

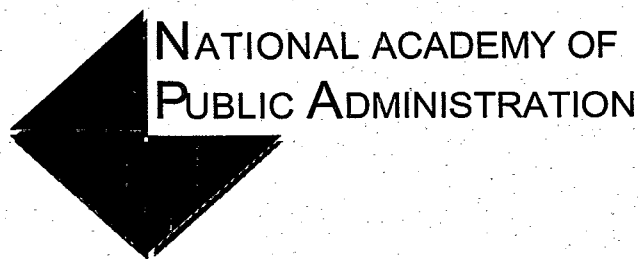
*A Report by a Panel of the*

**NATIONAL ACADEMY OF  
PUBLIC ADMINISTRATION**

*for the U.S. Environmental Protection Agency*

**June 2002**

**MODELS FOR CHANGE:  
EFFORTS BY FOUR  
STATES TO ADDRESS  
ENVIRONMENTAL JUSTICE**



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The National Academy of Public Administration is an independent, nonprofit organization chartered by Congress to improve governance at all levels: local, regional, state, national, and international. The Academy's membership of more than 500 Fellows includes public managers and scholars, business executives and labor leaders, current and former cabinet officers, members of Congress, governors, mayors, state legislators, and diplomats. Since its establishment in 1967, the Academy has assisted hundreds of federal agencies, congressional committees, state and local governments, civic organizations, and institutions overseas through problem solving, objective research, rigorous analysis, information sharing, developing strategies for change, and connecting people and ideas.

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FOR IMMEDIATE RELEASE

June 12, 2002

Contact Bill Shields or Suellen Keiner, (202) 347-3190

### **Academy Study Highlights Promising Efforts and Needed Improvements in Addressing Environmental Justice at the State Level**

State agencies must adopt performance, outcome, and accountability measures in order to reduce community exposures to environmental hazards according to a new study issued by a Panel of the National Academy of Public Administration. The Panel studied four states that have utilized a variety of innovative approaches to address environmental justice issues, but the approaches so far have produced few tangible improvements for disadvantaged communities.

"The Panel utilized the same framework for this analysis as for our first report on EPA's efforts to address environmental justice in permitting. We found many of the same concerns," said Dr. Philip Rutledge, Chair of the Panel of Academy Fellows that issued this study. Rutledge is Professor Emeritus at Indiana University's School of Public and Environmental Affairs. The Panel specifically focused on four areas for its analysis: leadership and accountability, permitting procedures, reducing risks, and public participation.

Models for Change: Efforts by Four States to Address Environmental Justice, is designed to assist the public, as well as state and local agencies, in identifying and considering various approaches to addressing environmental justice concerns. The report provides information on the legislation, policy, procedures, and tools that Indiana, Florida, New Jersey, and California have used to address the widely recognized fact that some low-income and people-of-color communities are exposed to significantly greater environmental and public health hazards than other communities.

The Panel recommends that state environmental justice programs should:

- articulate a clear commitment to environmental justice; formalize that commitment through executive orders, state policies, administrative orders, or similar pronouncements; establish measurable goals and accountability procedures; integrate environmental justice into the core mission and operation of their agencies; and provide information and training to communities, local governments, businesses, and academic institutions to improve their capacity for addressing environmental justice issues
- conduct a comprehensive examination of applicable state constitutional provisions, as well as state environmental, administrative, civil rights, and public health laws, to identify authorities for addressing environmental justice in core state environmental programs, including enforcement; train permitting staff to address environmental justice issues; and provide permit writers with practical tools and information necessary to execute their responsibilities

- eliminate backlogs for permit renewals which provide an opportunity to incorporate recently adopted pollution control requirements, account for new information on environmental hazards, mandate pollution prevention, improve operating and maintenance practices, and address other concerns of disadvantaged communities
- identify and reduce environmental hazards in communities with high exposure levels and produce measurable improvements by utilizing screening tools that account for race, income, and other relevant factors, and by targeting enforcement on pollution sources in these communities
- enhance public participation by training state staff to value and utilize local knowledge; engage high-risk communities more frequently and effectively in state programs; increase the effectiveness of advisory committees by clarifying their missions, establishing timelines, and providing adequate support; and expand public participation in other agency programs, such as enforcement and standard setting

This second report is part of the Panel's ongoing research on environmental justice. Its first report, *Environmental Justice in EPA Permitting: Reducing Pollution in High-Risk Communities Is Integral to the Agency's Mission*, was released in December 2000. Next, the Academy will work with the International City and County Management Association to produce a study analyzing the role of local land-use and zoning practices in creating, addressing, or alleviating environmental justice concerns.

In addition to Rutledge, the Fellows who served on the Panel were Jim Barnes, Professor at the Schools of Law and Public and Environmental Affairs at Indiana University; Jonathan Howes, Professor of Planning and Public Policy at the University of North Carolina at Chapel Hill; Valerie Lemmie, City Manager, Cincinnati, Ohio; David Mora, City Manager, Salinas, California; James Murley, Professor at the Joint Center for Environmental and Urban Problems, Florida Atlantic University; and Eddie Williams, President, Joint Center for Political and Economic Studies.

To obtain a copy of *Models for Change: Efforts by Four States to Address Environmental Justice*, please contact Bill Shields at (202) 347-3190, ext. 3014, or visit the Academy's web site at [www.napawash.org](http://www.napawash.org).

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**Panel**

**Philip Rutledge, *Chair***

**A. James Barnes**

**Jonathan Howes**

**Valerie Lemmie**

**David Mora**

**James Murley**

**Eddie Williams**

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The views expressed in this document are those of the Panel alone. They do not necessarily reflect the views of the Academy as an institution.

This document was funded by the Office of Environmental Justice of the U.S. Environmental Protection Agency under Cooperative Agreement Number EQ-82906401-0.

Academy Project Number 1969

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## FOREWORD

Fairness, justice, and equity are critical to good public administration. They are as important and integral to the administration of public policies and programs as efficiency, economy, and effectiveness. Recognizing this, the National Academy of Public Administration's (the Academy) Board of Directors created the Standing Panel on Social Equity in Governance. The Standing Panel defines social equity as "the fair, just, and equitable management of all institutions serving the public directly or by contract and the fair, just, and equitable distribution of public services and implementation of public policy."

This report, *Models for Change: Efforts by Four States to Address Environmental Justice*, is the Panel's second report on environmental justice and part of its ongoing research efforts. The report is designed to assist the public, state and local agencies, and others interested in environmental justice by identifying state initiatives that can serve as models of best practices. It documents and analyzes how four states — Indiana, Florida, New Jersey, and California — have addressed environmental justice to achieve their objectives through policy and programmatic approaches, tools, and mechanisms. Each state has adopted some unique approaches to environmental justice issues, such as adopting new statutes, issuing executive orders, and establishing advisory commissions. This variety provides valuable information about how states and localities can respond effectively to environmental justice concerns.

The Academy hopes that the state practices analyzed here will serve as models to build effective environmental justice programs at state and local levels. Coupled with the Academy's prior study on how the Environmental Protection Agency (EPA) can address environmental justice concerns through permitting, this report can provide a better understanding of how policies, programs, and practices related to environmental justice can be strengthened to produce results that address these concerns appropriately.

In conducting this study, the Panel received excellent assistance from the participating states, EPA headquarters and regional offices, and representatives of community groups and regulated industry. All those interviewed gave generously of their time and expertise to assist the Academy's researchers, and we greatly appreciate their help. We also thank EPA's Office of Environmental Justice for its financial support, and our Panel members and staff who devoted their time and thought to this very important project.



Robert J. O'Neill, Jr.  
President





## PANEL MESSAGE

Equity and justice are at the heart of effective public administration. The implementation of laws must ensure that those most in need of protection receive it and that government uses inventive, responsive, and accountable approaches to provide that protection.

The issue of environmental justice brings together, in a very significant way, critical good governance issues that resonate for all of us. These include:

- reducing pollution in areas experiencing high levels of exposure to hazards, and the potentially higher rates of adverse health outcomes that may result from that exposure<sup>1</sup>
- informed public participation
- enhanced community right-to-know procedures
- adequate data on health – disaggregated by race, income, and location – to allow for appropriate analysis and research on the relationship of environmental stressors to public health
- better emissions data and monitoring to identify the actual exposures that some communities experience

With the completion of this second study, the Panel is very encouraged that some states are interested and willing to take action to address the widely recognized fact that some low-income and people-of-color communities are exposed to significantly greater environmental and public health hazards than other communities. These communities also suffer what a recent Institute of Medicine report termed “double jeopardy” because they have a higher “frequency and magnitude” of exposure to emissions and are less able to deal with these hazards as a result of their limited knowledge of exposures and disenfranchisement from the political process.<sup>2</sup>

During the course of this project, the Panel learned that many of the issues raised have national implications that transcend the scope of this report, but are critical to successful problem solving. For example, state level data on health disaggregated by race, income, and location would enhance the states’ ability to address environmental justice problems. The lack of this data is a national issue.

Approximately 25 percent of preventable illnesses worldwide are attributable to poor environmental quality.<sup>3</sup> It has been estimated that, in the United States, there are 50,000 premature deaths and \$40 to \$50 billion in health-related costs annually associated with air pollution alone.<sup>4</sup> Poor air quality also contributes to respiratory illness, cardiovascular disease, and cancer.<sup>5</sup> A recent study also has shown that long-term exposure to air pollution in many of America’s largest cities, and even in some smaller ones, significantly increases the risk of death from lung cancer.<sup>6</sup>

Despite the lack of relevant state and local level health data that could be used for purposes of environmental justice, some studies have documented that people-of-color and low-income groups experience disproportionately higher levels of exposure to hazards from industrial facilities, waste treatment sites, and waste disposal sites.<sup>7</sup> One study found that people of color constituted almost 46 percent of the population of communities that had three or more industrial facilities, incinerators, or landfills.<sup>8</sup>

As research continues on the potential correlation between health impacts and exposure to environmental hazards, it is critical to collect the data needed to understand whether programs designed to protect human health and the environment are being administered in a just and equitable way. In the meantime, the Panel applauds states that are addressing high exposure levels of pollution in people-of-color and low-income communities and working to improve their ability to participate effectively in key processes, like permitting.

The Panel also commends EPA's Office of Environmental Justice for its leadership in supporting – through grants, technical assistance, a training network, and other efforts – various state and local programs that address environmental justice. These activities have been helpful in disseminating best practices, sharing lessons learned, and encouraging further efforts to respond to environmental justice concerns in a number of communities. The Panel urges EPA to continue providing this support and assistance for state and local government by:

- studying the environmental justice efforts of local agencies, identifying the lessons learned, and making this information widely available to all types of local agencies
- exploring additional ways EPA can assist and encourage states to expand their capacity for regional and neighborhood environmental monitoring
- providing states and other interested parties with periodic updates on effective approaches for achieving environmental justice

Though the focus of this study has been on state program efforts, the Panel believes that environmental justice issues are a shared responsibility that can be addressed most effectively through the collaborative and committed efforts of federal, state, and local governments. Good governance requires that no community should bear a disproportionate share of environmental exposure and harm and that meaningful participation in decisions affecting the quality and health of our communities should be available regardless of income, race, or ethnicity.

## ENDNOTES

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<sup>1</sup> Institute of Medicine, *Toward Environmental Justice: Research, Education, and Health Policy Needs* (1999), 14.

<sup>2</sup> *Ibid.*, p. 6.

<sup>3</sup> U.S. Department of Health and Human Services, *Healthy People 2010*. 2<sup>nd</sup> ed. (November 2000), p. 40.

<sup>4</sup> *Ibid.*, p. 40.

<sup>5</sup> *Ibid.*, p. 41.

<sup>6</sup> C. Arden Pope III et al, "Lung Cancer, Cardiopulmonary Mortality, and Long-term Exposure to Fine Particulate Air Pollution," *Journal of the American Medical Association* 287, no. 9 (March 6, 2002) <http://jama.ama-assn.org/issues/v287n9/abs/joc11435.html>

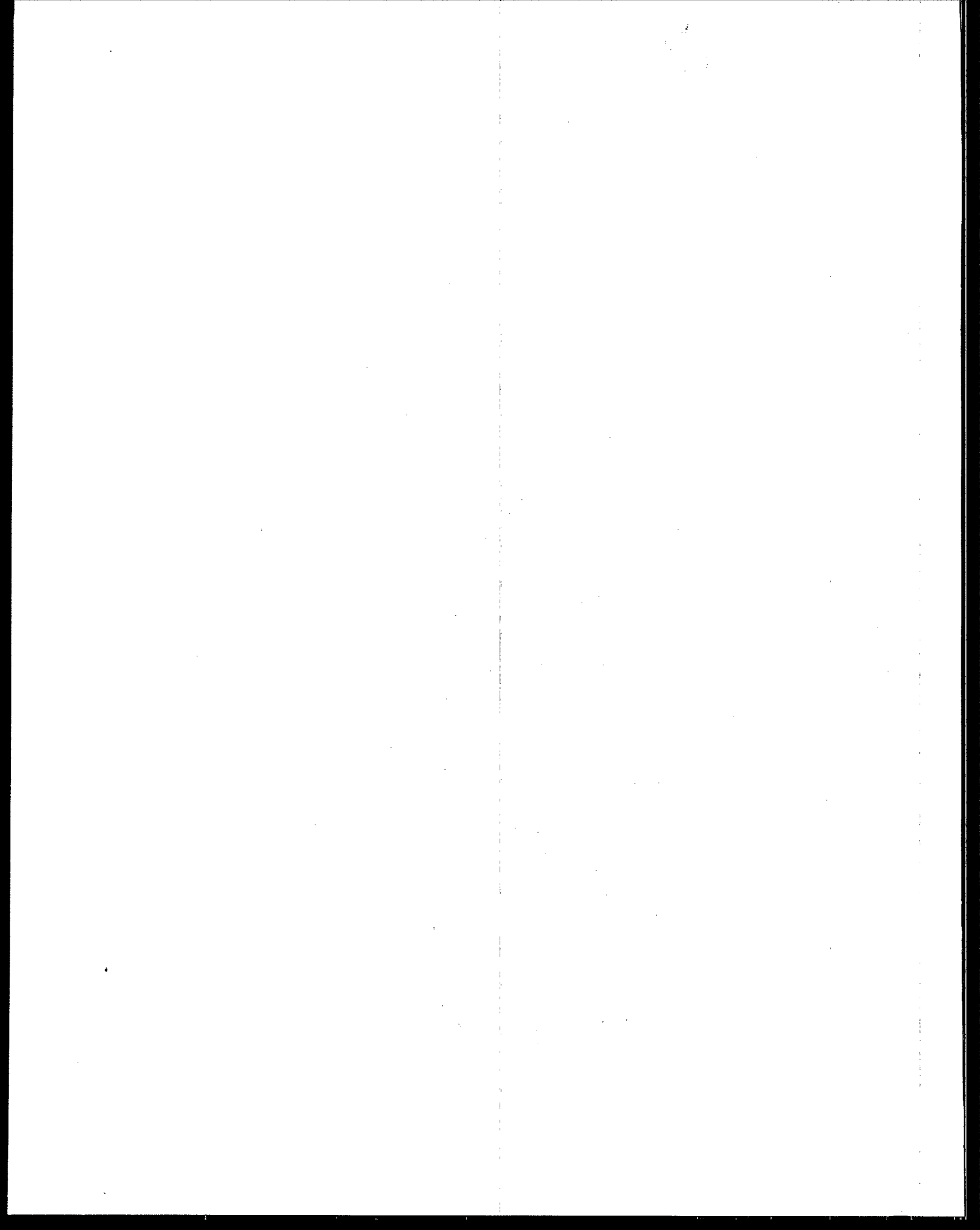
<sup>7</sup> *Toward Environmental Justice*, p. 21.

<sup>8</sup> *Ibid.*, p. 15.



## LIST OF ACRONYMS

<b>Academy</b>	National Academy of Public Administration
<b>ACTION</b>	Active Citizens Improving Our Neighborhoods
<b>AQMD</b>	South Coast Air Quality Management District
<b>ARB</b>	California Air Resources Board
<b>Cal/EPA</b>	California Environmental Protection Agency
<b>CEQA</b>	California Environmental Quality Act
<b>CEQ</b>	Council on Environmental Quality
<b>CBE</b>	Communities for a Better Environment
<b>CBRA</b>	Center for Brownfield Rehabilitation Assistance
<b>CCEEB</b>	California Council for Environmental and Economic Balance
<b>CERP</b>	Comprehensive Everglades Restoration Plan
<b>Clean Water Act</b>	Federal Water Pollution Control Act
<b>DEP</b>	Department of Environmental Protection
<b>DTSC</b>	Department of Toxic Substances Control
<b>ELI</b>	Environmental Law Institute
<b>EPCRA</b>	Emergency Planning and Community Right-to-Know Act
<b>EPA</b>	United States Environmental Protection Agency
<b>FIFRA</b>	Federal Insecticide, Fungicide and Rodenticide Act
<b>GIS</b>	Geographic Information Systems
<b>ICMA</b>	International City and County Management Association
<b>IDEM</b>	Indiana Department of Environmental Management
<b>LEAF</b>	Legal Environmental Assistance Foundation
<b>MATES II</b>	Multiple Air Toxics Exposure Study II
<b>NATI</b>	National Air Toxics Inventory
<b>NEJAC</b>	National Environmental Justice Advisory Committee
<b>NEPA</b>	National Environmental Policy Act
<b>NPL</b>	National Priorities List
<b>OPR</b>	California Governor's Office of Planning and Research
<b>RCRA</b>	Resource Conservation and Recovery Act
<b>SIP</b>	State Implementation Plan
<b>SELA</b>	Southeast Los Angeles
<b>Superfund</b>	Comprehensive Environmental Response, Compensation, and Liability Act
<b>TRI</b>	Toxic Release Inventory
<b>Title VI</b>	Title VI of the Civil Rights Act of 1964
<b>TSCA</b>	Toxic Substances Control Act



## EXECUTIVE SUMMARY

In October 2001, the Office of Environmental Justice at the U.S. Environmental Protection Agency (EPA) asked the National Academy of Public Administration (the Academy) to study a selected group of state environmental justice programs and identify opportunities for states to address environmental justice concerns more effectively. This study complements a prior Academy effort that analyzed how environmental justice could be incorporated into EPA's permitting programs for air, waste, and water and contributed to EPA's five-step strategy for integrating environmental justice into its permits.<sup>1</sup>

The prior study recommended changes to EPA's leadership, accountability, permitting programs, priority setting, and procedures for public participation to advance environmental justice. It determined that state environmental agencies are responsible for issuing the vast majority of air, waste, and water permits. By focusing on state programs, the current study expands the Academy's earlier analysis and recognizes the key role that states play in protecting public health and the environment.

This study examines four states: Indiana, Florida, New Jersey, and California. These states have been selected because they have chosen to address environmental justice through:

- enacting new legislation
- proposing new regulations
- issuing executive orders, policies, or other directives
- convening advisory committees composed of diverse stakeholders
- implementing various management measures

The study is designed to:

- identify specific measures adopted by the four states to address environmental justice problems
- analyze the strengths and limitations of these states' initiatives
- develop findings and recommendations to aid all states in responding to environmental justice concerns
- aid the public — including businesses, academia, and community organizations — in understanding how states can respond to environmental justice issues, evaluating their states' programs for this purpose, and participating in the states' environmental decisions

For the purposes of this study, the Academy Panel relied upon EPA's definition of environmental justice:

Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, culture, education, or income

with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. *Fair treatment* means that no group of people, including racial, ethnic, or socioeconomic groups, should bear a disproportionate share of the negative consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal environmental programs and policies. *Meaningful involvement* means that: (1) potentially affected community residents have an appropriate opportunity to participate in decisions about a proposed activity that will affect their environment and/or health; (2) the public's contribution can influence the regulatory agency's decision; (3) the concerns of all participants involved will be considered in the decision-making process; and (4) the decision-makers seek out and facilitate the involvement of those potentially affected. <sup>2</sup>

This study is designed to enhance the ability of the public, especially those from low-income and people-of-color communities, to learn more about how state agencies can address environmental justice problems and enhance their understanding of how state agencies can be more responsive to their concerns. By doing so, members of the public will be able to participate more effectively in environmental decision-making by state agencies.

The Panel recommends that states:

- strengthen their leadership and accountability to address environmental justice concerns
- integrate environmental justice into their core environmental and public health programs
- elevate the importance of environmental justice issues when setting their priorities
- expand their public involvement in the permitting process and other environmental decisions
- maximize the use of other opportunities and legal authorities to address environmental justice

## COMPLETE FINDINGS

### LEADERSHIP AND ACCOUNTABILITY

Despite persistent and seemingly intractable environmental justice problems, the Panel has uncovered heartening evidence of leadership to address them on the part of state legislators, agency managers and staff, universities, businesses, community residents, and local governments. Each type of leader offers a distinct perspective, provides unique resources, and produces different solutions and results. Our study of four states demonstrates that to be successful, environmental justice efforts can benefit from leadership by all six types.



## **Legislative Leadership**

**Finding 1:** Although states may have untapped legal authorities to address environmental justice issues, additional legislation can propel reluctant agencies forward, lend support and credence to the efforts of willing administrators, and launch activities that involve external parties.

## **Agency Leadership**

**Finding 2:** Champions are important for leading environmental justice initiatives because these programs require state agencies to change their traditional ways and adopt new strategies for doing business.

## **University Leadership**

**Finding 3:** University-based programs can play an important role in developing solutions to environmental justice concerns.

Compared with state agencies, university-based programs may be:

- somewhat more insulated from political change, and thereby provide continuity to environmental justice programs
- better positioned to provide credible and trusted advice to citizens
- capable of conducting more extensive scientific research than state agencies
- effective intermediaries among competing interests
- strong advocates for citizens

## **Community Leadership**

**Finding 4:** An active, informed citizenry is critical to the success of every state's environmental justice initiatives.

## **Business Leadership**

**Finding 5:** Some businesses and business organizations have recognized the importance of environmental justice, adopted environmental justice policies, and supported their states' environmental justice initiatives.

**Finding 6:** Business leaders have significant opportunities to improve their relationships with neighboring communities by moving beyond meeting minimum environmental requirements and responding directly to community concerns.

## **Local Government Leadership**

**Finding 7:** Local governments have many powers to address the environmental concerns of disadvantaged communities because local agencies decide on land-uses, geographic locations of industrial facilities and residential areas, site designs, distribution of public services and facilities, road construction, access to housing and public transit, and school siting.

## **Accountability**

**Finding 8:** None of the states in this study has adopted performance, outcome, or accountability measures for integrating environmental justice concerns into the daily operations of its environmental agencies. Without such measures, it will be difficult:

- for agency staff to know how to change their activities
- for agency managers, legislators, businesses, and communities to determine whether or how states' environmental justice initiatives are improving public health, environmental conditions, or overall quality of life in the communities to which they apply

**Finding 9:** California has required reports to the legislature that might help the public to assess the progress that state agencies have made in implementing environmental justice programs.

## **PERMITTING**

### **Legal Authorities**

**Finding 10:** Only two of the states studied — California and Florida — have enacted laws specifically designed to address environmental justice, but none of these laws fully integrates environmental justice concerns into core environmental programs or permitting requirements.

**Finding 11:** A close review of state constitutions and state environmental, civil rights, public health, and other related laws may reveal that existing state laws provide legal authority to address environmental justice concerns.

### **Training**

**Finding 12:** Agency staff may have limited experience with environmental justice problems, including how to address these issues in their daily work.

### **Permitting Tools**

**Finding 13:** States have developed very few tools to help permit writers take environmental justice issues into consideration.

## **Eliminating Permit Backlogs**

**Finding 14:** Permit backlogs create barriers to addressing environmental justice issues.

## **State Coordination with Local Governments**

**Finding 15:** State agencies are finding ways to coordinate their efforts with local land-use authorities. Together, they can provide better responses to environmental justice concerns.

**Finding 16:** Local governments may hold jurisdiction over solutions to environmental justice problems, and may have information that states can use to craft solutions, such as information relevant to permit writers.

Also, states have begun to experiment with increasing coordination with local governments on permit issuance.

## **SETTING PRIORITIES TO REDUCE POLLUTION**

### **Data on Concentrations of Facilities**

**Finding 17:** States have found that data on the concentration of environmentally hazardous facilities — often presented in map form — are important tools to overcome skepticism about whether environmental justice is a real problem.

