERC must assure that such information is provided to any person requesting it. **Section 322(h)(2)** imposes the same duties on EPA with respect to toxic chemicals the identities of which have been claimed as trade secrets. 42 U.S.C. § 11042(h)(2). EPA must also assure that the information is included in the national toxic chemical inventory computer database required under Section 313(j). Id.

These provisions are relevant for purposes of environmental justice, because it is important that trade secret claims do not result in the withholding of information about chemicals that could pose threats in affected communities. The petition authority could be used to help ensure that specific chemical identity information is not withheld inappropriately from such communities. The provisions give EPA broad authority in issuing regulations and, therefore, presumably allow it to consider environmental justice concerns in developing or amending trade secret regulations.

VII. FINANCIAL ASSISTANCE

EPCRA **Section 305(a)** provides that United States government officials carrying out federal programs for emergency response are authorized to provide training and education programs for federal, state, and local personnel in hazard mitigation, emergency preparedness, fire prevention and control, disaster response, long-term disaster recovery, national security, technological and natural hazards, and emergency processes. 42 U.S.C. § 11005(a). **Section 305(a)(2)** provides that monies are specifically authorized to be appropriated to the Federal Emergency Management Agency (FEMA) for grants through 1990 to support state and local government programs and to support university-sponsored programs that are designed to improve emergency planning, preparedness, mitigation, response, and recovery capabilities. 42 U.S.C. § 11005(a)(2).

These training programs could be used to help ensure that local and state governments, particularly resource-limited local governments in low-income communities, receive adequate training in emergency response. In addition, grants could be provided to universities in low-income communities and communities of color to support programs designed to improve emergency planning. Although the statute only specifically authorizes funding for FEMA, the general language of the statute that refers to United States government officials does not seem to preclude EPA providing such grants. In fact, as discussed earlier, EPA does provide grants to SERCs and Tribes for EPCRA-related projects and issues training and education documents.

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