### **Importance of Monitoring to Reduce Pollution**

**Finding 18:** Ambient monitoring data greatly facilitate better state targeting of resources and provide important support for new strategies to reduce hazardous exposures.

### **Need for Early and Visible Initiatives to Reduce Pollution**

**Finding 19:** Community members, neighborhood organizations, and other advocates may grow frustrated if state environmental justice programs do not include early and visible efforts to reduce health risks from pollution.

### **Linking Environmental Justice and Community Health**

**Finding 20:** Using state environmental justice programs to address community health concerns may broaden support for these initiatives.

### **Enforcement**

**Finding 21:** Enforcement of environmental laws holds the key to producing benefits from the pollution control requirements that are part of an environmental justice program or are already embedded in existing state rules and permit conditions.

## **Targeting Efforts to Protect Communities of Concern**

**Finding 22:** States should develop practical ways to target their efforts on communities with high exposures to pollution.

## **PUBLIC PARTICIPATION**

### **Programs to Expand Public Participation**

**Finding 23:** States have implemented a broad range of public participation initiatives to address environmental justice concerns.

### **Advisory Committees**

**Finding 24:** Broadly representative advisory committees, given clear tasks, can play an important role in assisting states to develop environmental justice programs. If states choose to establish advisory committees, they should use them to generate wide and diverse input for developing and improving environmental justice programs. However, states should recognize that committees have limited ability to provide prompt relief for hard-pressed community groups. Therefore, they are no substitute for direct, immediate agency actions that respond to the concerns of disadvantaged communities.

### **Using Brownfield Programs to Address Environmental Justice Concerns**

**Finding 25:** Well-designed state brownfield redevelopment programs can provide opportunities for communities to collaborate with state and local agencies on redevelopment projects. They can contribute significantly to alleviating environmental justice problems.

## **COMPLETE RECOMMENDATIONS**

**Recommendation 1:** State environmental agencies and other interested organizations should support and encourage programs designed to provide better information to state legislators about environmental justice issues, including information about:

- the existence of disproportionately high concentrations of industrial facilities and contaminated sites in or near people-of-color and low-income communities
- the potential adverse health and environmental effects that could result from such siting practices
- the status of ongoing efforts to address environmental justice concerns in their respective states
- models of innovative, creative approaches for solving similar problems in other states

**Recommendation 2:** State legislators should examine environmental justice issues in their jurisdictions, as well as environmental justice legislation adopted by other states. They should consider legislation establishing clear legal authority to address and resolve their states' environmental justice problems.

**Recommendation 3:** States' highest-level executives, such as the governor, commissioner, and other agency heads, should articulate a clear commitment to environmental justice.

**Recommendation 4:** States should formalize their commitment to environmental justice in a written document that clearly establishes principles for state and local agencies to follow. This document could be an executive order, state policy, administrative order, or similar pronouncement.

**Recommendation 5:** States should ensure that their commitment is supported by an adequate administrative structure and allocation of resources to achieve full implementation of environmental justice policies. This structure might include an office or staff devoted to environmental justice. Agency officials with environmental justice responsibilities should report directly to the commissioner or department head.

**Recommendation 6:** States should ensure that their environmental justice policies produce actual results by fully integrating the policies into core agency missions — including state planning mechanisms — so they can permeate programs and govern day-to-day staff functions and activities. The program results should be regularly evaluated and reported to the public.

**Recommendation 7:** State leaders should examine the role that universities can play in addressing environmental justice issues. However, university-based programs should not replace environmental justice programs at state regulatory agencies.

**Recommendation 8:** States should cultivate an active, informed citizenry on environmental issues, especially for those living in people-of-color and low-income communities where poverty, loose organization, lack of political power, or limited access to resources may limit citizen involvement. State agencies should use a variety of tools for achieving this goal, including:

- providing financial assistance to community organizations in the form of direct state funding or, where such funding is not available, such indirect assistance as educating community leaders about the availability of federal, state, or other grant programs, helping community groups apply for such grants, and providing community leaders with written descriptions of environmental problems and needs which can be used to prepare grant applications
- providing technical assistance to community organizations
- establishing community or field liaisons
- promoting and facilitating interaction between communities and businesses

Most importantly, state leaders should maintain an atmosphere that welcomes community involvement.

**Recommendation 9:** State agencies should encourage business leadership in responding to environmental justice concerns by:

- providing information to help businesses understand environmental justice concerns
- developing environmental justice and/or community outreach guidance for business leaders and permit applicants
- using brownfield restoration as a mechanism to address environmental justice concerns

**Recommendation 10:** States should assist local governments in understanding:

- the extent to which they have authority to address environmental justice issues
- the data available on the health, environment, and quality of life of local residents in high-risk communities
- various approaches that are available to solve environmental justice concerns

**Recommendation 11:** States should ensure that all local agencies with jurisdiction over potential environmental justice problems are provided with training, guidance documents, and/or educational materials prepared for local officials. States also should ensure that local governments have the necessary technical tools to use their legal authority wisely.

**Recommendation 12:** Each state should ensure that innovative, successful environmental justice best practices adopted by local governments within the state are reported to other local officials with similar responsibilities throughout the state.

**Recommendation 13:** States should ensure that their environmental justice programs produce results by:

- establishing clearly defined outcomes
- translating desired outcomes into clear performance goals
- evaluating program effectiveness at regular intervals, such as annual reports
- holding program managers and staff accountable for achieving desired performance goals
- tracking pollution levels in high-risk communities to determine if environmental problems, such as air and water pollution and waste disposal, are being solved
- tracking public health effects in high-risk communities to learn whether pollution-related problems are decreasing, such as tracking key health indicators like cancer, asthma, school attendance levels, and hospital admissions

**Recommendation 14:** Each state should undertake a comprehensive analysis of existing legal authorities to address environmental justice, including whether:

- there is legal authority to address environmental justice in state constitutions or state public health, civil rights, administrative, and environmental laws
- they are required to address environmental justice
- they have discretion to address environmental justice in the absence of an explicit statutory directive
- there are legal barriers to addressing environmental justice

**Recommendation 15:** In analyzing their existing legal authorities, states should pay special attention to provisions of state law derived from, modeled on, or adopted in response to federal laws. When integrating such provisions, states should consider ELI's analysis of comparable federal laws.

**Recommendation 16:** States should ensure that their legal analysis clarifies the authority of permit writers to deny, condition, or require additional conditions or controls on permits for all regulated facilities located in or near high-risk communities.

**Recommendation 17:** States should communicate the results of their legal analysis to their agencies' staff in terms that can be easily understood and incorporated into day-to-day work by program personnel, such as permit writers.

**Recommendation 18:** State agencies should commit to train, within a set period of time, all of their employees and managers on environmental justice. These training courses should address:

- how to identify potential environmental justice problems
- why solutions to environmental injustice are important
- what approaches can be used to solve environmental justice concerns
- when and how to coordinate solutions with federal and local agencies
- how to utilize non-agency — community, academic, and public health — resources to expand the range of available options
- how to improve public participation in environmental decision-making, especially in high-risk communities
- what types of additional information are needed to address environmental justice more fully and what can be done to improve such information gathering
- how to ensure that state enforcement adequately targets pollution problems in high-risk communities

**Recommendation 19:** States should develop practical tools to help permit writers consider environmental justice in their day-to-day activities.

**Recommendation 20:** States should have mechanisms in place to ensure that permit writers have access to and use information commonly available to community residents but frequently unknown to regulatory officials, such as eyewitness accounts of permit violations; poor maintenance practices; odors; spills; illegal dumping; fish kills; presence of unpermitted, under-permitted, or intermittently polluting facilities; and high levels of potentially pollution-related health problems like asthma or cancer.

**Recommendation 21:** Permit writers should be trained to seek and respond appropriately to information from communities facing higher risks where further research or investigation is warranted. This might require them to request additional information from permit applicants, insist on a site-specific study, coordinate with local government or public health officials, or refer potential violations to enforcement officials for further investigation.

**Recommendation 22:** Permit writers should be trained to incorporate the results of investigations into permitting decisions through appropriately crafted pollution limits, permit terms, permit conditions, and monitoring and reporting requirements, and to deny issuance of permits where warranted. Also, they will need clear instructions about their legal authority to address environmental justice problems, as well as adequate time, and resources to respond to community concerns.

**Recommendation 23:** State agencies should eliminate any backlogs of permit renewals and commit to reviewing and modifying any expired permits on a timely basis. Permit renewals provide an opportunity for agencies to incorporate newly adopted pollution control requirements, account for new information on environmental stresses, mandate pollution prevention, reflect current operating and maintenance practices, and consider community concerns.

**Recommendation 24:** When preparing permits for new and existing facilities, states should coordinate with local governments at the pre-application stage to:

- develop mechanisms to ensure permit writers obtain relevant information from local government officials
- give permit writers a clear understanding of their legal authority to address local concerns in state permits

**Recommendation 25:** To prioritize their risk reduction efforts, states should identify areas where there are concentrations of potential environmental hazards, or where disproportionately high exposures to environmental contaminants may occur.

**Recommendation 26:** States should conduct environmental monitoring to identify high risks at regional and neighborhood levels.

**Recommendation 27:** States should develop mobile monitoring stations or other means to investigate and respond to short-term or intermittent hazards in high-risk communities.



**Recommendation 28:** States should ensure that conventional monitoring stations for water quality, air toxics, ambient air quality, and bio-markers are dispersed throughout potential high-risk communities, allowing the state to detect and respond to local hot spots in these communities.

**Recommendation 29:** Although states are developing longer term plans to address environmental justice issues, they should work on identifying and reducing the most obvious hazards in high risk communities, thus demonstrating that their programs produce concrete, real-world changes. Increased inspections and enforcement where there are concentrations of pollution sources can demonstrate a state agency's commitment to reducing health hazards.

**Recommendation 30:** State environmental agencies should work with health agencies to determine whether increased access to community health services may help to address environmental justice concerns.

**Recommendation 31:** States should commit to improving their environmental enforcement efforts in high-risk communities by:

- placing additional monitoring stations in these communities
- conducting more frequent and thorough inspections of facilities near those communities
- taking advantage of community knowledge about a facility's day-to-day operations
- ensuring that violations are promptly addressed by enforcement actions
- choosing the type of enforcement action — administrative, civil, or criminal — appropriate for the violation
- imposing monetary penalties that, to the extent permitted by law, reflect history of non-compliance and gravity of the offense, including increased pollution exposures in densely populated neighborhoods
- evaluating enforcement activities to ensure they address the most serious environmental hazards and effectively deter future violations

**Recommendation 32:** State environmental justice programs should go beyond permitting to address other activities with important implications for high-risk communities, such as standard setting, enforcement, technical and compliance assistance, research, data gathering, and financial assistance.

**Recommendation 33:** States should update existing rules and promulgate new rules where necessary to ensure that specific categories of pollution sources concentrated in high-risk communities employ the latest, most effective pollution controls, operation and maintenance practices, and pollution prevention techniques.

**Recommendation 34:** When states seek to identify communities that may suffer high levels of exposure to environmental hazards, they should employ appropriate screening tools that:

- account for racial demographics and income
- use accurate and complete data
- provide multi-media data covering pollution of air, groundwater, surface water, and drinking water, plus waste disposal — all threats facing communities
- accurately detect exposures using an adequate monitoring network

**Recommendation 35:** State agencies should use the many proven practices for increasing public participation to ensure that citizens, especially those in communities with high exposures to pollution, understand decision-making processes, know when and how to participate, receive notice of actions that may affect their neighborhoods, understand those notices, enjoy the opportunity to participate at convenient times and places, and have access to information to participate effectively.

**Recommendation 36:** State agencies should train their staff to take local knowledge into account. Proactive problem-solving approaches include using a community liaison to work with high-risk communities or conducting town hall meetings. These techniques can help state agencies to identify and solve problems early, save resources, and build better relationships between communities and government.

**Recommendation 37:** To involve high-risk communities more frequently and effectively in their environmental justice programs, states also should:

- involve citizens early in the permitting process
- frequently interact with community leaders and organizations at times and places convenient to them
- expand public participation in other programs important to high-risk communities, including standard-setting, enforcement, technical and compliance assistance, research, and information-gathering; and provide financial assistance to help groups participate

**Recommendation 38:** States can enhance the effectiveness of environmental justice advisory committees by ensuring that they:

- have a clear mission and task
- have definite time lines for completing each work phase
- are large enough to represent all key interest groups
- have adequate funding to do the work, including travel and other expenses for some committee members if needed
- are clearly able to influence state policy
- meet at times and places convenient for all committee members
- include an evaluative component to assess the committee's productivity

**Recommendation 39:** States should consider using brownfield programs to address environmental justice concerns by providing communities with a strong voice in redevelopment project design and focusing some redevelopment programs on reducing pollution in communities with high exposure levels.

## ENDNOTES

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<sup>1</sup> National Academy of Public Administration. *Environmental Justice in EPA Permitting: Reducing Pollution in High-Risk Communities is Integral to the Agency's Mission* (December 2001).

<sup>2</sup> Office of Environmental Justice, U.S. Environmental Protection Agency. *Guidance to Assessing and Addressing Allegations of Environmental Injustice, Working Draft* (January 10, 2001) 7.

## CHAPTER ONE

### INTRODUCTION

In October 2001, EPA's Office of Environmental Justice asked the Academy to study state programs that are designed to address environmental justice concerns. This project is an outgrowth of a prior Academy report for EPA, *Environmental Justice in EPA Permitting: Reducing Pollution in High Risk Communities Is Integral to the Agency's Mission*, published in December 2001. That study assessed how environmental justice could be incorporated into EPA's air, water, and waste permitting programs. Also, it contributed to EPA's five-step strategy for developing practical ways to integrate environmental justice concerns into its permits. The five steps are seeking advice and recommendations, securing legal and administrative analyses, developing training, ensuring implementation, and assessing results.

The Academy's first report analyzed key public administration issues and focused on how EPA addressed the widely recognized fact that some low-income and people-of-color communities are exposed to significantly greater environmental and public health hazards than other communities. The Panel's recommendations for EPA focused on improving leadership and accountability, permitting programs, priority setting, and public participation. They were also designed to help community residents and other stakeholders gain a better understanding of how they can more effectively bring environmental justice concerns to the attention of EPA's permitting programs.

For the first report, EPA asked the Academy to focus on federal permitting alone, although it recognized that most permits are prepared by state and local agencies through their delegated programs. That said, the first study was important in determining whether and to what extent EPA has integrated environmental justice into its core operations, and in helping EPA serve as a model for demonstrating how these concerns can be addressed effectively.

Along with its request for the Academy review, the Office of Environmental Justice also commissioned a study by the Environmental Law Institute (ELI). ELI's report, *Opportunities for Advancing Environmental Justice: An Analysis of U.S. EPA*, reviewed "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."<sup>1</sup> ELI found that, "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."<sup>2</sup>

ELI's study also provided an important foundation for the current project by examining existing federal statutes that offer legal authorities to address environmental justice concerns. It found that state environmental agencies may have considerable latitude to respond to these issues as part of their delegated federal programs. The study also shed light on potential sources of state agencies' legal authorities contained in comparable state environmental or administrative laws. By focusing on state programs, this Academy study expands the prior

analysis of environmental justice and recognizes the key role that states play in protecting public health and the environment.

In conducting this research, the Panel documented the ways that Indiana, Florida, New Jersey, and California are addressing environmental justice and how these efforts relate to their permitting programs. The Panel has then analyzed the states' programs using its four-element framework.

This study stresses setting goals, the need for achieving tangible and clear results, and fully integrating environmental justice principles into core state planning and permitting programs. Environmental justice raises basic issues about health, informed and meaningful public participation, the community's right-to-know, and fairness. A performance-based public administration is best suited to ensure that public health and environmental issues are appropriately addressed.

The seven-member Panel of Fellows that guided this study also prepared the Academy's first environmental justice report. The members provided analysis and insights and developed recommendations based on the extensive research conducted by the Academy's researchers over a six-month period. The researchers collected and reviewed available literature on the legal, administrative, and other aspects of environmental justice and related issues. They also conducted in-depth interviews with state and county officials, as well as with community and business representatives.

For the purpose of this study, the Panel relied on EPA's definition of environmental justice:

Environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, culture, education, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. *Fair treatment* means that no group of people, including racial, ethnic, or socioeconomic groups, should bear a disproportionate share of the negative consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal environmental programs and policies. *Meaningful involvement* means that: (1) potentially affected community residents have an appropriate opportunity to participate in decisions about a proposed activity that will affect their environment and/or health; (2) the public's contribution can influence the regulatory agency's decision; (3) the concerns of all participants involved will be considered in the decision-making process; and (4) the decision-makers seek out and facilitate the involvement of those potentially affected.<sup>3</sup>

Later this year, the Panel will prepare a third report, analyzing the impact of local land use and zoning practices on environmental justice problems. This study, which will be conducted with the International City and County Management Association, will research and document whether

local land use and zoning laws, policies, and practices can play a role in creating, addressing, or alleviating environmental justice concerns.

This report is organized in eight chapters. Chapter Two provides a brief description of the Panel's four-element framework used to analyze the state programs. Chapter Three summarizes various legal authorities for addressing environmental justice, based primarily on ELI's analysis of EPA's statutory authorities. Using the framework outlined in Chapter Two, Chapters Four, Five, Six, and Seven document and analyze the programs for Indiana, Florida, New Jersey, and California, respectively. Chapter Eight summarizes the lessons learned from the four state programs and sets forth the Panel's findings and recommendations.

## ENDNOTES

<sup>1</sup>Environmental Law Institute, *Opportunities for Advancing Environmental Justice: An Analysis of U.S. EPA Statutory Authorities* (November 2001).

<sup>2</sup>*Ibid.*

<sup>3</sup>Office of Environmental Justice, U.S. Environmental Protection Agency. *Guidance to Assessing and Addressing Allegations of Environmental Injustice, Working Draft* (January 10, 2001) 7.



## CHAPTER TWO

### FRAMEWORK FOR ANALYZING STATE PROGRAMS

In 2001, the Academy studied EPA's air, water, and waste permitting programs in response to a request from EPA's Office of Environmental Justice. The goal was to determine how environmental justice could be incorporated as a practical matter into EPA's primary permitting programs by improving the agency's approach to public administration. In December 2001, the Academy issued *Environmental Justice in EPA Permitting: Reducing Pollution in High-Risk Communities is Integral to the Agency's Mission*. In that study, the Academy emphasized, "reducing pollution burdens on the public is the heart of environmental justice concerns..."<sup>1</sup> and permits are one of the fundamental tools available for requiring pollution reductions.

In *The Regulatory Craft*, Malcolm Sparrow pointed out that the essential work of public administrators is "picking important problems and solving them."<sup>2</sup> Although the idea seems simple, government agencies tend to focus on completing tasks, not solving problems. For many years, EPA and state environmental agencies have focused on the number of permits issued, not whether environmental risks have been reduced.

Over the last several years, the Academy has urged EPA to focus on setting priorities and measuring results.<sup>3</sup> Implementing this performance-based approach to governance requires important, but often scarce, elements to be in place:

- strong leaders who are willing to single out problems that need to be solved
- clear performance and accountability measures that track progress in solving the problems
- innovative use of an agency's authority and procedures to get the job done
- a focus on priority setting and reducing risks
- better ways of working with all interested parties that can contribute to reducing pollution, especially in communities with high exposures to pollution<sup>4</sup>

The Academy's report on *Environmental Justice in EPA Permitting* examined how EPA could better address environmental justice through its permitting programs. At the same time, it recognized that EPA issues permits in only very limited circumstances because most are issued by states through their delegated programs. The Academy's recommendations focused on four key areas:

- **Leadership and Accountability:** In order to integrate environmental justice considerations into EPA's core mission, sustained leadership, clearer performance goals, improved outcome measures, stronger accountability mechanisms, and better training all are necessary.

## **FIGURE 2.1: DETAILED SUMMARY OF PANEL RECOMMENDATIONS**

### **Leadership**

- Clear and consistent message on environmental justice
- Expectation that environmental justice will be integrated into programs
- Expectation that environmental justice will be incorporated into strategic planning
- Responsibility for environmental justice vested with senior level management

### **Accountability**

- Measurable objectives
- Performance outcome and accountability measures
- Program evaluation processes
- Public reporting requirements

### **Permitting**

- New rules to address identified risks
- Permit writers provided with practical tools
- Environmental justice training for staff
- Enforcement targeted to high risk areas

### **Risk Reduction**

- Better monitoring and data collection
- High risk areas identified
- Cumulative risk analysis improved
- Clear risk reduction goals set

### **Public Participation**

- Better and earlier access to the permitting process
- Improved community access to data
- Improved communication with communities
- Encourage dialogue among communities, project proposers, and agencies
- Available and accessible technical assistance

- **Permitting Procedures:** EPA should make full use of its existing legal authorities to ensure that its permitting programs effectively address environmental justice concerns. Also, it should provide simple tools that enable permit writers to identify and address pollution exposures in high-risk communities, expand monitoring to provide permit writers with better information, and focus more enforcement resources on communities that are disproportionately impacted by pollution.
- **Priority Setting:** EPA and other appropriate agencies should identify high-risk communities and prioritize them for pollution reduction efforts using various tools, including the permitting process.
- **Public Participation:** Because public participation is a critical element in determining appropriate permit conditions, EPA should devote more resources to encourage involvement by historically under-represented groups and create new opportunities for them to participate earlier in the permitting process.<sup>5</sup>

Figure 2.1 details these recommendations for EPA.

The Panel for this study believes that many of the approaches recommended for EPA are appropriate for state environmental justice programs. Yet, state environmental justice programs vary widely. Most do not address all of the Panel's suggested elements of a fully developed environmental justice program as set out above. However, the framework is useful for reviewing what the states have accomplished and what additional opportunities they may have to address environmental justice.

## ENDNOTES

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<sup>1</sup> National Academy of Public Administration, *Environmental Justice in EPA Permitting: Reducing Pollution in High-Risk Communities is Integral to the Agency's Mission* (December 2001) 15.

<sup>2</sup> Malcolm K. Sparrow, *The Regulatory Craft: Controlling Risks, Solving Problems, and Managing Compliance* (Brookings Institute Press: 2000) 132.

<sup>3</sup> National Academy of Public Administration, *Setting Priorities, Getting Results: A New Direction for EPA* (1995); National Academy of Public Administration, *Environment.gov: Transforming Environmental Protection for the 21<sup>st</sup> Century* (November 2000).

<sup>4</sup> See generally, *The Regulatory Craft*. 123-170.

<sup>5</sup> *Environmental Justice in EPA Permitting*, *supra*, at v-vi.

## CHAPTER THREE

### LEGAL AUTHORITIES TO ADDRESS ENVIRONMENTAL JUSTICE

Numerous reports and articles have analyzed whether federal law directs or authorizes federal agencies to address environmental justice. To compile much of this legal analysis into a coherent and centralized starting point for further inquiry, the Environmental Law Institute (ELI), at the request of EPA's Office of Environmental Justice, prepared *Opportunities for Advancing Environmental Justice: An Analysis of U.S. EPA Statutory Authorities*, issued in November 2001.<sup>1</sup> This seminal report identified "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."<sup>2</sup> ELI reviewed the principal environmental laws administered by EPA because the agency is "the central government office in the U.S. charged with protecting public health and the environment ... [with] jurisdiction over many of the core issues, especially the prevention and control of industrial pollution, that have given rise to the environmental justice movement."<sup>3</sup>

ELI measured federal statutory authorities administered by EPA against three goals frequently articulated as mechanisms for addressing environmental justice problems:

1. **Identifying fully the impacts of agency actions on people-of-color and low-income communities.** In addition to analyzing water, air, and land pollution, a comprehensive impact analysis might consider cumulative and synergistic impacts; heightened risks to sensitive populations (e.g., asthmatics); unique exposure pathways associated with cultural or social practices or economic circumstances; quality of life impairments due to noise, odor, and traffic; and economic impacts such as reduced property values, lost wages, and medical bills.
2. **Making agency decisions aimed at remedying and preventing disproportionate impacts.** This would encompass the full range of agency actions affecting individual communities: standard-setting, permitting, enforcement, research, monitoring, reporting, and financial assistance decisions.
3. **Ensuring affected communities have meaningful input in environmental decision-making.** This would entail consulting with affected communities "early and often" to obtain guidance on identifying impacts, making decisions, and implementing environmental programs.<sup>4</sup>

ELI concluded that EPA has "substantial and wide-ranging powers to pursue environmental justice,"<sup>5</sup> even in situations where consideration of these problems is "not directly compelled by the underlying statutes."<sup>6</sup> The report found four principal sources of EPA's general legal authority for addressing environmental justice:

- National Environmental Policy Act (NEPA)<sup>7</sup>
- Title VI of the Civil Rights Act<sup>8</sup>
- Executive Order 12898<sup>9</sup>
- general discretion of an administrative agency

In addition, the report identified relevant authorities and opportunities for addressing environmental justice in nine media-specific federal statutes, which collectively "encompass most of EPA's mandate to protect public health and the environment."<sup>10</sup> They are as follows:

- Federal Water Pollution Control Act (Clean Water Act)<sup>11</sup>
- Clean Air Act<sup>12</sup>
- Resource Conservation and Recovery Act (RCRA)<sup>13</sup>
- Comprehensive Environmental Response, Compensation, and Liability Act (Superfund)<sup>14</sup>
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)<sup>15</sup>
- Federal Food, Drug, and Cosmetic Act<sup>16</sup>
- Safe Drinking Water Act<sup>17</sup>
- Toxic Substances Control Act (TSCA)<sup>18</sup>
- Emergency Planning and Community Right-to-Know Act (EPCRA)<sup>19</sup>

Similarly, state authority to address environmental justice issues derives from a parallel combination of state-adopted statutory and administrative requirements, as well as from relevant provisions under applicable state constitutions. Indeed, many state environmental laws, rules, and policies contain provisions derived from, modeled upon, or adopted in response to federal environmental laws, regulations, policies, and guidance. Consequently, the analysis contained in ELI's report suggested the need for states to review their numerous similar legal authorities.

Only two of the states examined for this study — California and Florida — have enacted laws specifically designed to address environmental justice. However, these states laws do not fully integrate environmental justice concerns into its core environmental programs.

Academy researchers conducted a cursory search for potential sources of state legal authorities akin to general ones identified in ELI's report: NEPA, Title VI, Executive Order 12898, general administrative law, Clean Water Act, Clean Air Act, and Resource Conservation and Recovery Act. These seven sources of legal authority merit close examination by state environmental agencies because they could strengthen the agencies' application of state law to address pollution problems in people-of-color or low-income communities.

## **NATIONAL ENVIRONMENTAL POLICY ACT**

ELI found NEPA to be a promising tool for EPA and other agencies in addressing environmental justice. It determined, "NEPA creates opportunities for federal agencies to

incorporate consideration of environmental justice into a vast range of their decision-making processes." <sup>20</sup>

Sixteen states, the District of Columbia, and Puerto Rico have environmental policy acts or "little NEPAs." Other states have limited environmental review requirements established by statute, executive order, or other administrative directives.<sup>21</sup> To the extent that these state statutes or authorities resemble federal provisions, they may provide comparable legal authority for individual states to incorporate environmental justice concerns into agency decision-making. Other legal authorities that fall into any of the three broad categories below may be especially important:

1. provisions that authorize or direct agencies to analyze a broad range of potential impacts from agency decisions
2. provisions designed to ensure meaningful involvement of affected communities in agency decisions
3. provisions that entrust an agency with oversight of decisions by other state or local agencies

### **Analyzing a Broad Range of Impacts**

The first authority, authorizing or directing state agencies to analyze a broad range of impacts, may include language that:

- seeks to protect the health, safety, or environment of all individuals
- requires an impact analysis to be performed
- addresses a broad range of impacts, including social, economic, aesthetic, or quality of life
- considers a multiplicity of stresses, including multiple, cumulative, or synergistic exposures
- encourages a precautionary approach to protection of public health, safety, and/or the environment
- cautions against environmental degradation, risks to health and safety, or other undesirable or unintended consequences
- requires identification or consideration of alternative courses of action
- recommends an interdisciplinary approach
- establishes the state or a state agency as a trustee of the environment<sup>22</sup>

EPA has interpreted NEPA language to warrant consideration of environmental justice issues:

"In 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.'"<sup>23</sup>

The Council on Environmental Quality (CEQ), which oversees the federal government's compliance with NEPA, has used comparable language in NEPA as the basis for guidance urging federal agencies to incorporate environmental justice into the NEPA process:

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.

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.

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.<sup>24</sup>

As a matter of administrative practice, some appeal boards have reversed or remanded federal agency decisions for failure to interpret comparable language in NEPA as requiring consideration of environmental justice issues.<sup>25</sup>

### **Meaningful Community Involvement in Decision-Making**

The second type of authority, designed to ensure meaningful involvement of affected communities in state decisions, may direct agencies to:

- provide public notice of hearings, meetings, or permits, or about the availability of environmental documents
- hold public hearings or meetings
- solicit public comment or information
- explain where the public can obtain information, reports, or other documents
- make materials available to the public

EPA and CEQ have interpreted similar provisions in NEPA to require that federal agencies must encourage active community participation in environmental decision-making. In addition, they have encouraged federal agencies to overcome some of the potential challenges to



community involvement, such as language barriers and difficulty in understanding scientifically or technically complex issues.<sup>26</sup>

### **Effective Environmental Oversight**

Some provisions of state law may entrust one state agency with oversight for decisions or the activities of other state or local agencies. They may include language directing an agency to plan with another agency or to review; approve; comment on; evaluate; analyze; study; or report on the actions of another agency.

Such requirements may provide an opportunity for an oversight agency to address environmental justice by directing it to determine whether another agency's proposed action is satisfactory from the standpoint of public health, welfare, or the environment or complies with other applicable laws (including civil rights laws). ELI found that comparable language in the federal Clean Air Act, requiring EPA to review the proposed actions of other federal agencies, represents an important mechanism for promoting environmental justice.<sup>27</sup>

### **TITLE VI**

Title VI of the Civil Rights Act of 1964<sup>28</sup> prohibits discrimination on the basis of race, color, or national origin in all programs or activities that receive federal funding. As many state environmental programs are at least partly funded by EPA, Title VI directly relates state obligations to eliminate discrimination when administering programs to protect the environment and public health.

ELI did not examine the scope of EPA's responsibility under Title VI beyond noting that the statute provides "another potential source of authority to promote environmental justice."<sup>29</sup> Nonetheless, EPA has published two draft Title VI guidance documents<sup>30</sup> — as well as a report on the future direction of federal, state, and local environmental justice programs<sup>31</sup> — that are a starting point for states to analyze their legal obligations for implementing Title VI.

### **EXECUTIVE ORDER 12898**

Executive Order 12898, issued in 1994, 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 and low-income populations."<sup>32</sup> Although not a statute, the executive order commits the federal executive branch, including EPA, to use its discretion to further environmental justice goals "(t)o the greatest extent practicable and permitted by law."<sup>33</sup> As federal agencies gain experience implementing the executive order, its application to specific federal programs may assist states in interpreting similar provisions of state environmental law. Responding in part to the executive order, at least one state in this study — New Jersey — has drafted a proposed rule aimed at expanding opportunities for people-of-color and low-income communities to participate in environmental permitting.<sup>34</sup>

## GENERAL DISCRETION OF AN ADMINISTRATIVE AGENCY

ELI found that EPA may have the authority to respond creatively to the environmental concerns of people-of-color and low-income communities, even in the absence of statutory language that explicitly mentions or compels EPA to address environmental justice:

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.<sup>35</sup>

Environmental statutes typically grant freedom for EPA to choose among possible courses of action, including issuing regulations, or taking other actions it deems necessary to carry out its functions under federal statutes.<sup>36</sup> In conjunction with more specific statutory objectives and programs, these provisions afford EPA "substantial and wide-ranging powers to pursue environmental justice."<sup>37</sup> States with laws modeled upon federal environmental or administrative statutes may possess similar discretionary authority.

## FEDERAL WATER POLLUTION CONTROL ACT

The Federal Water Pollution Control Act — commonly referred to as the Clean Water Act<sup>38</sup> — establishes a federal-state partnership to restore and maintain the nation's waters. EPA retains a leadership role for specific standard-setting and oversight activities, but the Clean Water Act recognizes "the primary responsibilities and rights of states"<sup>39</sup> to initiate and implement water pollution controls. Specifically, states have lead responsibility for:

- planning the development, use, restoration, preservation, and enhancement of land and water resources<sup>40</sup>
- providing for, encouraging, and assisting public participation in every aspect of the state program<sup>41</sup>
- consulting with EPA on how to exercise state authority under the act<sup>42</sup>

ELI identified several of the Clean Water Act's most important standard-setting activities, carried out by federal and state agencies, as opportunities to address environmental justice.<sup>43</sup> Those activities, largely the province of EPA, include identifying or listing toxic pollutants that warrant control and setting a variety of minimum pollution control requirements, such as technology-based effluent limits for major industries, effluent limits for toxics, and disposal standards for sewage sludge. Even in these contexts, states retain authority to address additional toxic pollutants or to set more stringent standards for federally regulated pollutants if they so choose.<sup>44</sup> States seeking to utilize this authority may find ELI's discussion of underlying concepts in the federal law — "public health," "toxic pollutants" and "margin of safety" — useful in addressing environmental justice.<sup>45</sup>

Other key standard-setting obligations under the Clean Water Act belong, at least in the first instance, to the states. They include:

- designating the desired "uses" for state waters<sup>46</sup>
- developing water quality criteria to protect those uses<sup>47</sup>
- establishing acceptable pollutant loads — total maximum daily loads — for waters that cannot be adequately cleaned by technology-based effluent limits alone<sup>48</sup>
- creating individual control strategies for impaired waters<sup>49</sup>
- setting public participation requirements for state programs<sup>50</sup>

ELI found that these state-initiated activities provide opportunities to address environmental justice by obtaining and considering data on disproportionate impacts, sensitive populations, higher exposure rates (e.g., among subsistence or traditional fishers), or bioaccumulation due to a geographic concentration of pollutant sources, or by fashioning ways to involve affected low-income communities in state decisions about water standards.<sup>51</sup>

Once standards are set, the water discharge permit is the vehicle for applying them and other Clean Water Act objectives to individual pollutant sources.<sup>52</sup> Here again, states play a lead role, and 44 states and one territory have received delegated authority from EPA to write the discharge permits for their industries. ELI found that permit-writers have broad discretion to impose site-specific conditions that address environmental justice concerns related to water pollution.<sup>53</sup> These conditions might address aggregate risks, account for higher fish consumption in certain communities, require a wide array of reporting and monitoring, or build community enforcement capacities.

States also have the option to increase their water permitting efforts based on sources of concern in low-income or people-of-color communities. As an example, ELI cites animal feeding operations, which are often located in low-income, rural, or tribal communities.<sup>54</sup> EPA regulations require concentrated animal feeding operations over a certain size to obtain a water permit, but states may designate additional facilities for permitting if they determine that the facilities are "a significant contributor of pollutants to the waters of the United States."<sup>55</sup>

Few states have delegation to write dredge-and-fill permits,<sup>56</sup> but those that do have the capacity to address environmental justice in ways that ELI identified for EPA-administered programs.<sup>57</sup> For example, they may address cumulative or disproportionate impacts, consider siting alternatives, or write permit conditions on dredging permits to remedy environmental justice problems.

State and federal agencies share enforcement responsibility under the Clean Water Act. Although ELI did not directly address state enforcement powers, its analysis suggests numerous ways that states could use their enforcement tools to advance environmental justice. For example, ELI found that the Clean Water Act, like other federal statutes, gives broad discretion to EPA to address environmental justice through enforcement decisions:<sup>58</sup>

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.<sup>59</sup>

Enforcement decisions that present opportunities to address environmental justice include EPA's power to identify and target problem facilities, conduct inspections to determine compliance, and set priorities for enforcement actions. EPA decides on the type of sanction (civil or criminal) to be applied to violators, and in determining the relief to seek, EPA considers the gravity of the offense and can adjust the size of the penalty or allow for compensatory or restorative sanctions. EPA can involve the community in enforcement efforts by notifying the public about an action, providing access to inspection reports and analytical data, giving the public a preview of settlement proposals, and providing an opportunity for comment on proposed settlement agreements.<sup>60</sup> If a situation presents an imminent and substantial danger to public health because of exposures to dangerous levels of one or a combination of pollutants, EPA can also take emergency action to protect a disadvantaged community.<sup>61</sup>

The Clean Water Act allows state permit programs the same powers as EPA to inspect, monitor, enter, and require reports from permitted facilities as outlined in federal law,<sup>62</sup> and to abate violations through civil and criminal penalties and other means of enforcement.<sup>63</sup> As a result, states may find the same discretionary opportunities to address environmental justice by exercising state enforcement authorities.

ELI found that EPA could use many of the Clean Water Act's grant programs to help ensure that environmental justice receives priority attention.<sup>64</sup> EPA's research and development grants<sup>65</sup> for both general purposes and for research on sewage sludge<sup>66</sup> can support environmental justice. More importantly, EPA awards grants to states for implementing various water quality programs<sup>67</sup> including permitting and enforcement and controlling nonpoint source pollution,<sup>68</sup> and states can choose to use these resources for their own priority needs, including environmental justice.

## THE CLEAN AIR ACT

The Clean Air Act<sup>69</sup> is based on the premise that "the predominant part of the nation's population is located in its rapidly expanding metropolitan and other urban areas."<sup>70</sup> As ELI noted, those areas are home to disproportionate numbers of people who live in low-income and/or people-of-color communities.<sup>71</sup> Congress found that urban growth "has resulted in mounting dangers to the public health and welfare,"<sup>72</sup> dangers well documented in the scientific literature. ELI summarized the implications for environmental justice as: "exposure to air pollution [that] 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."<sup>73</sup>

The Clean Air Act is the primary federal statute designed to promote public health and welfare by preventing and controlling air pollution. As with the Clean Water Act, the Clean Air Act envisions a federal-state partnership to protect and enhance the nation's air resources. EPA bears responsibility for setting and overseeing implementation of minimum national air pollution standards, including the national ambient air quality standards, new source performance standards (including standards for new solid waste incinerators), national emission standards for hazardous air pollutants, mobile source standards, and urban area source requirements. States are free to adopt more stringent state standards<sup>74</sup> or to petition EPA for additional ones.<sup>75</sup> To the extent that state laws have provisions similar to those in the federal act, states may have the same authority that ELI identified in the federal act to consider pollutant interactions; cumulative and synergistic impacts; sensitive populations; unique exposure pathways; protection of communities that are dependent upon or ecosystems that support subsistence hunting or fishing; adverse effects on public welfare resulting from noise, increased traffic, or psychological stress; and margins of safety to resolve scientific or factual uncertainty in favor of protecting potentially affected communities.<sup>76</sup>

Under the Clean Air Act, air pollution prevention and control are "the primary responsibility of states and local governments."<sup>77</sup> States develop State Implementation Plans (SIPs)<sup>78</sup> to attain and maintain the national ambient air quality standards. The SIP process gives states an ongoing opportunity to address the full range of air pollution impacts on people-of-color and low-income communities; make pertinent air quality and emission information available to communities; provide a meaningful forum for community involvement in government decision-making; and ensure compliance with all applicable federal laws, including Title VI of the Civil Rights Act.<sup>79</sup>

States also issue permits generally to individual sources of air pollution, including recently implemented Title V operating permits.<sup>80</sup> Title V combines into one permit all requirements for new source review,<sup>81</sup> prevention of significant deterioration,<sup>82</sup> non-attainment area improvements,<sup>83</sup> control of hazardous air pollutants,<sup>84</sup> and acid deposition control.<sup>85</sup> This unified permit creates opportunities for states to write permit conditions that address a wide range of adverse impacts from all types of pollution, generate or disseminate valuable information to community organizations or local enforcement authorities (such as fire departments), and increase community capacity to oversee compliance.<sup>86</sup>

In addition to an air enforcement program,<sup>87</sup> states must have "adequate personnel, funding, and authority"<sup>88</sup> to carry out their SIPs, including authority comparable to EPA's to take emergency action to protect communities from imminent and substantial endangerment to public health, welfare, or the environment.<sup>89</sup> ELI found that the Clean Air Act's enforcement provisions gave EPA broad discretion to address environmental justice;<sup>90</sup> similar state air enforcement provisions may convey the same discretion to state agencies.

The Clean Air Act also empowers EPA to make planning and program grants available to states.<sup>91</sup> ELI suggests that EPA could use grant conditions as a way to get states to consider cumulative impacts and demographics in carrying out the air program. By implication, states could urge EPA to administer the grants with this emphasis.<sup>92</sup> The Clean Air Act further requires EPA to "encourage, cooperate with, and render technical services and provide financial assistance" to, among others, "public or private agencies, institutions, and organizations and individuals" interested in the prevention or control of air pollution.<sup>93</sup> Community organizations or their representatives could use this aid to collect information, analyze test results, purchase air monitoring equipment, or otherwise plan for controlling and reducing air pollution.<sup>94</sup> Although EPA is responsible for administering these grants, states could assist community groups or individuals in applying for and obtaining such assistance.

## RESOURCE CONSERVATION AND RECOVERY ACT

The Resource Conservation and Recovery Act (RCRA)<sup>95</sup> is the primary federal law governing the management and disposal of waste, both hazardous and solid. The statute reflects Congress' determinations 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,"<sup>96</sup> and that population concentrations in metropolitan and urban areas present these communities with "serious financial, management, intergovernmental, and technical problems" in waste disposal.<sup>97</sup> Because many disposal facilities tend to be located in low-income or people-of-color communities, it is important to examine RCRA and its state counterparts for their potential to address environmental justice concerns.

As with the federal Clean Water and Clean Air Acts, RCRA is intended to establish "a viable federal-state partnership."<sup>98</sup> Congress envisioned that "the collection and disposal of solid wastes should continue to be primarily the function of state, regional, and local agencies,"<sup>99</sup> with EPA providing technical and financial assistance and certain regulatory guidelines.

RCRA establishes separate regulatory schemes for hazardous and non-hazardous wastes. For hazardous wastes, EPA bears the primary burden of developing regulations. It must identify the wastes deemed "hazardous" and publish minimum pollution control requirements for generators; transporters; and treatment, storage, and disposal facilities. States may impose more stringent requirements, including requirements pertaining to site selection.<sup>100</sup> However, courts have held that states must refrain from adopting additional requirements that unduly burden interstate commerce.<sup>101</sup>

In any case, states play an important role in implementing RCRA. Most have EPA approval to administer some or all of the RCRA program.<sup>102</sup> To obtain approval, a state program must be "equivalent to" and "consistent with" federal requirements,<sup>103</sup> providing public access to information about treatment facilities and sites and about storage and disposal of hazardous waste "in substantially the same manner, and to the same degree" as if EPA were administering the program.<sup>104</sup> ELI found that RCRA requirements offer "visible and immediate opportunities for addressing environmental justice."<sup>105</sup> For example, permit writers

can rely on RCRA's omnibus authority over treatment, storage, and disposal facilities to draft permit conditions that are "necessary to protect human health and the environment."<sup>106</sup> ELI viewed this provision as authorizing consideration of sensitive populations, unique exposure pathways, risk aggregation, and a "wide range of environmental justice measures."<sup>107</sup>

Likewise, applicants for state-issued land disposal permits must provide important information about potential releases, such as "reasonably foreseeable potential releases from both normal operations and accidents," "the potential pathways of human exposure," and "the potential magnitude and nature of the human exposure."<sup>108</sup> With EPA concurrence, states also may request the federal Agency for Toxic Substances and Disease Registry to conduct a health assessment whenever a landfill or surface impoundment "poses a substantial risk to human health" due to the existence of releases, the magnitude of potential contamination, or the extent of human exposure.<sup>109</sup> Such health assessments must account for multiple – indeed, all – contamination sources, multiple human exposure pathways "including ground or surface water contamination, air emissions, and food chain contamination," and the "potential susceptibility" of the affected community, among other factors.<sup>110</sup> ELI notes that this information is "precisely the kind of data environmental justice advocates often seek."<sup>111</sup>

Under RCRA, states have an even greater role with respect to management of non-hazardous, solid waste. This authority has important implications for environmental justice because solid waste constitutes the greatest volume of wastes, and because the program governs some wastes that may, in fact, be quite hazardous, such as hazardous household wastes or those from small quantity generators.<sup>112</sup> RCRA requires states to develop and implement a solid waste management plan, as well as a permit or other approval program for each solid waste management facility that receives hazardous waste from households or small quantity generators.<sup>113</sup> States with approved plans become eligible for federal financial assistance.<sup>114</sup> States have considerable leeway with respect to the content of such plans and programs, but ELI suggests that EPA may impose conditions on its financial assistance that require state attention to environmental justice concerns.<sup>115</sup>

RCRA also affords EPA "extensive enforcement powers."<sup>116</sup> These include administrative, civil, and criminal sanctions;<sup>117</sup> emergency authority for imminent and substantial endangerment to health or the environment;<sup>118</sup> and authority to mandate other corrective action.<sup>119</sup> ELI found that many of these tools provide opportunities to address environmental justice.<sup>120</sup> Hence, states with RCRA delegation or equivalent waste programs will have similar opportunities.

## ENDNOTES

- <sup>1</sup> Christine Todd Whitman, Administrator, U.S. EPA, Memorandum, *EPA's Commitment to Environmental Justice* (August 9, 2001); U.S. EPA Office of General Counsel, Memorandum, *EPA Statutory and Regulatory Authorities Under Which Environmental Justice Issues May Be Addressed in Permitting*, (December, 2000); Report of the National Environmental Justice Advisory Council, *Environmental Justice in the Permitting Process*, (July 2000); Richard Lazarus and Stephanie Tai, "Integrating Environmental Justice Into EPA Permitting Authority," *Ecology Law Quarterly* (1999) 26: 617; U.S. EPA, *The Environmental Protection Agency's Environmental Justice Strategy* (April 3, 1995); and Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (February 11, 1994).
- <sup>2</sup> Environmental Law Institute, *Opportunities for Advancing Environmental Justice: An Analysis of U.S. EPA Statutory Authorities* (November 2001) ii, hereafter, *Opportunities for Advancing Environmental Justice*.
- <sup>3</sup> *Ibid.*, i.
- <sup>4</sup> *Id.*, iii-iv.
- <sup>5</sup> *Id.*, 3. See also *id.*, 67.
- <sup>6</sup> *Id.* at 1.
- <sup>7</sup> 42 U.S.C. Sections 4321-4347.
- <sup>8</sup> 42 U.S.C. Section 2000d to 2000d-7; see also 40 C.F.R. Part 7.
- <sup>9</sup> *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, (February 11, 1994).
- <sup>10</sup> *Opportunities for Advancing Environmental Justice*, iv.
- <sup>11</sup> 33 U.S.C. Sections 1251-1387.
- <sup>12</sup> 42 U.S.C. Sections 7401-7671q.
- <sup>13</sup> 42 U.S.C. Sections 6901 et seq.
- <sup>14</sup> 42 U.S.C. Sections 9601-9675.
- <sup>15</sup> 7 U.S.C. Sections 136-136y.
- <sup>16</sup> 21 U.S.C. Sections 301-397.
- <sup>17</sup> 42 U.S.C. Sections 300f-300j-26.
- <sup>18</sup> 15 U.S.C. Sections 2601-2692.
- <sup>19</sup> 42 U.S.C. Sections 11001-11050.
- <sup>20</sup> "Opportunities for Advancing Environmental Justice," 67.
- <sup>21</sup> Nicholas C. Yost, *NEPA Desk Book: 2<sup>nd</sup> Edition* (Environmental Law Institute: Washington, DC, 1995) 42-43.
- <sup>22</sup> Compare Section 101 and 102(2)(C) of NEPA, 42 U.S.C. Section 4331(a) and 4332(2)(C) and *Opportunities for Advancing Environmental Justice: An Analysis of U.S. EPA Statutory Authorities*, 67-85.
- <sup>23</sup> Christine Todd Whitman, Administrator, U.S. EPA, Memorandum, *EPA's Commitment to Environmental Justice* (Aug. 9, 2001); see also U.S. EPA Office of Federal Activities, *Final Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analyses* (April, 1998) available at [www.es.epa.gov/oeca/ofa/ejepa.html](http://www.es.epa.gov/oeca/ofa/ejepa.html) (last visited Nov. 9, 2001).
- <sup>24</sup> Council on Environmental Quality, *Environmental Justice Guidance under the National Environmental Policy Act* (Dec. 10, 1997) available at [www.ceq.eh.doe.gov/nepa/regs/ej/ej.pdf](http://www.ceq.eh.doe.gov/nepa/regs/ej/ej.pdf) (last visited Nov. 13, 2001).
- <sup>25</sup> See, e.g., *In Re Louisiana Energy Services*, 47 N.R.C. 77(1998) (Atomic Safety and Licensing Board) and *Southern Utah Wilderness Alliance*, 150 I.B.L.A. 158 (1999) (Bureau of Land Management).
- <sup>26</sup> See, e.g., U.S. EPA Office of Federal Activities, *Final Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analyses* (April, 1998) available at [www.es.epa.gov/oeca/ofa/ejepa.html](http://www.es.epa.gov/oeca/ofa/ejepa.html) (last visited Nov. 9, 2001) and Council on Environmental Quality, *Environmental Justice Guidance under the National Environmental Policy Act* (Dec. 10, 1997) available at [www.ceq.eh.doe.gov/nepa/regs/ej/ej.pdf](http://www.ceq.eh.doe.gov/nepa/regs/ej/ej.pdf) (last visited Nov. 13, 2001). See also, *Opportunities for Advancing Environmental Justice*, 67-73 and 79.
- <sup>27</sup> Section 309(a) of the Federal Clean Air Act, 42 U.S.C. Section 7609(a) and *Opportunities for Advancing Environmental Justice*, 81-85.
- <sup>28</sup> 42 U.S.C. Section 2000d to 2000d-7; see also 40 C.F.R. Part 7.
- <sup>29</sup> *Opportunities for Advancing Environmental Justice*, 2.



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- <sup>30</sup> U.S. EPA, *Draft Title VI Guidance for EPA Assistance Recipients Administering Environmental Permitting Programs* (Draft Recipient Guidance) and *Draft Revised Guidance for Investigating Title VI Administrative Complaints Challenging Permits* (Draft Revised Investigation Guidance). 65 *Fed. Reg.* 39650 *et seq.* (June 27, 2000).
- <sup>31</sup> U.S. EPA 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*, EPA Pub. 100-R-99-004 (April, 1999).
- <sup>32</sup> *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (February 11, 1994) Section 1-101.
- <sup>33</sup> *Ibid.*
- <sup>34</sup> 34 N.J.R. 665-675 available at [www.state.nj.us/dep/equity/eerule.pdf](http://www.state.nj.us/dep/equity/eerule.pdf).
- <sup>35</sup> *Opportunities for Advancing Environmental Justice*, 2.
- <sup>36</sup> *Ibid.*, 1-5.
- <sup>37</sup> *Id.*, 3.
- <sup>38</sup> 33 U.S.C. Sections 1251-1387.
- <sup>39</sup> Section 101((b), 33 U.S.C. Section 1251(b).
- <sup>40</sup> *Ibid.*
- <sup>41</sup> Section 101(e), 33 U.S.C. Section 1251(e).
- <sup>42</sup> Section 101(b), 33 U.S.C. Section 1251(b).
- <sup>43</sup> *Opportunities for Advancing Environmental Justice*, 88-95.
- <sup>44</sup> Section 510, 33 U.S.C. Section 1370.
- <sup>45</sup> *Opportunities for Advancing Environmental Justice*, 87-95.
- <sup>46</sup> Section 303(c), 33 U.S.C. Section 1313(c).
- <sup>47</sup> *Ibid.*
- <sup>48</sup> Section 303(d), 33 U.S.C. Section 1313(d).
- <sup>49</sup> Section 304(l), 33 U.S.C. 1314(l).
- <sup>50</sup> Section 101(e), 33 U.S.C. Section 1251(e).
- <sup>51</sup> *Opportunities for Advancing Environmental Justice*, 87-95.
- <sup>52</sup> Section 402, 33 U.S.C. Section 1342.
- <sup>53</sup> *Opportunities for Advancing Environmental Justice*, 95-97.
- <sup>54</sup> *Ibid.*, 97-98.
- <sup>55</sup> 40 C.F.R. 122.23 and App. B.
- <sup>56</sup> Section 404, 33 U.S.C. Section 1343.
- <sup>57</sup> *Opportunities for Advancing Environmental Justice*, 98-99.
- <sup>58</sup> *Ibid.*, 27-37 and 101-102.
- <sup>59</sup> *Id.*, 27.
- <sup>60</sup> *Opportunities for Advancing Environmental Justice*, 27-37 and 101-102.
- <sup>61</sup> Section 504, 33 U.S.C. 1364.
- <sup>62</sup> Section 402(b)(2)(B), 33 U.S.C. Section 1342(b)(2)(B).
- <sup>63</sup> Section 402(b)(7), 33 U.S.C. Section 1342(b)(7).
- <sup>64</sup> *Opportunities for Advancing Environmental Justice*, 104.
- <sup>65</sup> Section 105, 33 U.S.C. 1255.
- <sup>66</sup> Section 405(g), 33 U.S.C. 1345(g).
- <sup>67</sup> Section 106, 33 U.S.C. 1256.
- <sup>68</sup> Section 319(h), 33 U.S.C. 1329(h).
- <sup>69</sup> 42 U.S.C. Sections 7401-7671q.
- <sup>70</sup> Section 101(a)(1), 42 U.S.C. 7401(a)(1).
- <sup>71</sup> *Opportunities for Advancing Environmental Justice*, 105.
- <sup>72</sup> Section 101(a)(2), 42 U.S.C. 7401(a)(2).
- <sup>73</sup> *Opportunities for Advancing Environmental Justice*, 105.
- <sup>74</sup> Section 116, 42 U.S.C. Section 7416.
- <sup>75</sup> See, e.g., Section 111(g), 42 U.S.C. Section 7411(g); Section 112(b)(3), 42 U.S.C. Section 7412(b)(3); and Section 302(e), 42 U.S.C. 7602(e). See also Section 126(b), 42 U.S.C. Section 7426(b).

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- <sup>76</sup> *Opportunities for Advancing Environmental Justice*, 105-116.  
<sup>77</sup> Section 101(a)(3), 42 U.S.C. Section 7401(a)(3).  
<sup>78</sup> Section 110, 42 U.S.C. Section 7410.  
<sup>79</sup> *Opportunities for Advancing Environmental Justice*, 121-123.  
<sup>80</sup> Sections 501 - 507, 42 U.S.C. Sections 7661 - 7661f.  
<sup>81</sup> Sections 110(a)(2)(C) and 173(a)(5), 42 U.S.C. Sections 7410(a)(2)(C) and 7503(a)(5).  
<sup>82</sup> Sections 160-169, 42 U.S.C. Sections 7470-7479.  
<sup>83</sup> Sections 171-193, 42 U.S.C. Sections 7501-7515.  
<sup>84</sup> Section 112, 42 U.S.C. Section 7412.  
<sup>85</sup> Sections 401-416, 42 U.S.C. Sections 7641-7651o.  
<sup>86</sup> *Opportunities for Advancing Environmental Justice*, 116-121.  
<sup>87</sup> Section 110(a)(2)(C), 42 U.S.C. Section 7410(a)(2)(C).  
<sup>88</sup> Section 110(a)(2)(E), 42 U.S.C. Section 7410(a)(2)(E).  
<sup>89</sup> Section 110(a)(2)(G), 42 U.S.C. Section 7410(a)(2)(G).  
<sup>90</sup> *Opportunities for Advancing Environmental Justice*, 27-37 and 123-124.  
<sup>91</sup> Section 105, 42 U.S.C. Section 7405.  
<sup>92</sup> *Opportunities for Advancing Environmental Justice*, 128-129.  
<sup>93</sup> Section 103(a)(2), 42 U.S.C. Section 7403(a)(2).  
<sup>94</sup> *Opportunities for Advancing Environmental Justice*, 128.  
<sup>95</sup> 42 U.S.C. Sections 6901 *et seq.*  
<sup>96</sup> Section 1001(b)(2), 42 U.S.C. Section 6901(b)(2).  
<sup>97</sup> Section 1001(a)(3), 42 U.S.C. Section 6901(a)(3).  
<sup>98</sup> Section 1003(a)(7); 42 U.S.C. Section 6902(a)(7).  
<sup>99</sup> Section 1001(a)(4), 42 U.S.C. Section 6901(a)(4).  
<sup>100</sup> Section 3009, 42 U.S.C. Section 6929.  
<sup>101</sup> *Opportunities for Advancing Environmental Justice*, 141.  
<sup>102</sup> *Ibid.*  
<sup>103</sup> Section 3006(b), 42 U.S.C. Section 6926(b).  
<sup>104</sup> Section 3006(f), 42 U.S.C. Section 6926(f).  
<sup>105</sup> *Opportunities for Advancing Environmental Justice*, 138.  
<sup>106</sup> Section 3005(c)(3), 42 U.S.C. Section 6925(c)(3).  
<sup>107</sup> *Opportunities for Advancing Environmental Justice*, 138-139.  
<sup>108</sup> Section 3019(a), 42 U.S.C. Section 6939a(a).  
<sup>109</sup> Section 3019(b), 42 U.S.C. Section 6939a(b).  
<sup>110</sup> Section 3019(f), 42 U.S.C. Section 6939a(f).  
<sup>111</sup> *Opportunities for Advancing Environmental Justice*, 139.  
<sup>112</sup> *Ibid.*, 136.  
<sup>113</sup> Sections 4005 and 4006, 42 U.S.C. Sections 6945 and 6946.  
<sup>114</sup> Section 4007, 42 U.S.C. Section 6947.  
<sup>115</sup> *Opportunities for Advancing Environmental Justice*, 142, 146-147.  
<sup>116</sup> *Ibid.* at 142. See also *id.* at 143-146.  
<sup>117</sup> Section 3008, 42 U.S.C. Section 6928.  
<sup>118</sup> Section 7003, 42 U.S.C. Section 6973.  
<sup>119</sup> Section 3004, 42 U.S.C. Section 6924.  
<sup>120</sup> *Opportunities for Advancing Environmental Justice*, 142-146.

## CHAPTER FOUR

### INDIANA

#### FINDINGS

**Finding 1:** The Indiana Department of Environmental Management (IDEM) has initiated numerous activities to address environmental justice and public participation, including a strategic plan, guidance, training, and education. Members of the public have viewed these efforts as important and useful, but would like to see more emphasis on improvements associated with permitting, including the reduction of cumulative impacts and exposures to pollution.

**Finding 2:** IDEM's new compliance/enforcement planning process has begun to integrate environmental justice concerns into the department's core programs by including toxic hot spots and areas of concern as factors for focusing its compliance/enforcement efforts.

#### BACKGROUND

According to the 2000 Census, Indiana is a medium-sized state with a population just under 6 million<sup>1</sup>, over 88 percent of whom are white. Only two counties have populations of color that exceed 13 percent: Lake, which has 35 percent (23 percent African-American and 12 percent Hispanic) and includes the industrial cities of Gary and Hammond; and Marion, which has 27 percent (24 percent African-American and 3 percent Hispanic) and includes Indianapolis.<sup>2</sup> Sixty-six of the state's 93 counties are more than 98 percent white.<sup>3</sup> Indiana's demographics are quite different from the other three states in this study, all of which have much higher people-of-color populations.

In the past four years, IDEM convened an Environmental Justice Advisory Council; developed an environmental justice strategic plan; identified potentially hazardous sites in locations of environmental justice concern; created a *Guide for Citizen Participation*; drafted operating procedures for enhanced public participation in IDEM's decisions; conducted environmental justice sensitivity training for staff; and incorporated environmental justice as a factor in its new compliance/enforcement planning process. A grant from EPA's Office of Environmental Justice funded a significant part of this work.<sup>4</sup>

Those active in Indiana's environmental justice movement view IDEM's public participation and public education efforts as important and useful, but they favor more on-the-ground results that deal clearly with new permits, such as addressing cumulative impacts and reducing environmental exposures in already burdened communities.<sup>5</sup>

## DEPARTMENT STRUCTURE

Although IDEM implements state environmental programs, separate governor-appointed air, water, and waste boards have authority for issuing air, water, and solid waste rules.<sup>6</sup> IDEM staff have indicated that this structure limits their ability to modify or adopt new, cross-cutting rules to address environmental justice, either substantively or procedurally. The boards have not addressed environmental justice issues thus far. As a result, IDEM has focused on strategic planning, compliance/enforcement priority-setting, public participation, and training rather than on seeking rule changes.<sup>7</sup>

IDEM has two staff assigned to work on environmental justice issues. Although the department's strategic plan calls for creating a senior level environmental justice ombudsman, IDEM has not yet done so for budgetary reasons. The department may soon fill the position, however.

## IDEM's ENVIRONMENTAL JUSTICE PROGRAM

IDEM's environmental justice program stemmed from several factors. Previously, the department had focused on pollution problems in northwest Indiana, an area with many people-of-color, or low-income communities and home to three of the nation's largest steel mills. In 1996, EPA's Region V designated northwest Indiana as one of the "geographic initiatives" in its Agenda for Action.<sup>8</sup> The agenda described the situation in Northwest Indiana:

Northwest Indiana, spanning the southern shore of Lake Michigan, has experienced a century of severe environmental degradation. This is largely because of the steel and petroleum refining industries, because of alteration of the natural ecosystem by filling of dunes and wetlands, and because of overall development. Ozone and particulate nonattainment, 10 million cubic yards of contaminated sediments in the Indiana Harbor Ship Canal and the Grand Calumet River, millions of gallons of free-floating petroleum products in the ground-water, and numerous sites contaminated with hazardous waste — including 15 Superfund sites — are some of the many environmental challenges facing the area.<sup>9</sup>

Other motivations for the state's environmental justice work included IDEM's own mapping of Superfund sites, which showed their concentration in either people-of-color or low-income communities; the emergence of Title VI cases nationwide; and the notoriety of the Shintech case which involved the controversial siting and permitting of a vinyl chloride plant in a low-income community of color near Baton Rouge, Louisiana.<sup>10</sup> The primary trigger for IDEM's environmental justice activities, however, was the EPA environmental justice grant it received in 1998.<sup>11</sup>

Research conducted by the Indianapolis Urban League's Environmental Coalition further motivated IDEM to address environmental justice issues. The coalition received an environmental justice "small grant" from EPA to study the relationship among race, income, and toxic air releases. The study was completed in May 2000 and concluded:

Both low-income residents and black residents (who make up 90 percent of the minority population) are disproportionately located near TRI (toxic release inventory) facilities in Indianapolis, Indiana. As a result, these populations may face greater health risks from hazardous air emissions.<sup>12</sup>

Because the research was carefully designed, using census block and TRI data, and the coalition had diverse representation, the study was widely accepted as credible.<sup>13</sup> The Indiana Justice Partnership in northwestern Indiana, funded by EPA's office of Environmental Justice in 1997, also helped to spur IDEM's environmental justice program.

Although IDEM had already begun to address environmental justice issues, their importance was underscored by a Title VI civil rights complaint filed against the city of Indianapolis by EPA and Improving Kids' Health, a small nonprofit organization focusing on children's health issues. The complaint alleged that bypasses of the city's sewers occurred in areas that produced disproportionate impacts on people-of-color communities.<sup>14</sup>

### **Strategic Plan**

IDEM has developed a fairly detailed environmental justice strategic plan. The plan focuses on identifying areas of concern and on public participation. It acknowledges the importance of reducing risks and training IDEM staff to better understand environmental justice issues. IDEM held public meetings on the plan in the state's largest population centers, but found that, except for in Northwest Indiana, community groups had little interest discussing the planning document. IDEM also convened an Interim Environmental Justice Advisory Committee, but found it hard to maintain all the members' interest because some were more concerned with working on specific steps to reduce exposures in high-risk areas.<sup>15</sup>

Following 18 months of development, IDEM adopted its strategic plan for environmental justice in August 2001. The plan describes IDEM's environmental justice mission as working with Indiana communities to:

Ensure that it develops and implements policies, programs, and procedures that:

- Inform, educate, and empower all people in our State to have meaningful participation in decisions which affect their environment;
- Reduce any cumulative disparate impact of environmental burden, including burdens from past practices, on people-of-color and/or low-income status; and

- Address IDEM's obligations under Title VI of the Civil Rights Act of 1964.<sup>16</sup>

The plan's key implementation principles include:

- **Awareness and Sensitivity.** IDEM will ensure that all staff involved in environmental decision-making are educated regarding the nature of, and the cumulative environmental burden on the population affected by those decisions.
- **Public Participation.** IDEM will continue to improve its efforts to put into place effective means for soliciting meaningful public input and providing opportunities to impact environmental decision-making.
- **Inclusiveness.** IDEM will include all interested parties and governmental agencies in the process of fashioning and implementing an Environmental Justice Strategic Plan.
- **Proactivity.** IDEM will actively pursue resolutions to environmental justice disputes by facilitating or arranging for facilitation of those disputes between all of the interested parties.
- **Communication and Education.** IDEM's Environmental Justice Strategic Plan will have clear, concise, proactive, and accessible communication and education as integral components.
- **Sustainability.** The Environmental Justice Strategic Plan, devised in partnership by IDEM and other stakeholders, will include clear, concise, and proactive guidelines in order to provide for the ongoing sustainability of programs implemented pursuant to the strategy, including systematic evaluation measures.<sup>17</sup>

The plan includes seven goals:

1. identify geographic areas where there are environmental justice concerns
2. educate communities about environmental issues, the public's role as a participant in environmental decision-making and the department's statutory roles and responsibilities
3. educate IDEM staff regarding environmental justice issues and understand the relevance and applicability of those issues to their work
4. ensure all affected parties have the opportunity to communicate their concerns to the department and to each other about decisions that involve environmental justice issues, including permitting decisions

5. evaluate the effectiveness and appropriateness of existing public processes for environmental decision-making, utilizing community input in the evaluation
6. seek out and involve other agencies in addressing issues related to environmental justice
7. implement an effective environmental justice Strategic Plan for the department<sup>18</sup>

The state's commitment to environmental justice is also demonstrated by incorporating the Environmental Justice Strategic Plan into IDEM's Performance Partnership Agreement with EPA's Region V.<sup>19</sup> These agreements are negotiated between states and EPA Regional offices. Typically, they include jointly developed goals and objectives based on an assessment of a state's unique environmental conditions and program needs, strategies for meeting them, roles and responsibilities of each partner in carrying out the strategies, and the measures that will be used to assess progress. More than 30 states have negotiated these voluntary agreements with EPA.<sup>20</sup>

### **Geographic Information Systems Mapping**

IDEM has mapped areas throughout Indiana that contain double the statewide averages for people-of-color population and incomes below the poverty level. The maps also contain the location of Superfund sites, combined sewers, major air and water permits, hazardous waste facilities, and other related information.<sup>21</sup> IDEM expects that the maps will encourage its staff to pay closer attention to potential environmental justice issues in low-income and people-of-color communities.<sup>22</sup> For example, the areas of concern identified on the maps can trigger the use of IDEM's new Enhanced Public Participation Protocol, discussed below.

### **Guide for Citizen Participation**

Using its environmental justice grant from EPA, IDEM prepared a detailed, "plain English" *Guide to Citizen Participation*.<sup>23</sup> Available in English and Spanish, the guide includes information on:

- getting involved in protecting the neighborhood environment
- Indiana's environmental rules and rulemaking process
- how IDEM helps to protect the neighborhood and environment
- the public participation process
- how IDEM's environmental permitting programs work
- opportunities for participating in IDEM's decisions on environmental cleanups
- specific public notice requirements and opportunities for public participation for IDEM's other, non-permit/non-cleanup related activities
- environmental issues over which IDEM believes it has no authority, such as noise, odor, water wells, soil conservation, and publicly owned lands
- getting involved in IDEM's decision-making process

The Interim Environmental Justice Advisory Committee believed that the 117-page guide was too complicated, while some IDEM program staff worried that the guide might oversimplify some procedures.<sup>24</sup> The advisory committee's concerns led IDEM to develop a 12-page "mini-guide" that does not include the details for individual permitting programs.<sup>25</sup>

IDEM also has published a brochure on *How to Participate in Environmental Decision-Making* for wide distribution and has begun to prepare "plain English" permit notices. These notices will be written more like newspaper advertisements than legal notices. For example, a recent notice about a proposed incinerator was published as a one-quarter page ad in a Spanish language paper.<sup>26</sup>

### **Enhanced Public Participation Procedures**

IDEM is developing operating procedures for enhanced public participation, based on the premise that routine public notice and comment procedures often do not adequately consider the limited ability of many citizens to obtain the necessary information to participate effectively in decisions affecting their environment.<sup>27</sup> The enhanced procedures would be triggered for projects that:

- are located in close proximity to neighborhoods with high minority and/or low-income populations; program staff will utilize "environmental justice maps" to make this determination. IDEM notes that "in close proximity" is a subjective term but often refers to an area within a reasonable distance from the project, usually a one-or-two mile radius
- are a major, new permitted source or major modification of a permitted source of emissions or discharges into the environment
- result in significant environmental impact
- generate public interest<sup>28</sup>

If any of these conditions exist, IDEM expects its staff to:

- draft a public notice in easily understood language
- make the notice available in both English and Spanish, depending on the area's demographics
- distribute the notice to relevant organizations included on the Enhanced Neighborhood Contact List, such as neighborhood associations, minority health coalitions, and other groups that could facilitate more effective communication with communities<sup>29</sup>

IDEM also expects that projects meeting the threshold criteria will be referred to its environmental justice coordinator and community relations director to determine whether a site-specific public relations plan should be developed. Elements in such a plan could include



follow-up phone calls to encourage attendance, fact sheets, radio announcements, community interviews, facilitated meetings, and a series of shorter meetings held in multiple locations.<sup>30</sup>

IDEM has drafted a facilitation protocol for resolution of environmental justice disputes that is designed to "bring parties together and foster collaborative, solution-based discussions about issues."<sup>31</sup> The protocol is a policy document designed to inform IDEM staff about when and how to use dispute resolution to address environmental justice concerns. The protocol anticipates that IDEM staff will serve as facilitators on occasion and that outside facilitators will be used on other occasions.<sup>32</sup>

### **Staff Training**

IDEM found that its staff had a low awareness of environmental justice issues and little personal experience with them. To remedy this situation, IDEM developed and delivered a staff awareness training session to 80 percent of its 900-person staff. IDEM based its training on programs created by the Environmental Justice Training Collaborative, a multi-stakeholder group that includes EPA; state, local, and tribal governments; local environmental justice groups; businesses and industry. IDEM found that practical examples of environmental justice issues and success stories in addressing them are important to the sessions' effectiveness.<sup>33</sup> IDEM plans a second phase, focusing on incorporating environmental justice into specific department activities.<sup>34</sup>

### **Compliance Planning**

IDEM recently adopted a coordinated planning process for prioritizing compliance and enforcement activities across all of its programs.<sup>35</sup> In the past, it planned these activities within each of its waste, water, and air offices. The new, cross-media process is designed to focus enforcement resources on the state's most significant environmental problems, regardless of the environmental medium affected.

The first phase of this planning process will be to develop an annual report, prepared by the compliance/enforcement team, that identifies enforcement priorities. IDEM's team is composed of branch and section chiefs from each of the media offices and staff from the Office of Planning and Assessment. The report will be based on:

- an inventory of IDEM's current enforcement and compliance activities
- research on a variety of factors, including compliance trends, EPA compliance and enforcement initiatives, use of EPA's on-line enforcement targeting database, and new state laws and rules
- data analysis, including complaints, toxic release inventory information, enforcement history, and delineation of high-risk facilities
- list of facilities that staff feel should receive attention

- generation of a compliance/enforcement planning report. Among a list of 12 priorities are toxic "hot spots" and the environmental justice focus areas identified in the Geographic Information Systems (GIS) mapping project<sup>36</sup>

IDEM will decide on department-wide compliance and enforcement priorities during phase two, based on information in the phase one report. In phase three, IDEM will draft and implement a compliance action plan for each media office related to each of the 12 priorities. These compliance action plans then will allocate compliance resources and specific site visits based on:

- agency priorities
- office priorities
- potential for environmental harm
- compliance history of sector or segment of the regulated community
- EPA requirements

Review and assessment is the fourth and final phase of the process.<sup>37</sup> Because the compliance/enforcement planning process is new, IDEM has just begun to implement it.

## **ANALYSIS OF THE INDIANA PROGRAM**

### **Leadership**

IDEM staff initiated the environmental justice program by applying for an EPA grant to convene the Interim Environmental Justice Advisory Committee, develop the state's environmental justice strategic plan, map areas of concern, and prepare the *Guide for Public Participation*. IDEM staff believe that they can take several important steps to address environmental justice issues without legislation, including all of the activities that the department has launched.<sup>38</sup> Some public interest community members believe that IDEM should focus more attention on permitting and risk reduction.

To give environmental justice added emphasis, IDEM incorporated its environmental justice strategic plan into its Performance Partnership Agreement with EPA and also trained its staff on the issue. It has an environmental justice coordinator, but the position is not part of the department's senior management. Unlike California and Florida, Indiana has no legislation specifically addressing environmental justice and IDEM staff believe it is unlikely that the legislature will enact such legislation in the near future. Without legislation or a governor's order, the future of IDEM's environmental justice programs depends on the commissioner's and senior managers' continued interest and support.

### **Accountability**

IDEM has not yet developed measurable objectives for the program.<sup>39</sup> It has, however, told department managers that they will be held accountable in their performance evaluations for

using the enhanced public participation procedures when their programs engage in activities involving mapped communities of concern. These requirements have not translated into formal personnel evaluation criteria to date.<sup>40</sup> IDEM does not have any external environmental justice reporting requirements, although it has made several commitments in its Performance Partnership Agreement that reflect elements contained in its environmental justice strategic plan. Finally, IDEM recently decided to establish a longer-term Environmental Justice Advisory Committee to provide additional emphasis on environmental justice.

### **Permitting Authority and Procedures**

Most of IDEM's environmental justice strategy focuses on improving public participation. Department managers believe that state law allows them significant latitude for work in this area.<sup>41</sup> IDEM's powers include the authority to "develop and implement a program of public awareness and participation to assure maximum citizen involvement in the evolution and continuation of the environmental programs of the state."<sup>42</sup> Although managers do not believe that the department has similar latitude to account for environmental justice in permitting, IDEM has not comprehensively analyzed its legal authority to address environmental justice concerns.<sup>43</sup>

The principal tools available to assist state permit writers are the maps that show environmental justice areas of concern and the protocol for enhanced public participation that applies if a project is proposed for one of these areas.

### **Priority Setting and Risk Reduction**

IDEM's environmental justice strategic plan provides for reducing any cumulative disparate impacts. The department's main work related to cumulative impact has been identifying communities where higher concentrations of potentially environmentally hazardous facilities exist. Most of IDEM's focus has been on public participation, an area that can help in reducing risk over time, but does not directly do so. Risk reduction likely will play a role in the new compliance/enforcement planning process since toxic hot spots and environmental justice are areas that the department's compliance and enforcement planning team must consider when developing priorities. For example, environmental justice considerations will be a factor in the department's implementation of an enforcement initiative on scrap yards. To set priorities for the scrap yard enforcement initiative, IDEM intends to use GIS for mapping overlays of scrap yards, environmental justice areas of concern, history of non-compliance, and wellhead protection areas.<sup>44</sup>

Cumulative impacts are a significant environmental justice concern in northwest Indiana.<sup>45</sup> However, IDEM believes that it lacks the capacity to conduct the substantial scientific research needed to understand the complicated issues associated with cumulative impacts. Department staff believe that EPA could provide valuable assistance to the states for analyzing cumulative impacts.<sup>46</sup>

However, IDEM is pursuing initiatives to address two toxic pollutants: diesel emissions and styrene. The department's Northwest Indiana Diesel Emissions initiative was launched in response to community concerns. It is being carried out through a community-based work group that includes representatives of local, state, and federal governments, transportation planning agencies, industry, and environmental interests.<sup>47</sup> The initiative currently focuses on the concentrated, long-term idling of heavy-duty diesel vehicles. Thus far, they have completed a number of survey studies to explore this problem.<sup>48</sup> The effort also involves technology-specific pilot projects funded by the EPA.<sup>49</sup>

In 1997, Indiana's manufacturers of boats, recreational vehicles, bathtubs, showers, and other reinforced plastic products emitted more than 2,000 tons of styrene, with 75 percent coming from the northern part of the state.<sup>50</sup> Styrene can affect the human nervous system and is a highly reactive volatile organic compound that contributes to ozone formation. In 1999, the state legislature required Indiana's air pollution control board to promulgate rules limiting styrene emissions.<sup>51</sup> The styrene rules, adopted in 2000, focused on the open molding processes used in the reinforced plastic/composite fiberglass industry.<sup>52</sup> IDEM managers noted that the department has very limited resources to pursue emission reduction projects, such as the diesel and styrene initiatives.<sup>53</sup>

### **Public Participation**

IDEM has focused on improved public participation by producing the *Guide to Citizen Participation* for permit and non-permit programs, drafting policies on enhanced public participation procedures, and facilitation of environmental justice disputes. Also, it has developed a training program for citizens on how to participate in environmental decision-making.

### **RECOMMENDATIONS**

- The Indiana Department of Environmental Management (IDEM) should establish measurable program objectives for environmental justice, develop accountability measures and procedures for achieving them, and issue regular public reports about its progress in addressing environmental justice concerns.
- Now that IDEM has identified localities of concern for special attention, the department should examine whether residents of those areas are exposed to greater amounts of pollution than other areas of the state. Also, it should develop programs to reduce hazards in any areas that are facing higher risks. This effort is consistent with IDEM's commitment contained in its strategic plan to "reduce any cumulative disparate impact of environmental burden."
- IDEM should comprehensively examine applicable state constitutional provisions, as well as environmental, administrative, civil rights, and public health laws, to identify legal authorities for addressing environmental justice issues in its core environmental

programs, including enforcement. Upon completion of this analysis, IDEM should communicate the results through an easily understood guidance document that can be carried out by permit writers and other department staff in their daily work.

- IDEM should develop performance objectives to hold managers accountable for its commitment to using the department's enhanced public participation procedures in communities of concern.
- IDEM should add more databases to the state's GIS mapping of low-income and people-of-color communities and should include data on water discharges, air emissions and toxic releases, as well as ambient monitoring results, along with the demographic information and location of Superfund sites already on current maps.
- IDEM should undertake a second phase of staff training on environmental justice, focusing on how to incorporate environmental justice concerns into the department's specific core programs and daily activities.
- IDEM should establish a permanent, broadly representative advisory committee through legislative or executive order to assist it in achieving its environmental justice goals.
- IDEM should ensure that its environmental justice coordinator reports directly to its commissioner.

## ENDNOTES

<sup>1</sup> [www.stats.indiana.edu/web/county/race99.html](http://www.stats.indiana.edu/web/county/race99.html)

<sup>2</sup> *Fedstats* at [www.fedstats.gov/qf/](http://www.fedstats.gov/qf/) (2000).

<sup>3</sup> *Ibid.*

<sup>4</sup> See [www.in.gov/idem](http://www.in.gov/idem). The public can find information on IDEM's environmental justice program, including its strategic plan, and the *Guide for Citizen Participation*, on the department's web site by clicking on the "browse topics" prompt on the home page and then clicking on the "environmental justice" topic.

<sup>5</sup> Mary Mulligan, Member, IDEM Interim Advisory Committee on Environmental Justice, Interview (March 27, 2002).

<sup>6</sup> Barbara Goldblatt, David Parry, Felicia Robinson, and Keith Veal, Interview.

<sup>7</sup> *Ibid.*

<sup>8</sup> U.S. Environmental Protection Agency Region V, *Agenda for Action* (1996) 18-19.

<sup>9</sup> *Ibid.*, 18.

<sup>10</sup> Barbara Goldblatt, David Parry, Felicia Robinson, and Keith Veal, Interview.

<sup>11</sup> *Ibid.*; and Lori Kaplan, Commissioner, Indiana Department of Environmental Management, Interview, (April 9, 2002).

<sup>12</sup> Indianapolis Urban League Environmental Coalition, *Race, Income and Toxic Air Releases in Indianapolis, Indiana* (May 2000) 12.

<sup>13</sup> John Mundell, President, Mundell and Associates and Member of the Indianapolis Urban League Environmental Coalition, Interview (March 27, 2002).

<sup>14</sup> Tom Neltner, President, Improving Kids' Environment, Interview (April 2, 2002).

<sup>15</sup> Barbara Goldblatt, David Parry, Felicia Robinson, and Keith Veal, Interview; Mary Mulligan, Interview.

<sup>16</sup> Indiana Department of Environmental Management, *Environmental Justice Strategic Plan* (September 2000) 1.

<sup>17</sup> *Ibid.*

<sup>18</sup> *Ibid.*, 1-3.

<sup>19</sup> Indiana Department of Environmental Management, *Environmental Performance Partnership Agreement: A Strategic Partnership between U.S. EPA Region V and the Indiana Department of Environmental Management* (2001-2003) 8.

<sup>20</sup> National Academy of Public Administration, *environment.gov: Transforming Environmental Protection for the 21<sup>st</sup> Century* (2000) 152, Figure 5-1.

<sup>21</sup> E-mail from Keith Veal to Veronica Lenegan (May 17, 2002).

<sup>22</sup> Barbara Goldblatt, David Parry, Felicia Robinson, and Keith Veal, Interview.

<sup>23</sup> Indiana Department of Environmental Management, *IDEM's Guide for Citizen Participation: How to Make Your Voice Heard on Community Environmental Issues* (2001). Available at [www.in.gov/idem/guides/publicparticipation](http://www.in.gov/idem/guides/publicparticipation).

<sup>24</sup> Barbara Goldblatt, David Parry, Felicia Robinson, and Keith Veal, Interview.

<sup>25</sup> Indiana Department of Environmental Management, *Getting Involved in Environmental Decision Making: Highlights from IDEM's Guide for Citizen Participation*. Available at [www.in.gov/idem/guides/publicparticipation](http://www.in.gov/idem/guides/publicparticipation).

<sup>26</sup> Barbara Goldblatt, David Parry, Felicia Robinson, and Keith Veal, Interview.

<sup>27</sup> Indiana Department of Environmental Management, Draft, *Operating Procedures for Enhanced Public Participation*.

<sup>28</sup> *Ibid.*

<sup>29</sup> *Ibid.*

<sup>30</sup> *Ibid.*

<sup>31</sup> Indiana Department of Environmental Management, *Facilitation Protocol, Draft Resolution of Environmental Justice Disputes*, Outline.

<sup>32</sup> *Ibid.*

<sup>33</sup> Barbara Goldblatt, David Parry, Felicia Robinson, and Keith Veal, Interview.

<sup>34</sup> *Ibid.*

<sup>35</sup> Indiana Department of Environmental Management, *Compliance/Enforcement Planning Process*.

<sup>36</sup> *Ibid.*, 5.

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- <sup>37</sup> Ibid., 3-7.
- <sup>38</sup> Barbara Goldblatt, David Parry, Felicia Robinson, and Keith Veal, Interview.
- <sup>39</sup> Lori Kaplan, Commissioner, Indiana Department of Environmental Management, Interview (April 9, 2002).
- <sup>40</sup> Barbara Goldblatt, David Parry, Felicia Robinson, and Keith Veal, Interview.
- <sup>41</sup> Ibid.
- <sup>42</sup> Indiana section 13-14-1-5 (In. Stat. Ann. 2000).
- <sup>43</sup> Barbara Goldblatt, David Parry, Felicia Robinson, and Keith Veal, Interview.
- <sup>44</sup> Pamela O'Rourke, Indiana Department of Environmental Management, Interview (February 4, 2002).
- <sup>45</sup> Mary Mulligan, Interview.
- <sup>46</sup> Ibid.
- <sup>47</sup> Indiana Department of Environmental Management, *Clean Air Bulletin*, Volume 3, Issue 1 (August 2000).
- <sup>48</sup> IDEM's Northwest Indiana Diesel Emissions Initiative - *Interim Report* (October 2001).
- <sup>49</sup> IDEM's Northwest Indiana Diesel Emissions Initiative - *Current Status* (May 2002).
- <sup>50</sup> Indiana Department of Environmental Management, *Clean Air Bulletin*, (August 2000) 3:1.
- <sup>51</sup> Ibid.
- <sup>52</sup> Email from Keith Veal to Veronica Lenegan (May 17, 2002).
- <sup>53</sup> Barbara Goldblatt, David Parry, Felicia Robinson, and Keith Veal, Interview.





## CHAPTER FIVE

### FLORIDA

#### FINDINGS

**Finding 1:** Florida's university-based approach to addressing environmental justice issues can serve as a useful model for some states as it focuses on scientific research and provides technical resources to citizens and governmental units.

**Finding 2:** As Florida has demonstrated, focusing on public health issues can generate broader support for environmental justice initiatives.

**Finding 3:** Florida's brownfield law, which requires significant public input into redevelopment plans, can be a very useful tool for addressing environmental justice problems.

#### BACKGROUND

Florida has more than 16 million people, more than 14 percent of whom are African-American and 16 percent Hispanic. Its two largest counties have very large people-of-color communities. Miami-Dade County's population is more than 20 percent African-American and 57 percent Hispanic. Broward County's population is 20 percent African-American and 16 percent Hispanic.<sup>1</sup>

Florida is different from the other states studied because most environmental justice activity occurs outside its environmental agency. Legislation requires the Florida Department of Environmental Protection (DEP) to address environmental justice issues in its brownfield program, but the agency does little other environmental justice work. Florida is the only state in the study that launched its environmental justice efforts based on an in-depth 18-month evaluation of the state's environmental justice problems. A multi-stakeholder commission, created by the legislature and supported by university researchers, led the study.

Florida's environmental justice program includes research and community involvement activities conducted by the Environmental Sciences Institute, the Center for Environmental Equity and Justice, the College of Pharmacy, the Institute of Public Health at the Florida Agricultural and Mechanical University (FAMU),<sup>2</sup> and the Interdisciplinary Center for Brownfield Rehabilitation Assistance at the University of South Florida. These activities are designed to address problems in communities that have significant health problems, limited access to health care, and a high concentration of environmentally hazardous facilities. Environmental justice issues also play a role in the CERP, managed by the U.S. Army Corps of Engineers and the South Florida Water Management District.

## **IMPETUS FOR THE PROGRAM**

Most of the state's environmental justice initiatives stem from two sources. State Representative Josephus Eggelletion became aware of environmental justice issues from national news reports and a meeting of the National Conference of State Legislators. With this information in hand and amid growing complaints from his constituency, he introduced legislation in 1994 to create an Environmental Equity and Justice Commission, charged with documenting the actual extent of environmental justice problems in the state.<sup>3</sup> With a reputation as a moderate interested in economic development and environmental protection, Eggelletion was able to facilitate an agreement among businesses, government, and environmental interests concerning the commission's makeup and goals.<sup>4</sup> The Florida Chamber of Commerce and the Florida Chemical Manufacturers Association participated in these negotiations. These interests called for industry representation on the commission. They wanted the study to use a reasonable process for gathering facts about whether industrial facilities were concentrated in low-income neighborhoods and communities of color, and focus on preventing future problems rather than assigning responsibility for disproportionate impacts to particular facilities. They also wanted public hearings to be held throughout the state to give businesses an opportunity to comment.<sup>5</sup>

The Legal Environmental Assistance Foundation (LEAF), a nonprofit advocacy group, played a key role in advancing the legislation that created the commission. LEAF worked with several Florida communities on hazardous waste incinerator siting and Superfund issues. As a result of this work, LEAF developed model legislation designed to increase the availability of information on community health issues. When the idea for the commission emerged, LEAF supported the proposal.<sup>6</sup>

## **FLORIDA ENVIRONMENTAL EQUITY AND JUSTICE COMMISSION**

The Environmental Equity and Justice Commission was formed in 1995 and completed its work 18-months later. The legislation creating the commission tasked it:

to examine and determine the possible disproportionate and cumulative concentration of environmental hazards in people of color and low-income communities, to assess how Florida can best address these inequities, if any, with emphasis on future prevention, and to ensure that public benefits resulting from the work of Florida's agencies will be fully and equitably realized by communities of color and low income, taking into account the greater degree of risk to which such communities may be exposed.<sup>7</sup>

The 17-member commission included two members each from the civil rights, environmental, and business communities, two university representatives, and one member each representing the Florida DEP, the Department of Health, a large public facility and a large private facility regulated by the Florida DEP, city government, county government, experts in environmental risk, and each house of the legislature.

The legislation required the commission to conduct a "scientific analysis, including case studies, of 'targeted sites,' using historical and current demographic information, including health statistics of the surrounding population of each site."<sup>8</sup> The law defined targeted sites as "a representative sample of the sites both in minority and low-income neighborhoods, as well as other socioeconomic neighborhoods, throughout the state, but to include only those businesses and facilities regulated by the Florida DEP, including government-owned facilities; facilities regulated by the Florida DEP through delegation to any local government or water management districts; and the Superfund Sites National Priorities List (NPL)."<sup>9</sup>

When examining targeted sites, the commission was to review several areas associated with environmental justice:

- enforcement authority and actions as they affect targeted sites
- factors, including economic, that may have caused targeted sites to be concentrated in low-income and people-of-color communities
- the role that land-use decision making plays in influencing siting and land use decisions which could pose a potential risk to human health
- ways that government agencies might become more aware of neighborhood situations that pose a particularly high risk to human health
- communication methods used by the Florida DEP that could better reach people-of-color and low-income communities
- approaches to ensure consideration of environmental justice when formulating and implementing environmental policies and legislation<sup>10</sup> (see Figure 5.1)

The commission conducted a demographic analysis to identify Florida's targeted sites and designated four subcommittees to address specific topics:

- **Health Effects and Risks Subcommittee:** to assess the human health impacts resulting from acute and chronic exposure to environmental pollutants
- **Enforcement and Evaluation Subcommittee:** to examine the content and application of regulatory agency enforcement policies and determine if these policies are fairly and equitably applied to all communities and facilities without respect to race or income
- **Local Government Site Placement Subcommittee:** to determine whether local governments provide opportunities for potentially affected communities to participate meaningfully in local siting decisions
- **Rules Subcommittee:** to review the influence that state entities, particularly the Florida DEP, have exerted or could have exerted on the siting of facilities that have the potential for affecting the health of adjacent communities<sup>11</sup>

**FIGURE 5.1**  
**FLORIDA ENVIRONMENTAL EQUITY AND JUSTICE COMMISSION**

Highlights of the Commission's key legislative recommendations include:

- appropriate funds to establish a Center for Environmental Equity and Justice at a historically black college or university to focus on research, and policy development
- develop criteria for public notice of violations or enforcement actions by the Florida DEP, as well as proposed projects or enforcement actions by local governments
- define "environmentally overburdened neighborhoods," and consider limiting future siting by local governments in these neighborhoods
- develop education and outreach programs to address and/or provide information on health effects from exposure within communities, and build awareness and understanding of the comprehensive land use planning process, siting and permitting procedures, and environmental protection programs
- publicize public hearings, community meetings, workshops, and seminars through churches, community organizations, civic groups, schools and neighborhoods
- consider environmental equity and justice issues in land use planning and zoning decisions by local governments
- utilize fines collected by Florida DEP to address the problems of affected communities directly, e.g., studies and analyses that examine health effects of exposure to environmental pollution
- integrate environmental justice and equity into the functional plan of every state agency
- consider the redevelopment of hazardous sites only after questions relating to environmental and health consequences have been addressed and the site is no longer an environmental hazard

Source: Florida Environmental Equity and Justice Commission.

**DEMOGRAPHIC ANALYSIS**

Commission research staff — under the leadership of Dr. Richard Gragg of FAMU, and the Florida DEP — conducted an extensive proximity and demographic analysis that mapped 3,287 facilities in six categories: large quantity hazardous waste generators, Superfund NPL sites, solid waste sites, TRI reporters, hazardous waste transfer, storage and disposal sites, and Florida's own list of hazardous waste sites. This study then compared the location of these facilities with population demographics at the census block level. However, there were insufficient public health data for the researchers to overlay with the facility and demographic

information, or to determine whether communities near targeted facilities were exposed to a disproportionate amount of environmental pollution from regulated facilities.<sup>12</sup>

The researchers also conducted a more in depth study of 571 facilities located in 15 counties to examine the demographics of communities near environmentally hazardous sites within one-half, one, and two miles.<sup>13</sup> The results demonstrated that communities within two miles of targeted sites included disproportionately non-English speaking populations, minorities, and renters, and that nearby low-income populations were somewhat higher than the state average.<sup>14</sup> Based on this detailed analysis, the commission concluded, "minority and low-income communities are disproportionately impacted by targeted environmental hazardous sites" (see Figure 5.2).<sup>15</sup>

Three commission recommendations have been implemented: the creation of the Center for Environmental Equity and Justice, housed in the FAMU Environmental Sciences Institute; establishment of a birth-defects registry, housed in the FAMU Institute of Public Health; and the establishment of the Community Health Advisory Board to the Florida Department of Health. Legislation outlining environmental justice requirements for brownfield projects was already in place. In addition, the commission's work led to pilot community health centers in six communities that had a high incidence of health problems.<sup>16</sup>

## **CENTER FOR ENVIRONMENTAL EQUITY AND JUSTICE**

In 1998, the state legislature created the Center for Environmental Equity and Justice in FAMU's Environmental Science Institute to "conduct research, develop policies, and engage in education, training, and community outreach with respect to environmental equity and justice issues."<sup>17</sup> The center receives annual state funding totaling \$670,000 as part of FAMU's base budget.<sup>18</sup> The legislation authorized the center to enter into a memorandum of understanding with the Florida DEP, the Department of Community Affairs (which has an oversight role in local land-use planning), and other relevant agencies to address environmental justice issues.<sup>19</sup> The center attempted to enter into a memorandum of agreement with the Florida DEP, but the department managers did not believe an agreement would accomplish anything because, in their view, Florida DEP's current legal authorities did not allow them to consider environmental justice issues.<sup>20</sup>

### **Focus of the Center**

The Center for Environmental Equity and Justice focuses on:

- examining issues related to enforcement, evaluation, health effects and risks, and site placement
- providing and facilitating education and training on environmental equity and justice issues to students, citizens, and local and state government employees
- conducting research to elucidate and validate contaminant biomarkers of exposure, effect, and susceptibility in human populations

- addressing environmental impacts on populations using geographic information systems and other technologies
- focusing on sampling and analyzing environmental contaminants in impacted communities
- serving as a statewide resource for technical and public information on environmental justice<sup>21</sup>

**FIGURE 5.2**  
**CLEARWATER, FLORIDA**  
**LINKING BROWNFIELD REDEVELOPMENT AND ENVIRONMENTAL JUSTICE**

- The state of Florida and the City of Clearwater have developed an "Environmental Justice Action Agenda" to address brownfield redevelopment.
- The agenda was created in broad consultation with residents, city staff, and other stakeholders.
- The agenda is designed to:
  - enhance awareness of brownfields
  - improve the community's access to information
  - ensure community participation in decision-making
  - develop the economic base of the brownfield area neighborhoods
  - create a healthy and safe environment in the Clearwater brownfield area
- The agenda is "considered a 'living document' that builds upon existing local, state, and national efforts and programs to...provide fair and equal environmental protection to all citizens of Clearwater" affected by the redevelopment of brownfields.
- Florida Statute Chapter 376 codifies Florida's linkage between environmental justice issues and brownfield redevelopment. The statute reads, "Environmental justice considerations should be inherent in meaningful participation elements of a brownfields redevelopment program."
- Additionally, the Center for Brownfields Rehabilitation Assistance (CBRA) supports the City of Clearwater's Environmental Justice Action Agenda. Established in 1998 at the University of South Florida, the "center seeks to conduct and disseminate research on the environmental and health effects surrounding Florida's many brownfields sites."
- The combination of clear statutory authority, Clearwater's dedication to the Environmental Justice Agenda, with the public support of the CBRA, give the environmental justice policy all the legs it needs to stand.

Source: City of Clearwater Brownfields Area Environmental Justice Action Agenda, approved by the City of Clearwater, FL, on September 7, 2001.

## Activities of the Center

The center engages in a wide range of activities, including:

- training BS, MS and Ph.D. students in environmental sciences, including environmental justice, environmental ethics, environmental toxicology and human health, risk assessment, environmental law, environmental policy and risk management, and environmental chemistry
- convening annual statewide environmental justice conferences
- helping to develop the Economic and Environmental Equity Plan for the CERP
- working with the City of Clearwater, the University of South Florida Brownfields Resource Center, EPA, community members, and the International City and County Managers' Association (ICMA) to develop and implement an environmental justice action agenda for the City of Clearwater, which the ICMA used as the basis for its national model for incorporating environmental justice concerns into brownfield redevelopment<sup>22</sup>
- consulting with community organizations on environmental justice issues<sup>23</sup>
- drafting memoranda of understanding with state agencies to address environmental justice issues, though the Florida DEP and the Department of Health have not entered into such agreements to date<sup>24</sup>

FAMU also maintains the state's birth-defects registry since its inception in 1998; thus, the university has a base of data that can be analyzed to determine whether patterns exist related to birth defects.<sup>25</sup>

The center's current projects are:

- drafting memoranda of understanding with state agencies to address environmental justice issues
- conducting scientific research on such issues as the role of environmental contaminants as a risk factor for learning disabilities, anti-social behavior in youth and the development of prostate cancer
- assisting, via a formal agreement, the South Florida Water Management District and the Army Corps of Engineers to implement the Environmental and Economic Equity Program Management Plan for the CERP
- assessing atmospheric emissions from Oakridge National Laboratory and their impacts on the community of Scarborough, Tennessee
- investigating environmental justice issues in coastal communities
- promoting environmental justice policies in major environmental organizations such as the Audubon Society, the Nature Conservancy, and the National Council for Science and the Environment
- implementing Florida's Environmental Justice Action Agenda
- establishing partnerships with various parties, including universities, the federal Agency for Toxic Substances and Disease Registry, and the U.S. Department of

the Interior, to develop strategies to address environmental stressors and socio-economic issues related to environmental justice

The center's director, Dr. Richard Gragg, also serves as a member of EPA's National Environmental Justice Advisory Council.

## **BROWNFIELD LEGISLATION**

As a result of the work of the Environmental Equity and Justice Commission, Florida's 1997 brownfield legislation provides authority to address environmental justice. The law states:

According to the statistical proximity study contained in the Environmental Equity and Justice Commission, minority and low-income communities are disproportionately impacted by targeted environmentally hazardous sites. The results indicate the need for the health and risk exposure assessments of minority and poverty populations around environmentally hazardous sites in this state. Redevelopment of hazardous sites should address questions related to environmental and health consequences.<sup>26</sup>

The law also provides that environmental justice considerations be incorporated by offering meaningful public participation in all brownfield redevelopment plans.<sup>27</sup>

When local governments want to designate an area as a brownfield site, they must provide "notice of the proposed rehabilitation of the brownfield area...to neighbors and nearby residents of the proposed area to be designated."<sup>28</sup> Those proposing brownfield designation must afford an opportunity for comment and suggestions about rehabilitation by those receiving notice.<sup>29</sup> In addition, the local government or person responsible for rehabilitating and redeveloping a brownfield site must form an advisory committee to improve public participation and receive public comment on rehabilitation and redevelopment of the area, future land-uses, local employment opportunities, community safety, and environmental justice. The law further requires that the advisory committee include local residents and review and comment on the proposed redevelopment agreement.<sup>30</sup> In 2001, Florida reported 45 designated brownfield sites.<sup>31</sup>

The environmental justice concepts contained in Florida's brownfield legislation are perhaps most fully realized in the City of Clearwater's Brownfield Action Agenda.<sup>32</sup> The agenda is a framework for Clearwater to work with community residents and others on cleaning and redeveloping brownfield sites. Clearwater is located in Florida's most densely populated county; it has 217 state or federally regulated waste sites with various levels of contamination. An estimated 10,830 people live in Clearwater brownfield areas, with 59 percent being people of color and 27 percent with incomes below the poverty line.<sup>33</sup>

Clearwater's agenda provides for enhancing public awareness of brownfield problems, improving the community's access to information, ensuring community participation in



decision-making, developing the economic base of brownfield areas, and creating a healthy and safe environment in the brownfield areas.<sup>34</sup> Work on the agenda has stimulated efforts to create a statewide organization whose mission would be to promote brownfield redevelopment and environmental justice opportunities through a partnership of communities, industries, and government.<sup>35</sup>

## **CENTER FOR BROWNFIELD REHABILITATION**

In 1998, the Florida legislature established the interdisciplinary Center for Brownfield Rehabilitation Assistance (CBRA) at the University of South Florida.<sup>36</sup> The Center is responsible for research: (1) to identify innovative solutions for removing contamination from brownfields and reducing threats to drinking water supplies and other potential public health threats from contaminated sites, and (2) to develop risk-based corrective actions for rehabilitating brownfield sites.<sup>37</sup> The CBRA — together with FAMU's Center for Environmental Equity and Justice, the City of Clearwater, the Greenwood Neighborhoods, and ICMA — helped facilitate the development of Clearwater's Environmental Justice Action Agenda.

## **COMMUNITY ENVIRONMENTAL HEALTH PROGRAMS**

State legislation established the Community Environmental Health Program in 1999. Its primary purpose is "to ensure the availability of public health services to members of low-income communities that may be adversely affected by contaminated sites located in or near the community."<sup>38</sup> The legislation also required the Department of Health to establish a Community Health Advisory Board, with a majority of low-income members, to identify community health needs and the types of services that should be provided.<sup>39</sup> However, the legislature did not fund the advisory board's work for Fiscal Year 2002 and the board has stopped meeting.<sup>40</sup>

In 2000, the legislature funded a free health clinic in Clearwater and six other health clinics to provide basic health services for communities located near contaminated sites. A broad coalition of legislators supported the clinics because they recognized the health problems in the areas being served.<sup>41</sup> The projects were funded at \$100,000 the first year, \$400,000 the second year, and in excess of \$400,000 the third, but the annual funding has been hard to sustain due to tight state budgets.<sup>42</sup>

## **EVERGLADES RESTORATION**

The Comprehensive Everglades Restoration Plan (CERP) is a 30-year, \$7.8 billion project with more than 60 individual components designed to restore, preserve, and protect the South Florida ecosystem and to meet the region's other key water needs. Congress and the Florida legislature approved the effort in the Water Resources Development Act of 2000, which authorized work to "restore, preserve, and protect the South Florida ecosystem while providing for other water-related needs of the region, including water supply and flood

protection."<sup>43</sup> The Army Corps of Engineers and the South Florida Water Management District jointly manage the project.<sup>44</sup> CERP includes establishing aquifer storage and recovery wells, constructing levees, and building reservoirs. Because CERP is a joint federal/state effort, each separate project requires analysis under NEPA, which, in turn, requires compliance with the environmental justice directives included in Executive Order 12898.<sup>45</sup> Also, the Water Resources Development Act requires the Secretary of the Army to "ensure that impacts on socially and economically disadvantaged individuals, including individuals with limited English proficiency, and communities are considered during implementation of the plan, and that such individuals have opportunities to review and comment on its implementation."<sup>46</sup>

CERP provides important opportunities to address environmental justice problems, particularly related to drinking water supplies in communities surrounding Lake Okeechobee.<sup>47</sup> The population at the south end of Lake Okeechobee includes large proportions of low-income and people-of-color communities. The quality of their drinking water has long been an issue, and there is concern that planned aquifer recharge and water recovery wells may aggravate drinking-water quality problems. These communities also are concerned that CERP does not treat Lake Okeechobee as a natural resource and pays too little attention to improving water quality there.<sup>48</sup>

To meet NEPA and Water Resources Development Act requirements, the Corps of Engineers and the South Florida Water Management District have developed an Environmental and Economic Equity Plan and a Public Outreach Plan. One purpose is to: "institute the sensitivity for and the provision of environmental justice assessment procedures, according to NEPA guidelines, for all CERP project planning and decision making."<sup>49</sup> Among the key tasks are:

- providing environmental justice training for CERP staff and managers
- providing environmental justice support for project managers
- constructing an environmental justice outreach capacity to affected communities of color and low-income communities
- working with FAMU to ensure that CERP addresses environmental justice issues<sup>50</sup>

FAMU's Center for Environmental Equity and Justice will help to design environmental justice analyses so that CERP projects meet NEPA and Water Resources Development Act requirements. The Center also will advise CERP managers on how to address environmental justice issues and structure public meetings and other community interaction. Further, it will help to design health related data collection for CERP projects.<sup>51</sup> The Public Outreach Plan includes detailed approaches for outreach to "minority" communities and "socially and economically disadvantaged communities."<sup>52</sup>

CERP managers hope to use a proactive approach for environmental justice issues so they gain an early understanding of community concerns, avoid late opposition and difficult redesign problems, maintain good relations with the communities involved, and avoid litigation.<sup>53</sup>

ACTION (Active Citizens Improving Our Neighborhoods), a regional community organization focused on Everglades restoration, views CERP primarily as a growth management plan for South Florida that does little to address people-of-color and low-income communities. ACTION has expressed concern that managers have made few efforts thus far to involve these communities in CERP projects, to assess risks faced by these communities, and to mitigate problems or improve conditions. ACTION also is concerned that the Army Corps of Engineers and Water Management District do not have adequate funding to provide technical assistance to the affected communities.<sup>54</sup>

## **ANALYSIS OF THE FLORIDA PROGRAM**

### **Leadership**

In Florida, environmental justice leadership largely occurs outside the state's environmental agency. Legislators and public interest groups drove the initial environmental justice efforts. However, term limits have forced out at least one of the key legislators. Nonetheless, legislative leadership continued for several years, resulting in the Environmental Equity and Justice Commission, the Center for Environmental Equity and Justice, brownfield legislation, and most recently community health clinic funding. Tight state budgets may limit future initiatives, such as the continued funding of community health clinics. This makes it critically important to ensure that community programs — such as the Governor's "Front Porch Florida" program which is focused on "holistic community revitalization" — incorporate environmental justice concerns.<sup>55</sup> Public interest organizations, led by LEAF, continue to have a strong voice on environmental justice issues and have played a major role in obtaining passage of environmental justice legislation. LEAF continues to lobby the legislature and state agencies to implement the commission's recommendations.

So far, several of the Environmental Equity and Justice Commission recommendations directed toward the legislature, the Florida DEP, the Department of Health, and the Department of Community Affairs (whose responsibilities include land-use planning), have not been implemented. Although legislative leadership is important to set clear policy direction and fund new programs, it has been difficult for the legislature to ensure that the recommendations are implemented over time. Executive branch leadership is important to sustain momentum on issues like environmental justice that require programmatic changes in public participation, permitting, risk reduction efforts, and enforcement.

Should Florida DEP follow up on the commission's recommendations, one key step will be to thoroughly review and analyze Florida statutes that might form the legal authority to address environmental justice. This would pave the way for the department to take a leadership role, make environmental justice a clear priority in its policies and actions, and enter into a memorandum of understanding with the Center for Environmental Equity and Justice to take advantage of its expertise and resources.<sup>56</sup> As noted earlier, ELI has identified numerous provisions in federal environmental laws that EPA potentially could use to advance environmental justice goals in a variety of programs.<sup>57</sup> Similarly, the Academy's cursory

review of Florida's key environmental laws regulating air and water pollution, and waste treatment and disposal has identified several state statutory authorities that the Florida DEP might interpret as applicable to environmental justice.<sup>58</sup>

The Center for Environmental Equity and Justice continues to assume a leadership role, organizing annual environmental justice conferences, having representation on EPA's National Environmental Justice Advisory Council, participating in such projects as the CERP and Clearwater's Brownfield Action Agenda, and working with the National Council on Science and the Environment. The center can play several important leadership roles through developing new data, informing and educating citizens, ensuring that environmental justice issues are brought to the attention of policy makers, and educating students. Yet, it cannot change the way that state agencies make decisions unless it is invited to work directly with government agencies, as it has for the Everglades project.

### **Accountability**

Florida has few avenues for ensuring public accountability for its environmental justice programs. The Center for Environmental Equity and Justice reports annually to the state Board of Education and is ultimately accountable to the legislature. It also works with an advisory council. However, its role in resolving environmental justice problems is rather limited.

NEPA applies to environmental justice issues for projects related to restoration of the Everglades, allowing some public participation and providing a potential legal remedy should environmental justice considerations not be taken into account for various CERP projects. In addition, the Environmental and Economic Equity Program Management Plan requires CERP to develop indicators and performance measures so it can evaluate and assess socio-economic parameters, including environmental justice.<sup>59</sup> It is too early to tell whether these data will be gathered and used effectively in holding CERP managers accountable.

Clearwater's Brownfield Action Agenda encourages a much more direct role for citizens in evaluating brownfield projects and making decisions on redevelopment. Because citizens are direct participants, they may be able to obtain some level of city accountability.<sup>60</sup>

### **Permitting Authority and Procedures**

The CERP is the only environmental justice program in Florida that directly affects permitting. The plan is driven primarily by the need to meet federal NEPA requirements. However, these requirements are focused largely on public participation, not developing permit conditions. This study identified agencies in other states that have found ways to consider environmental justice in their permitting practices and procedures. Without Florida DEP's active leadership to address environmental justice, the state permitting authorities and procedures are not likely to change.

The Environmental Equity and Justice Commission recommended that the Department of Community Affairs "incorporate environmental equity in its training and procedures related to the comprehensive [land-use] planning efforts that affect siting decisions."<sup>61</sup> Although this recommendation has not been implemented, recognizing the importance of local land-use decisions in creating or aggravating environmental justice issues is an important first step. By providing better information about environmental consequences of land-use decisions, and tools to help local governments take these consequences into account, the department could encourage local officials to address environmental justice problems.

### **Setting Priorities and Reducing Risk**

Florida's efforts to set priorities and reduce risks are limited to three areas. First, brownfield projects must consider community concerns in redevelopment projects, including clean-up levels that will apply to a brownfield site. Remediation of these sites should reduce risk in some communities. However, Florida's brownfield clean-up priorities are currently driven by private redevelopment proposals, not by the state government's risk evaluation.

Research by the Center for Environmental Equity and Justice also may lead to risk reduction. For example, the center is examining possible environmental causes for prostate cancer, which occurs more frequently among African-Americans. This research eventually could yield efforts to reduce environmental factors that may contribute to these high cancer rates. However, such efforts likely will not occur until many years in the future. More immediate risk reduction may result from the work of the community health clinics established by the legislature. They can reduce individual risk through better health care, but they are not removing environmental risks that may contribute to broader health problems.

Unless state agencies, such as Florida DEP and the Department of Health, use their mandates for reducing risk and engage in environmental justice initiatives, the state will have difficulty producing concrete results. The Panel believes that improvements in reducing risk and addressing environmental justice problems can only be achieved by meaningfully integrating these initiatives into the basic missions of appropriate state agencies.

### **Public Participation**

Florida's brownfield program and the CERP include enhanced public participation procedures. The Everglades program is quite new, so it is too early to assess how effective these procedures will be in enhancing involvement among people-of-color and low-income communities. Perhaps the most interesting advance in public participation procedures is in the requirement to set up community advisory panels for cleaning up brownfield sites, most fully realized in Clearwater's brownfield action agenda.

### **RECOMMENDATIONS**

- Florida departments with environmental justice responsibility should establish measurable program objectives for addressing related issues, develop accountability

measures and procedures for achieving the objectives, and issue regular public reports about progress made.

- Florida should track data on pollution levels for communities in which residents are exposed to high levels of pollution, and should ensure that such hazards are being reduced.
- The Department of Environmental Protection should conduct a comprehensive examination of applicable state constitutional provisions, as well as environmental, administrative, civil rights, and public health laws, to identify available authorities for addressing environmental justice in core environmental programs, including enforcement. Upon completion of this legal analysis, Florida DEP should communicate the results through a guidance document that can be easily understood and carried out by permit writers and other department staff in their daily work. Florida DEP also may be able to use new programs, such as the "Governor's Front Porch" initiative, to work with communities on addressing environmental justice problems.
- Florida DEP and other appropriate departments should coordinate with, and build initiatives based on, research by the Center for Environmental Equity and Justice.
- The appropriate departments and institutions in Florida should implement the recommendations of the Environmental Equity and Justice Commission and consider implementing additional ones. These include: considering environmental equity and justice issues in land use planning and zoning decisions by local governments; utilizing fines collected by the Florida DEP to address problems of affected communities; and integrating environmental justice into the functional plan of every state agency.
- Based on EPA and other states' experience, Florida DEP must become more proactive in incorporating environmental justice issues into its permitting and enforcement activities to ensure that progress is made in ameliorating problems.
- The Everglades restoration project should ensure that the actual reduction of on-the-ground hazards — not just improved public participation — is a key feature of its efforts to address environmental justice.
- Florida DEP should appoint a senior coordinator for administering environmental justice programs and ensure that this position reports to the department's secretary.

## ENDNOTES

- <sup>1</sup> Fedstats at <http://www.fedstats.gov/qf/> (2000).
- <sup>2</sup> Florida A&M is a historically black university that has developed expertise in environmental justice and is highly respected for their relationship with local Florida communities. For more information visit [www.famu.edu/future/visitor/history.html](http://www.famu.edu/future/visitor/history.html).
- <sup>3</sup> *Florida Environmental Equity and Justice Commission*, Final Report (introductory letter).
- <sup>4</sup> Suzi Ruhl, President, Legal Environmental Assistance Foundation, Interview (March 8, 2002).
- <sup>5</sup> Maribel Nicholson-Choice, Attorney for Greenberg Traurig, Representing the Florida Chamber of Commerce and the Florida Chemical Manufacturers Association, Member, Environmental Equity and Justice Commission (April 1, 2002).
- <sup>6</sup> Suzi Ruhl, Interview.
- <sup>7</sup> Fla. Stat. Ann. Section 760.85(1) (1997).
- <sup>8</sup> Fla. Stat. Ann. Section 760.85(5) (1997).
- <sup>9</sup> Fla. Stat. Ann. Section 760.85(5)(a) (1997).
- <sup>10</sup> Fla. Stat. Ann. Section 760.85(5) (1997). The Act contains a specific disclaimer that the "act is intended only to ensure equitable regulation and enforcement of environmental laws and rules and is not intended to, nor does it create any right, benefit, or trust responsibility, substantive or procedural, enforceable at law or equity by any party against the businesses studied, or the State of Florida, including municipal and county governments, or their officers, directors, or employees. This act shall not be construed to create any right to administrative or judicial review involving the compliance or noncompliance of the businesses studied, or the State of Florida, including municipal and county governments, or their agents, officers, directors, or employees. Fla. Stat. Section 760.85(3) (1997).
- <sup>11</sup> *Florida Environmental Equity and Justice Commission*, 6-7.
- <sup>12</sup> Maribel Nicholson-Choice, Remarks, *Florida Chamber of Commerce, Environmental Permitting Summer School* (July 20, 2000).
- <sup>13</sup> *Florida Environmental Equity and Justice Commission*, 9.
- <sup>14</sup> *Ibid.*, 23-36.
- <sup>15</sup> *Ibid.*, 36.
- <sup>16</sup> Suzi Ruhl, Interview.
- <sup>17</sup> Fla. Stat. Ann. Section 760.854(2) (West Supp. 2002).
- <sup>18</sup> Richard Gragg, Florida A&M University, Director, Center for Equity and Justice, Interview (March 7, 2002).
- <sup>19</sup> Fla. Stat. Ann. Section 760.854(4) (West Supp. 2002).
- <sup>20</sup> Michael Owens, former Deputy Ombudsman, Florida Department of Environmental Protection, Interview (March 11, 2002). See, however, footnote 57 and accompanying text.
- <sup>21</sup> [www.famu.edu/acad/colleges/esi/CEEJ/mission.html](http://www.famu.edu/acad/colleges/esi/CEEJ/mission.html).
- <sup>22</sup> International City County Managers Association, *Righting the Wrong: A Model Plan for Environmental Justice in Brownfields Redevelopment* (2001).
- <sup>23</sup> Center for Environmental Equity and Justice, *2000-2001 Annual Report to the Florida Board of Education* at <http://expertnet.org/bor/instdir.cfm>.
- <sup>24</sup> Richard Gragg, Interview.
- <sup>25</sup> Dr. C Perry Brown, Florida A & M University, Interview (March 7, 2002).
- <sup>26</sup> Fla. Stat. Section 376.78(6) (West Supp. 2002).
- <sup>27</sup> Fla. Stat. Section 376.78(7) (West Supp. 2002).
- <sup>28</sup> Fla. Stat. Section 376.80(2)(b)(4) (West Supp. 2002).
- <sup>29</sup> *Ibid.*
- <sup>30</sup> Fla. Stat. Section 376.80(4) (West Supp. 2002).
- <sup>31</sup> Florida Department of Environmental Protection, *Florida Brownfields Redevelopment Act 2001 Annual Report* (January 31, 2002) 3.
- <sup>32</sup> City of Clearwater Brownfields Program, *City of Clearwater Brownfields Area Environmental Justice Action Agenda* (September 7, 2000).
- <sup>33</sup> *Ibid.*, 17.
- <sup>34</sup> *Ibid.*, 4-5.

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- <sup>35</sup> Miles Ballogg, former Brownfields Coordinator for the City of Clearwater, Interview (April 11, 2002).
- <sup>36</sup> Fla. Stat. Section 240.5321 (West Supp. 2002).
- <sup>37</sup> Ibid.
- <sup>38</sup> Fla. Stat. Section 381.1015(1) (West Supp. 2002).
- <sup>39</sup> Fla. Stat. Section 381.1015(2) (West Supp. 2002).
- <sup>40</sup> Suzi Ruhl, Interview.
- <sup>41</sup> Ibid.
- <sup>42</sup> Ibid.
- <sup>43</sup> PL 106-541, Title VI.
- <sup>44</sup> U.S. Army of Corps of Engineers and the South Florida Water Management District, *Comprehensive Everglades Restoration Plan: Environmental and Economic Equity Program Management Plan* (August 2001) 1-2.
- <sup>45</sup> Executive Order 12898 (July 11, 1994).
- <sup>46</sup> PL 106-541, Section 601(k) (2).
- <sup>47</sup> Cynthia Laramore, Executive Director, ACTION, South Florida, Interview (April 1, 2002).
- <sup>48</sup> Cynthia Laramore, Interview.
- <sup>49</sup> *Environmental and Economic Equity Plan*, 4.
- <sup>50</sup> Ibid., 27-30.
- <sup>51</sup> Jerry Krenz, South Florida Water Management District, Interview (March 11, 2002).
- <sup>52</sup> U.S. Corps of Engineers and the South Florida Water Management District, *Public Outreach Program Management Plan* (August 2001), 26-31.
- <sup>53</sup> Ibid.
- <sup>54</sup> Cynthia Laramore, Interview.
- <sup>55</sup> [www.myflorida.com/myflorida/government/governorinitiatives/frontporch/intro.html](http://www.myflorida.com/myflorida/government/governorinitiatives/frontporch/intro.html)
- <sup>56</sup> Richard Gragg, Interview.
- <sup>57</sup> Environmental Law Institute, *Opportunities For Advancing Environmental Justice: An Analysis of U.S. EPA Statutory Authority* (November 2001).
- <sup>58</sup> See for example, the Florida Air and Water Pollution Control Act, Title 29, Chapter 403, Sections 403.021 (3), (5), (8) and (10), 403.087(4), 403.088(2)(c), and the Florida Waste Management Act, Title 29, Chapter 403, Sections 403.702(1) and (2), 403.704(16) and (17), and 403.707(1).
- <sup>59</sup> *Environment and Economic Equity Program Management Plan*, 36.
- <sup>60</sup> *City of Clearwater Brownfields Area Environmental Justice Action Agenda*, 4-5.
- <sup>61</sup> *Florida Environmental Equity and Justice Commission*, 127.



## CHAPTER SIX

### NEW JERSEY

#### FINDINGS

**Finding 1:** New Jersey views its environmental justice program as part of a broader state plan to direct new development into decaying cities.

**Finding 2:** The New Jersey Department of Environmental Protection has developed a proposed rule to establish an expanded public participation process for including environmental justice in environmental permits.

**Finding 3:** The New Jersey Department of Environmental Protection is developing a comprehensive state-community partnership approach, using the resources of many state agencies to respond simultaneously to a community's environmental justice concerns.

#### BACKGROUND

New Jersey is the nation's most densely populated state with a population of more than 8 million people: 13 percent of whom are African-American, 13 percent are Hispanic, and 72 percent are White. For more than a century, the state has been one of the nation's leading chemical producers. Because it was common to build housing adjacent to manufacturing facilities so that workers lived nearby, many New Jersey communities border or overlap industrial zones. As the automobile increased social mobility, wealthier residents moved to suburbs and lower income residents occupied housing near industrial facilities. Today, high population density near existing and abandoned industrial facilities may disproportionately affect low income and people-of-color communities, giving rise to significant environmental justice concerns.<sup>1</sup>

State officials have been aware of environmental justice concerns since the mid 1990s, when a siting controversy over a proposed sludge-composting project dramatized the issue. The pervasive presence of older, industrialized cities has kept environmental justice concerns on the front burner, because New Jersey has more brownfield sites than any other state. Also, it has a greater percentage of its land area occupied by people-of-color or low-income communities near industrial sites. Experience with urban revitalization projects in several older cities — Trenton, Newark, Perth Amboy, Elizabeth, and New Brunswick — has propelled a broader state planning process and a search for "outside the box" approaches to solving environmental justice problems. Also, the former commissioner of New Jersey's Department of Environmental Protection (DEP) gained information to develop the state's approach to addressing environmental justice as a member of EPA's National Environmental Justice Advisory Committee (NEJAC)<sup>2</sup> and its Title VI Federal Advisory Committee.<sup>3</sup>

## OVERVIEW OF THE PROGRAM

New Jersey views its environmental justice program as part of a broader state plan to limit sprawl, purchase open space, preserve agricultural lands, and redevelop older, industrialized cities and brownfield sites by directing new development into decaying cities. Also, the state's aggressive brownfield law allows developers to recoup a significant portion — 75 percent — of site clean-up costs from new tax revenues generated by the revitalized site. The state treasury tracks all tax revenues, including sales and corporate business taxes, after the sites are cleaned. This program appeals to developers, and provides significant additional revenues for the state: about \$4 million in its first two years of operation.<sup>4</sup>

At the same time, New Jersey faces limits on its ability to craft solutions to environmental justice problems. On the one hand, it wants to gather more information about contaminated sites but on the other, it also wants to avoid "redlining" heavily stressed communities or otherwise discouraging developers from reinvesting in older cities. Indeed, the proximity of other population centers in New York, Pennsylvania, Maryland, and Delaware makes it crucial for New Jersey to remain competitive when attracting development.<sup>5</sup>

Against this backdrop, New Jersey has launched a series of environmental justice initiatives, ranging from informal solicitations of advice to formal rulemaking. This chapter describes the state's initiatives and outlines their strengths and limitations.

## ADVISORY COUNCIL

In May 1998, the New Jersey DEP commissioner created an Environmental Equity Task Force to develop policy and process recommendations for addressing environmental justice. In response to EPA's Title VI Interim Guidance on Environmental Justice as well as Executive Order 12898, New Jersey's task force met for a six-month period. Based on its findings, the commissioner issued two administrative orders. The first created an Advisory Council on Environmental Equity<sup>6</sup> to serve two purposes:

- provide advice, guidance, and recommendations to the Commissioner on strategies to promote environmental justice, and to build partnerships and trust with the state's many diverse communities
- assist the DEP as it implements an environmental justice policy and process, and thereafter serve as the DEP's principal advisory resource for environmental justice

Established permanently, the council has demonstrated an increased commitment to leadership on environmental justice. Its diverse membership of 30 individuals includes representatives from DEP, grassroots community-based organizations, academic and medical professionals, environmental organizations, businesses, labor unions, and local officials.

In 1999, the commissioner used another administrative order to implement the task force's recommendations. The order created an Office of Equal Opportunity, Contract Assistance and Environmental Equity, charged with the development and implementation of an environmental justice policy.<sup>7</sup> Its director is a member of DEP's management team, which ensures clear and direct reporting to the commissioner.<sup>8</sup>

## STATE POLICY

In 2000, the DEP commissioner issued a third administrative order, reflecting the advisory council's recommendations<sup>9</sup> and setting forth the department's policy on environmental justice. The policy defines environmental justice as:

the fair and equitable treatment in environmental decision-making of the citizens of all New Jersey communities regardless of race, color, income or national origin. The Department's environmental justice policy is to support and advance, to the extent permitted by law, a proactive approach to environmental decision making that is sensitive to a community's environmental needs and life experiences, while at the same time recognizing the interests of the entities seeking permits.<sup>10</sup>

The policy serves as guidance to managers and staff on environmental justice objectives and strategies for implementing the policy in the context of specific decisions. It begins by reaffirming and formalizing the need for the Advisory Council on Environmental Equity, making the council responsible for developing guidance documents on how to implement an effective community outreach program for permit applicants. The policy also commits DEP to incorporating environmental justice considerations into its decisions through eight specific steps:

- identify mechanisms for community notification of new, modified, or renewal permit applications for major facilities, as well as facilities about which a local community has expressed environmental justice concerns "as early as possible within the permit application review process"
- develop guidance for permit applicants that addresses how to administer an effective local community outreach process
- establish a mechanism for community outreach on environmental justice issues "at the earliest feasible stage of the permit application process," — such as at pre-application conferences with the department and permit applicants — and have DEP staff advocate that applicants conduct voluntary community outreach and discuss environmental justice concerns with local groups
- utilize appropriate technical screening tools (such as GIS, Toxic Release Inventory data, or other information resources) at the earliest feasible stage of the process to enable applicants to identify potential environmental justice issues

- draft permit conditions, where appropriate and permitted by law, reflecting agreements between permit applicants and local community stakeholders on environmental justice issues, which means DEP staff would participate in discussions among these parties
- facilitate alternative dispute resolution meetings among permit applicants and local community stakeholders as a way to resolve disagreements identified in the course of environmental justice community outreach
- facilitate local community access to technical and scientific data, such as by increasing the availability and transfer of data and making information easy to understand
- train department managers and staff, within funding limits, on environmental justice issues<sup>11</sup>

## **RULE-MAKING INITIATIVE**

In February 2002, DEP proposed for public comment a rule establishing an "Expanded Community Participation Process for Environmental Justice" for environmental permits.<sup>12</sup> After receiving public comment on the proposed rule, DEP's current commissioner decided not to proceed, noting concerns about the proposed rule's complexity and limited scope. Instead, the commissioner favored a comprehensive state-community partnership approach, described later in this report.

Nonetheless, the process of developing the proposed rule educated both business leaders and department staff to community concerns. Some aspects of the proposed rule, especially the expanded community participation provision and the environmental justice screening model, remain available to DEP as potential tools for tackling environmental justice problems. Because the proposed rule and DEP's new partnership approach may provide useful insights to other states, this report discusses both approaches.

### **Scope of the Proposed Rule**

The proposed rule was designed to resolve issues concerning the department's legal authority for imposing environmental justice requirements.<sup>13</sup> DEP cited as legal authority for this rule existing state statutes regarding public outreach and community participation in permitting decisions. In addition, the department noted that the proposed rule ensured compliance with Title VI of the federal Civil Rights Act of 1964.<sup>14</sup>

DEP's proposed rule would have applied to applicants for new permits, permit renewals, and major modifications to existing permits for major facilities.<sup>15</sup> This definition was intended to cover the largest, most complex, and most regulated facilities and encompassed sources of water pollution and air pollution as well as solid waste, medical waste, hazardous waste, and recycling facilities. DEP estimated that it typically issued permits for less than 50 major facilities annually, and that approximately 25 percent of them might be small businesses.<sup>16</sup> Other permit applicants could be covered based on petitions from affected community groups.<sup>17</sup>

The proposed rule would not have applied to land-use permits because New Jersey's land-use regulations do not distinguish between "major" and "non-major" projects as well as because DEP must make land-use permit decisions within 90 days of determining that a permit application is complete. DEP did not exclude the possibility that the rule might eventually apply to land-use permits, but stated that the mandatory time-limit for making decisions on such permits "presented coordination issues which must be resolved before the Department will propose to make land-use permit applications subject to these rules"<sup>18</sup> (see Appendix C).

### **Environmental Justice Screening**

Under the proposed rule, once DEP became aware of an anticipated permit application, either at or before the time of pre-application, DEP would conduct an environmental justice screening using its computerized model which relates census and environmental exposure data for individual geographic units. DEP's model, based on an earlier one culled from government and academic literature,<sup>19</sup> functioned by multiplying the population of each race in each census tract by the exposures in that tract.

The 1995 Census — the most recent data available at the time the model was developed — provided demographic figures for all 1,937 census tracts in New Jersey. The model grouped populations according to race or ethnicity in six categories: European, African, Latin, Asian, Native, and Other Americans. Exposure estimates were drawn from four data sources: the National Air Toxics Inventory, New Jersey's ambient ozone measurements, its ambient particulate measurements for particles less than or equal to 2.5 micrometers in size, and the state's Known Contaminated Sites List. New Jersey anticipated refining the model over time by adding more databases for other relevant variables.

The model used each data source to calculate the product of exposure and population producing a "population emission ratio." Ratios greater than 1 indicated greater exposures for that race than the statewide population as a whole; ratios less than 1 indicated a lesser exposure for that race than the statewide population as a whole. Hence, 1 was the threshold value for environmental justice screening (see Figure 6.1).<sup>20</sup>

### **Requirement for Public Participation**

If the screening model calculated a threshold value exceeding 1 for a major facility, the proposed rule would require the permit applicant to conduct an expanded community participation process for environmental justice. Other permit applicants would be encouraged, but not required, to follow the process as well.<sup>21</sup> Permit applicants would sign certification agreeing to follow the process when participation was required, and could elect or decline to follow it when participation was voluntary. The certification would be required for a permit application to be considered as complete and would remain on file as part of the public record for the application.<sup>22</sup>

### FIGURE 6.1 DEP'S MODEL FOR ENVIRONMENTAL EQUITY SCREENING

- Calculates disproportionate sub-population (ethnic group) exposures before or during the permitting process
- Utilizes census tract data for New Jersey to derive an aggregate exposure rate for each of six ethnic categories.
- Includes four sources of "stressor" data: the National Air Toxics Inventory, New Jersey's ozone measurements, New Jersey's 2.5  $\mu\text{m}$  particulate matter measurements, and New Jersey's Known Contaminated Sites List.

The model uses a weighted average to determine whether a subgroup in a census tract area is exposed to more or less pollution than that average resident of the state. This ratio is determined for each of the six ethnic categories for each of the four sets of data stressors in each census tract. Each census tract is assigned a unique Population Emission Ratio (PER) for each sub-population.

For each of six ethnic groups:

$$\frac{\Sigma (\text{exposure rating})(\text{census tract sub-population})}{(\text{sub-population of the state})} = \text{Population Emission Ratio (PER) assigned to each sub-population}$$

$$\frac{\Sigma (\text{exposure rating})(\text{total census tract population})}{(\text{total population of the state})}$$

**Outcomes:**

- When the ratio is equal to "1," the sub-population has an exposure equal to the total population of New Jersey.
- When the ratio is greater than "1," then the sub-population has a greater exposure than the state's total population, suggesting possible environmental justice issues.
- When the ratio is less than "1," then the sub-population has a lower exposure than the rest of the state.

**Local Sensitivity:** to determine local sensitivity to a proposed facility, the exposure rating is increased by "1" and multiplied against the PER for the particular sub-group or groups of concern. The two values are then subtracted creating a Delta or "change" value. The same calculation is made for each of the four sources of stressors data. This value describes the magnitude of change that would occur if exposure were increased for each subpopulation in that census tract.

**Mapping:** the Delta values make it possible to create a pin-point map by census tract, or a contour map graphically representing areas that currently exposed to more pollution that would be worse off if pollution increased in the future (see Appendix D).

Source: available at <http://www.state.nj.us/dep/equity/eebnb.pdf>

## **Expanded Public Participation Process**

The proposed rule sets out the steps that would be required in an expanded community participation process.

First, there would be a pre-application meeting between the permit applicant and DEP.<sup>23</sup> The meeting would serve to inform DEP of the project design, location, and schedule, and allow the department to explain the expanded process to the applicant.

Second, the applicant would plan and carry out a community outreach and involvement plan that included three components:

1. a fact sheet describing the project
2. an outreach strategy evaluating who would be impacted, what information would be provided, and how the applicant would communicate with the community and resolve issues
3. a schedule identifying the timing and sequence of permit filings, permit review, and community meetings.<sup>24</sup>

The applicant would be required to submit a plan for DEP review and distribute it to key community leaders identified in consultation with the department.<sup>25</sup>

Third, the applicant would hold an initial meeting in or near the affected area with key community representatives;<sup>26</sup> local government officials; and DEP representatives, who would serve as moderators. At the meeting, community members would receive a description of the proposed project; information on potential health, environment, and quality of life impacts; and an outline schedule for permit filings, permit review, and other community meetings. In addition, local government officials would have an opportunity to explain applicable local laws.<sup>27</sup>

Fourth, based on comments received from the community, the applicant would revise the public participation plan and identify additional outreach needed to reach consensus on community concerns.<sup>28</sup> To fulfill this requirement, applicants could avail themselves of a DEP community needs guidance document, which would advise applicants how to identify community members for outreach, what types of outreach would be appropriate for different types of projects, what methods of information exchange could be used, and what resources would be available for community members to evaluate potential impacts from proposed projects.<sup>29</sup>

Fifth, at the conclusion of the outreach effort, DEP would determine whether the applicant had made a good faith effort to comply. If DEP found the effort unacceptable, it would deny the permit (for mandatory participants) or include an unacceptable finding in the permit (for

voluntary participants).<sup>30</sup> Sixth, if the applicant and community reached agreement on some issues, DEP would convert the agreement into enforceable permit conditions, unless the terms of this agreement went beyond the department's legal enforcement authority. For the latter, the applicant and community could enter into a separate agreement outside the permit context.<sup>31</sup>

Seventh, if the applicant and community could not reach agreement on some issues, they could use DEP's alternative dispute resolution process. Here, the department's office of dispute resolution would attempt to mediate resolution of the remaining issues for incorporation into the final permit.<sup>32</sup>

Eighth, if controversy remained at the conclusion of the alternate dispute resolution process, DEP would require the applicant to conduct an impact analysis, considering pollution sources within a one-mile radius of the proposed facility, community health characteristics, and the facility's projected impact on the surrounding environment. Specific impacts to be considered included air pollution, releases to surface and ground water, the presence of already contaminated sites, and other community-specific health or environmental data. The impact analysis then would generate additional permit conditions (see Figure 6.2).

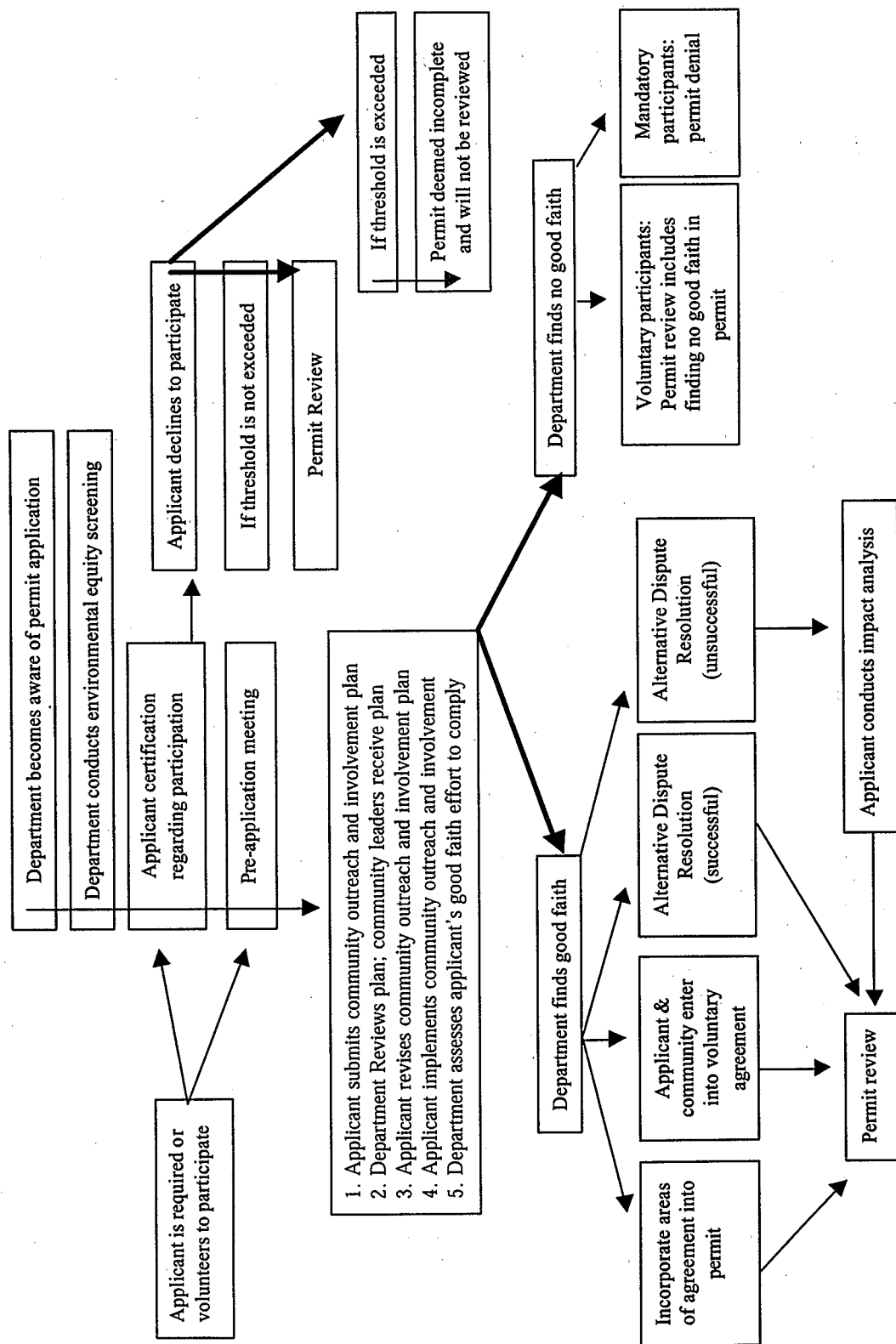
### **Benefits of the Proposed Rule**

DEP believed the proposed rule offered strong environmental, economic, and social benefits:

- **Environmental Benefits:** Although New Jersey published a list of known contaminated sites in the state, information on human exposure to hazardous contaminants remained ambiguous at the statewide level. However, local officials and residents living near industrial facilities or contaminated sites had unique opportunities to observe activities or hazards that might escape official scrutiny, such as previously unknown sources of pollution, locations of susceptible populations, or facility activities that could require enforcement action. The proposed rule invited communities and local governments to bring this wealth of information to the attention of DEP permit writers so that steps could be taken to eliminate or mitigate impacts on health or environmental impacts.<sup>33</sup>
- **Economic Benefits:** The rule would have fostered community involvement at the earliest stages of the permitting process. Communications at this stage could establish trust between applicants and affected communities. Project applicants could save time and money by incorporating project changes to address community concerns from the outset. Project changes could include such pollution prevention measures as redesigning industrial processes or substituting less hazardous substances, including additional pollution controls, obtaining emission offsets from nearby sources, or modifying operating practices. By working with the community, facilities might save money on construction costs by eliminating the need to rebuild, avoiding the expense of litigation and enforcement, reducing future tort liability for hazards to health or the environment, expediting the permit process, and discovering innovative or even cost-saving solutions



**FIGURE 6.2**  
**NEW JERSEY'S PROPOSED RULE**  
**EXPANDING THE COMMUNITY PARTICIPATION PROCESS FOR ENVIRONMENTAL EQUITY**



to eliminate potential public health and environmental hazards. By building strong community relations, permit applicants could achieve greater certainty with respect to regulatory requirements, catalyze adjacent economic development, increase property values, and stabilize a nearby workforce. The new rule would have created some short-term costs due to the time and effort involved in engaging in community dialogue and additional pollution controls. However, DEP believed "these short-term costs [were] likely to be offset by the long-term benefits."<sup>34</sup>

- **Social Benefits:** Communities vary greatly, so solutions that meet their needs can differ from one location to the next. The proposed rule encouraged community involvement early in the permitting process so that applicants could develop sites and project plans and proposed permit conditions in response to the cultural, social, and economic needs. This process could help permit applicants avoid destabilizing the adjacent community, discouraging property development, and devaluing land and personal property. In addition, the proposed rule would afford a mechanism for the applicants to develop partnership agreements with communities that went beyond narrow regulatory requirements.<sup>35</sup>

### **Critiques of the Proposed Rule**

When the rule was proposed, DEP received widespread approval for its effort to open communications among regulators, permitted industries, and disadvantaged community groups. However, two principal groups criticized the proposed rule: industry officials, some of whom believed the proposal did not reflect their views despite their participation on the advisory council,<sup>36</sup> and some communities that wanted relief from geographically clustered facilities.<sup>37</sup> Comments on the proposed rule and suggestions for what the rule should contain provide useful insights into the issues involved, even though DEP is not pursuing development of a final rule.

Industry representatives lauded the constructive dialogue that had occurred within the advisory council and recognized the need for extended stakeholder outreach. At the same time, they were concerned about implementing the concepts of communication and outreach in the proposed rule. Following are key points raised by industry representatives.

- The proposal places an additional burden on permitting, presenting yet another obstacle to development at brownfield sites and other needy areas.
- The rule should not apply to permit renewals for existing facilities, although it could address major new facilities and major modifications to existing ones if the modifications significantly increase emissions.
- The screening tool should be scrapped and the same process should apply to all applicants, regardless of location.
- The proposed certification procedure for electing or declining to utilize the expanded community outreach process should not apply to voluntary participants because companies that withhold consent would be stigmatized.

- DEP should have a deadline for reviewing an applicant's outreach plan and review the plan on behalf of the community, rather than have a separate stakeholder review.
- Solutions reached with the community should be memorialized in a separate agreement, not in enforceable permit conditions.
- The rule should contain more specific criteria for determining what constitutes good faith efforts to comply, and should identify avenues of recourse if a permit applicant was deemed not to have proceeded in good faith.
- The rule should be more specific about impact analysis requirements.
- DEP should clarify its legal authority to issue the rule.
- The advisory council should be expanded to include more business representatives, brownfield developers, health professionals, and urban planners, recognizing that community health is affected by such factors as population density, transportation, employment, and industrial pollution.<sup>38</sup>

Some community groups contended that the proposed rule was not strong enough. The following are key concerns raised by community representatives.

- The proposed rule has "no teeth" because it does not bar inappropriate siting decisions that might endanger public health or the environment or create disproportionate impacts.
- The proposal does not equalize a disadvantaged community's bargaining leverage with resource-rich permit applicants. The rule should provide for technical and financial assistance to communities so they can identify pollutants of concern, develop draft permit conditions, and hire their own technical and legal experts.
- The proposal over-emphasizes permit conditions negotiated between the applicant and community and down-plays DEP's use of statutory or discretionary authority to impose conditions that protect health and the environment.
- The proposal lacks incentives for permit applicants to pay for resolving community concerns, so side agreements between the parties might only cover small concessions to the community that could be difficult to enforce.
- The proposal covers too few sources because it applies only to "major" facilities that emitted "100 tons or more of a single pollutant." Meanwhile, facilities that emit lesser quantities of multiple pollutants might have greater adverse impacts but would not be subject to citizen petitions.
- Impact analyses should be required in all cases, not just when the community has not reached agreement with the facilities. Also, there should be clear standards for content and conduct of the analysis.
- The screening tool considers data on only four stressors, yet some of those databases are neither complete nor accurate. Emphasizing ambient pollution, not emissions, data relies too heavily on where monitoring stations are located, at least for particulates and certain other pollutants. Comparing a target

population's exposure to that of the statewide population (including minorities) dilutes the potential to identify disparate impacts on minorities.

- The rule should spell out basic requirements for public participation, including the need to translate materials into a language other than English, where appropriate.<sup>39</sup>

## COMPREHENSIVE STATE-COMMUNITY PARTNERSHIP INITIATIVE

Under the direction of its current commissioner, DEP is now developing a new initiative for a comprehensive state-community partnership to address environmental justice problems. The objective of DEP's evolving partnership model is to pull together resources from a variety of agencies to simultaneously address a broad range of issues affecting public health, the environment, and overall quality of community life.

Camden, New Jersey, is an emerging example of this approach. The city includes more than 100 known contaminated sites. Its South Camden neighborhood, an African-American and Latino community with low-income residents, contains a cluster of industrial facilities, two Superfund sites, a dozen other contaminated sites, a power plant, a trash incinerator, a sewage treatment plant, and a cement-additive processor. Public concern over potential health impacts has already produced two lawsuits aimed at reducing South Camden's share of pollution. Scores of community residents attended a public hearing on DEP's proposed public participation rule.<sup>40</sup>

Shortly after taking office, DEP's current commissioner accepted an invitation by the community to tour South Camden, creating a high-profile demonstration of interest in environmental justice issues and raising hope among South Camden's residents.<sup>41</sup> Following this visit, the commissioner enlisted several state agencies to formulate a comprehensive response to the concerns of South Camden's community groups. Immediate and visible results included targeted state police enforcement of truck traffic traveling through South Camden's residential streets, stepped-up environmental monitoring of drinking water in schools and homes, and action by the Department of Community Affairs to relocate residents bordering a Superfund site.

In addition, the governor's office has requested \$1.4 million in its proposed budget for community redevelopment funds for South Camden. DEP has applied for a federal grant to conduct neighborhood monitoring for air toxics, envisioning that South Camden residents will participate in scoping the issues, designing the risk analysis, and identifying risk reduction strategies. DEP has begun discussions with the U.S. Department of Health and Human Services to expand an ongoing health effects study that is examining potential impacts from various additional environmental stressors. Further, DEP explored the creation of an urban park in South Camden and discussed potential educational initiatives with the Department of Education.

## **ANALYSIS OF THE NEW JERSEY PROGRAM**

### **Leadership**

DEP has exercised leadership by articulating a clear commitment to environmental justice and proving that commitment through specific initiatives:

- a state policy pledging "to support and advance, to the extent permitted by law, a proactive approach to environmental decision making that is sensitive to a community's environmental needs and life experiences, while at the same time recognizing the interests of the entities seeking permits"
- two administrative structures designed to ensure full implementation of the environmental justice policy. The Office of Equal Opportunity, Contract Assistance, and Environmental Equity — reporting directly to DEP's commissioner — and an Advisory Council with diverse membership to provide ongoing advice and strategic direction; industry, local government, and community representatives praise the council for providing a constructive forum to explore environmental justice issues with differing constituencies and viewpoints<sup>42</sup>
- educating regulated facilities about the need to consult with key community leaders "early and often" prior to obtaining permits to construct, expand, or renew major polluting facilities
- a bipartisan commitment to solving environmental justice problems that transcends political parties. The proposed rule expanding community participation in permitting was developed under a Republican administration and the comprehensive state-community partnership model was done under a Democratic administration

At the same time, DEP recognizes significant gaps in the scope of its environmental justice initiatives. Even the proposed rule's emphasis on negotiated permit conditions begged the question of what DEP could or could not do under applicable state law to deny or condition permits for facilities that endanger public health, threaten the environment, or create or exacerbate a disproportionate adverse impact on already stressed communities. This question is pertinent to the new state-community partnership approach. In response to these uncertainties, the Panel encourages DEP to engage in a comprehensive review of its applicable environmental and administrative laws, and to identify opportunities for addressing environmental justice issues in its core programs.

### **Accountability**

New Jersey's policy on environmental justice does not contain explicit objectives for measuring progress on environmental justice issues, nor has DEP adopted performance, outcome,

accountability, or evaluation measures for integrating environmental justice into its day-to-day operations. Consequently, it will be difficult to assess whether or how DEP's evolving environmental justice initiatives improve public health, environmental conditions, and overall quality of life in heavily stressed people-of-color or low-income communities.

However, community leaders are pressing for immediate, visible changes to disadvantaged neighborhoods. Watching children complain of shortness of breath, play against the backdrop of industrial facilities, and witness the debilitating effects of cancer in family members, they want the department to help them "take back" their towns or communities, bar additional polluting sources from relocating in their midst, complete actual cleanups of existing contamination, and conduct community-wide health assessment studies.<sup>43</sup>

Residents question whether these changes will occur, and also how long it will take for them to happen. DEP would be better suited to answer those questions if it adopted more specific performance, outcome, and accountability measures.

### **Permit Tools**

Because New Jersey's comprehensive state-community partnership approach is evolving, its implications for permitting remain unclear. In the absence of the proposed rule, the Panel encourages DEP to ensure that expanded public participation in permitting takes place under the new approach. If New Jersey expands public participation, as it had envisioned when embarking on the proposed rule, that approach would have the potential to improve the amount and quality of information available to community groups and DEP's permit writers, thus greatly enhancing the adequacy and effectiveness of the permits by:

- capturing the type of information commonly available to community residents but frequently beyond the purview of state officials, such as violations of existing permit conditions; poor maintenance; the presence of unpermitted, underpermitted, or intermittently emitting facilities; and the prevalence of potentially pollution-related health ailments
- capitalizing on the wealth of relevant information that local government officials have
- inducing voluntary business responses to community concerns through improved operating practices, maintenance, and pollution prevention measures which, in turn, may enhance the benefits of technology-based pollution controls

Even if businesses and community groups reach negotiated agreements, DEP's permit writers will face difficult decisions about what is within and beyond the scope of their current legal authority. If agreements are not reached, permit writers must decide the extent to which they can or must resolve controversies through agency-crafted permit conditions. Without guidance, permit writers — especially for DEP programs with tight time constraints, limited resources, and large workloads — may revert to traditional approaches rather than using available legal authorities to compel or authorize permit conditions based on new information.

In short, DEP must ensure that its permit writers are cognizant of the full range of authority at their disposal to address environmental justice concerns.

One key to permitting effectiveness will be the extent to which DEP can ensure that permits are renewed in a timely manner. Outdated permits should be renewed to include better pollution control requirements, information on community stresses, pollution prevention strategies successfully used by others in the same industry, and improvements to existing pollution controls for maximum effectiveness. Otherwise, renewal backlogs can prevent surrounding communities from reaping the benefits of new developments in law, science, or technology. Unfortunately, backlogs awaiting agency review, modification, and renewal have plagued many water discharge programs for decades. To make significant progress, New Jersey must make a high priority commitment to eliminate backlogs in highly stressed, disadvantaged communities.

### **Priority-Setting**

In its comprehensive partnership approach, DEP has made a promising start in crafting an environmental justice program that assesses community needs and joins the resources of many state agencies to achieve results. The Panel encourages the state to continue this approach, expand its use to communities beyond South Camden, and explore how all DEP programs can be brought to bear on environmental justice problems.

In addition, DEP should track exposure trends for high risk communities, determine whether on-the-ground measures of environmental quality — such as air, water and waste pollution — are improving, and ascertain whether pollution-related public health effects — such as cancer, asthma, school attendance, and hospital admission rates for respiratory ailments — are decreasing. These and other appropriate performance measures can help the department to determine whether its environmental justice initiatives are achieving intended outcomes.

### **Public Participation**

New Jersey has made major strides in educating its regulated entities and DEP's staff about the importance of expanded public participation in permitting programs, other than land-use permits. It has encouraged early and frequent interaction with community leaders and makes services of DEP's Office of Dispute Resolution available to business and communities alike.

Other state programs have important implications for environmental justice, including standard-setting, enforcement, research, information gathering, and financial assistance. Enforcement will be central to realizing the pollution control potential of New Jersey's existing regulatory requirements.

The Panel encourages DEP to ensure that expanded public participation occurs in permitting, and to provide expanded public participation in other programs as well.

## RECOMMENDATIONS

- New Jersey DEP should establish measurable program objectives for addressing environmental justice, develop accountability measures and procedures for achieving these objectives, and issue regular public reports about its progress in addressing environmental justice concerns.
- DEP should track exposure trends in communities with high levels of pollution as one measure for evaluating the effectiveness of its environmental justice initiatives.
- DEP should clearly cover low-income as well as people-of-color communities in its environmental justice initiatives.
- DEP should conduct a comprehensive examination of applicable state constitutional provisions, as well as environmental, administrative, civil rights, and public health laws, to identify authorities for addressing environmental justice in core environmental programs, including enforcement. Upon completion of this analysis, DEP should communicate the results through a guidance document that can be easily understood and carried out by permit writers and other agency staff in their daily work.
- DEP should ensure that its permitting program achieves expanded public participation, in the absence of a rule on the subject. In addition, it should examine how it can improve public participation in other programs, including land-use planning, permitting, standard-setting, enforcement, research, compliance and technical assistance, information gathering, and financial assistance.
- DEP should continue to develop its comprehensive state-community partnership for addressing environmental justice problems, expand that initiative to other communities, and explore how all programs — permitting, standard-setting, enforcement, research, information gathering, compliance and technical assistance, and financial assistance — can be used to solve environmental justice problems.



## ENDNOTES

- <sup>1</sup> 34 N.J.R. 665-675, Preamble, Social Impact.
- <sup>2</sup> *Report of the Title VI Advisory Committee, Next Steps for EPA, State and Local Environmental Justice Programs* (March 1, 1999).
- <sup>3</sup> Robert C. Shinn, Jr., Commissioner, New Jersey Department of Environmental Protection, Interview (January 7, 2002).
- <sup>4</sup> *Ibid.*
- <sup>5</sup> *Ibid.*
- <sup>6</sup> Administrative Order No. 1998-15 (October 22, 1998).
- <sup>7</sup> Administrative Order No. 1999-05 (April 27, 1999).
- <sup>8</sup> Interview with Robert C. Shinn, Jr. (January 7, 2002).
- <sup>9</sup> Administrative Order 2000-01 (February 8, 2000).
- <sup>10</sup> *Ibid.*
- <sup>11</sup> *Ibid.*
- <sup>12</sup> 34 N.J.R. 665 at [www.state.nj.us/dep/equity/eerule.pdf](http://www.state.nj.us/dep/equity/eerule.pdf).
- <sup>13</sup> *Ibid.* in Preamble, Summary.
- <sup>14</sup> *Ibid.*
- <sup>15</sup> Proposed New Rules N.J.A.C. Section 7:1F-1.1.
- <sup>16</sup> 34 N.J.R. 665, Preamble, Summary.
- <sup>17</sup> A community petition may identify a facility required to participate in the expanded outreach process or trigger an environmental justice screening. If the latter indicates the facility is located in an area where the threshold value warranting participation has been exceeded, the facility will be required to participate.
- <sup>18</sup> Proposed New Rules N.J.A.C. Section 7:1F.
- <sup>19</sup> Susan A. Perlin, et al., "Distribution of Industrial Air Emissions by Income and Race in the United States: An Approach Using the Toxic Release Inventory," *Environmental Science and Technology* (1995) 29:1.
- <sup>20</sup> A *Basis and Background* document for the environmental justice screening model is available to the public and can be obtained by contacting Melinda Dower, Office of Pollution Prevention and Coordination, P. O. Box 423, Trenton, NJ 08625-0423.
- <sup>21</sup> Proposed New Rules N.J.A.C. Section 7:1F-2.2.
- <sup>22</sup> Proposed New Rules N.J.A.C. Section 7:1F-2.4.
- <sup>23</sup> This meeting is intended to occur "as early in the application planning process as possible prior to submission of a permit application. Applicants for permit renewals shall request such pre-application meeting at least 6 months prior to expiration of the permit." Proposed New Rules N.J.A.C. Section 7:1F-2.1.
- <sup>24</sup> Proposed New Rules N.J.A.C. Section 7:1F-2.5.
- <sup>25</sup> Proposed New Rules N.J.A.C. Section 7:1F-2.6.
- <sup>26</sup> "Key community representatives" may include local residents, local businesses, neighborhood associations, school representatives, religious groups, civic organizations, environmental organizations, other non-governmental organizations, health care providers, local government officials, officials responsible for emergency response, and labor unions. See Proposed New Rules N.J.A.C. Section 7:1F-1.3.
- <sup>27</sup> Proposed New Rules N.J.A.C. Section 7:1F-2.7.
- <sup>28</sup> *Ibid.*
- <sup>29</sup> *Guide to Administering an Effective Environmental Justice Process* available through Pamela Lyons, Director, Equal Opportunity, Contract Assistance and Environmental Justice, P. O. Box 402, 506 East State Street, Floor 2, Trenton, NJ 08625-0402.
- <sup>30</sup> Proposed New Rules N.J.A.C. Section 7:1F-2.10.
- <sup>31</sup> Proposed New Rules N.J.A.C. Section 7:1F-2.8.
- <sup>32</sup> Proposed New Rules N.J.A.C. Section 7:1F-2.9.
- <sup>33</sup> Proposed New Rules N.J.A.C. Section 7:1F-2.11.
- <sup>34</sup> 34 N.J.R. 665, Preamble, Economic Impact.
- <sup>35</sup> *Ibid.*, Social Impact.
- <sup>36</sup> Donald McCloskey, Public Service Enterprise, Inc., Interview (April 3, 2002).

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- <sup>37</sup> Bonnie Sanders, President, South Camden Citizens in Action, Interview (March 15, 2002); and Olga Pomar, Camden Regional Legal Services Attorney, Interview (March 14, 2002).
- <sup>38</sup> Donald McCloskey, Interview.
- <sup>39</sup> Valorie Caffee, Director of Organizing, New Jersey Work and Environment Council, Interview (January 8, 2002); Bonnie Sanders; Olga Pomar.
- <sup>40</sup> Olga Pomar, Interview.
- <sup>41</sup> Interview with Bonnie Sanders.
- <sup>42</sup> Donald McCloskey; Fred Martin, Director, Division of Planning for the City of Camden, New Jersey, Interview (January 8, 2002); and Valorie Caffee. Indeed, to the extent there is criticism of the Council, it reflects the view that the Council should expand its membership or focus. Industry representatives recommend more business leaders, health professionals, and urban planners (Interview with Donald McCloskey, supra); others suggest more labor representation (Interview with Valorie Caffee, supra). Some community representatives, on the other hand, question the relevance of the Council's deliberations to communities in dire need of immediate cleanups. Reverend Al Stewart, Interview (January 8, 2002).
- <sup>43</sup> Reverend Al Stewart; Bonnie Sanders, Interview.

## CHAPTER SEVEN

### CALIFORNIA

#### FINDINGS

**Finding 1:** California has enacted significant environmental justice legislation that established a strong state policy to address environmental justice problems. The six statutes are largely procedural, as they require strategic planning, studies of gaps in authority, and guidelines for local land-use plans.

**Finding 2:** California intends to link environmental justice and local land-use issues in a practical way through land-use guidelines, consultations between state environmental agencies and local land-use authorities, and city policies and plans.

**Finding 3:** California's state and regional agencies are rapidly developing their environmental justice initiatives. Two of these agencies, the Air Resources Board and the South Coast Air Quality Management District, have programs that include leadership and accountability, integration into permits, priority setting and risk reduction, and public participation. The Panel believes these features are key to an effective program.

**Finding 4:** Comprehensive monitoring data gathered for the Multiple Air Toxics Exposure Study (MATES II) have been critically important to understanding environmental justice problems in California. They have provided the basis for new state and regional programs to address these issues and reduce pollution.

**Finding 5:** The South Coast Air Quality Management District's and the Air Resources Board's Town Hall meetings, as well as the Department of Toxic Substances Control community liaisons, are excellent ways to improve communications between agencies and people-of-color or low-income communities.

#### BACKGROUND

More than 40 percent of California's diverse population of 34 million people are people of color. Major ethnic groups include Hispanic (32.4 percent), Asian (10.9 percent) and African-American (6.7 percent). Los Angeles County, the center of many environmental justice concerns, is almost 60 percent non-white.<sup>1</sup>

California agencies have faced environmental justice issues for a long time due to the state's large urban population with many people-of-color and low-income communities, high level of economic activity, and serious problems with air pollution and waste disposal. The Department of Toxic Substances Control and the South Coast Air Quality Management District began environmental justice efforts several years ago. Both the South Coast Air Quality Management District and the California Air Resources Board have integrated environmental justice issues into their substantive requirements, allocation of grant funds, and decision-

making criteria for development permits. Other California agencies remain largely focused on procedural issues related to environmental justice, like strategic planning and public participation. Still, a flurry of recent activity has stemmed from six environmental justice laws enacted in the last three years and the increased attention paid to environmental justice at the federal level, such as the issuance of Executive Order 12898.

## AGENCY STRUCTURE

The structure of California's environmental agencies is complex. The California legislature did not create a cabinet-level environmental agency until 1991.<sup>2</sup> That agency, the California Environmental Protection Agency (Cal/EPA), became the umbrella agency under which several previously independent environmental boards and offices now operate (see Figure 7.1).

The Air Resources Board and the Department of Toxic Substances Control are very large agencies with nearly 1,000 employees each, making them similar in size to many states' entire environmental agencies.

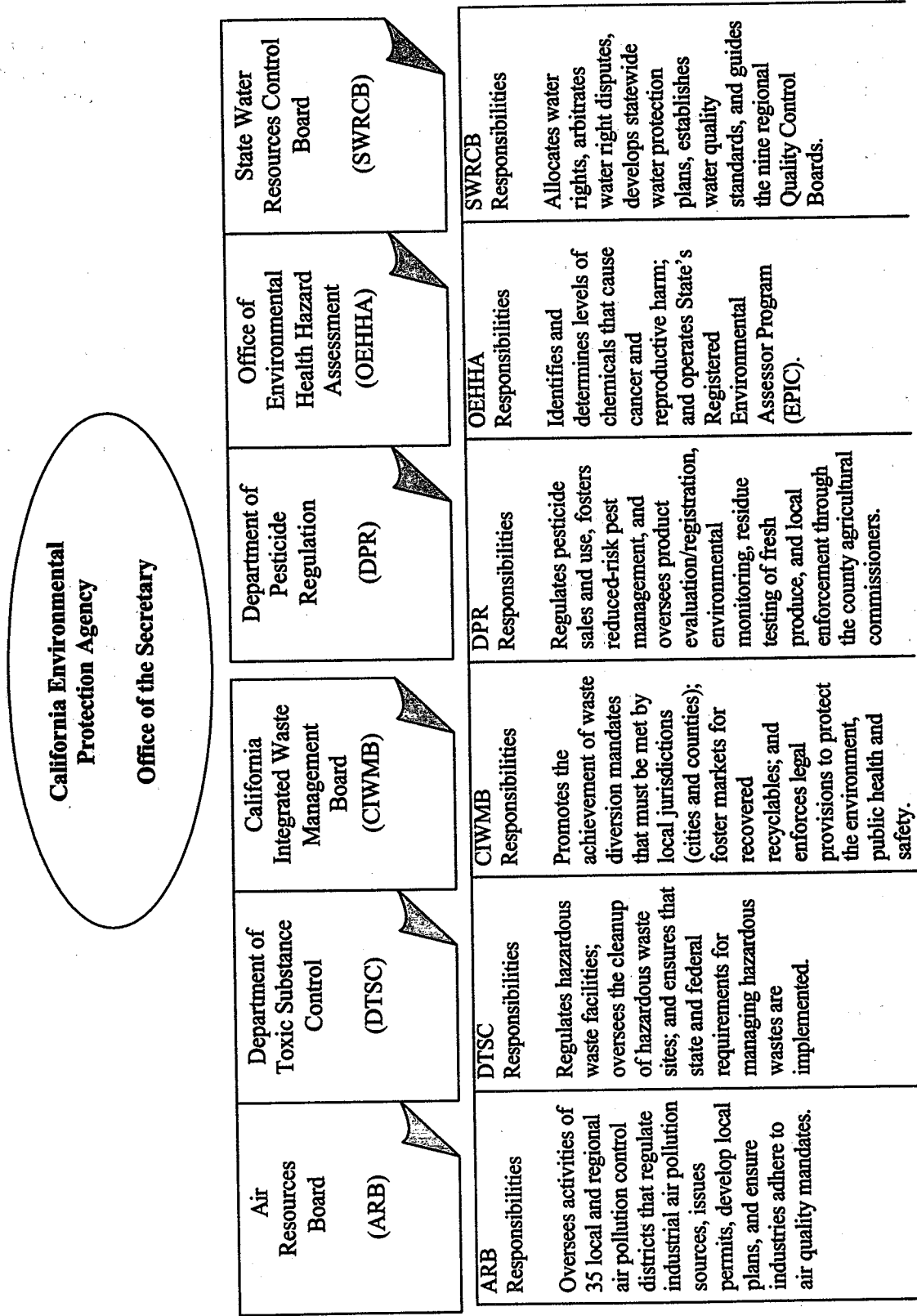
Cal/EPA's strategic plan notes that the unique organizational structure of California's environmental programs separates the six boards, departments, and offices into programs that are largely independent of the secretary of Cal/EPA because the secretary does not direct their policies and decisions on a daily basis. As an officer of the governor's cabinet, the secretary provides the overall vision and leadership that focuses these entities' efforts on the goals of the governor.<sup>3</sup> The secretary also approves the budgets for the six agencies, but the agencies promulgate their own rules and implement programs within their jurisdiction. Cal/EPA sets the basic environmental justice policy and strategy, but the agencies develop their own environmental justice mission statements, strategies, and implementation approaches. As a result, California does not have a single environmental justice program, but several, all under Cal/EPA's environmental justice initiative.

A further complexity is that regional agencies carry out much of the program implementation work. For example, California's 35 Air Quality Management Districts have their own authority to adopt rules and manage programs. The largest, the South Coast Air Quality Management District, has 800 employees, a \$100 million budget, and geographic coverage that encompasses a population representing between four and five percent of the entire U.S. population.<sup>4</sup>

This study has focused on five environmental justice programs in California:

- the governor's Office of Planning and Research, which coordinates environmental justice issues and provides guidance to local governments on land-use planning
- Cal/EPA, responsible for environmental justice strategic planning and for overseeing the state's environmental boards, departments, and offices

**FIGURE 7.1**  
**ORGANIZATIONAL STRUCTURE OF CAL/EPA**



- the Department of Toxic Substances Control, which had early involvement with environmental justice controversies arising from disputes over siting of waste management facilities in the early 1990s
- the Air Resources Board, which recently adopted a policy on environmental justice
- the South Coast Air Quality Management District, which has worked on the Multiple Air Toxics Exposure Study (MATES II), and launched efforts to respond to the results

## IMPETUS FOR THE PROGRAMS

The motivating impetus for these programs has been a combination of strong public interest involvement, significant legislative interest, controversial agency decisions that spurred rethinking about public involvement, federal environmental justice activity, and leadership from key agency officials.

California's public interest community began to focus on environmental justice during the early 1990s. Waste facility siting decisions in Los Angeles spawned the "Mothers of East L.A.," a group that remained an active force for environmental justice issues throughout the decade.<sup>5</sup> Other public interest organizations investigated and documented environmental justice concerns.<sup>6</sup> For example, a Communities for a Better Environment study noted that:

Southeast Los Angeles (SELA), the industrial heart of L.A., is a striking example of environmental injustice. The area contains the three most densely populated cities in the county. Its residents are disenfranchised politically and economically. Fifty-eight percent of SELA adults are not citizens and per capita income is 45 percent of that of the county.

In addition to socioeconomic hardships, residents of SELA must face the burden of exposure to toxic chemicals. Covering less than one percent of the county's area, SELA accounts for 18 percent of toxic air emissions. Manufacturers are eight times more concentrated in SELA than in the county as a whole.<sup>7</sup>

Due in part to California's term limits, a new generation of state legislators took office in the 1990s, coming from districts with significant environmental justice concerns. These legislators began introducing environmental justice initiatives to address constituent concerns. The state legislature passed several environmental justice bills, but Governor Wilson vetoed this legislation.<sup>8</sup> In 1999, Governor Davis assumed office and signed six environmental justice bills into law.

The Department of Toxic Substances Control (DTSC) became more aware of environmental justice issues through the intense opposition led by Mothers of East L.A. to a new waste facility in the early 1990s. Their opposition ultimately caused the project proposer to withdraw the project. As a result of this experience, DTSC conducted the Vernon Community Assessment, which examined more than 40 sites in a small area that involved the department in

some way. In 1993, Communities for a Better Environment conducted a training session for DTSC staff. Given this growing awareness of environmental justice issues, the department included a new community involvement policy in its 1993 public participation manual, addressing language, culture, information dissemination, and ways to work with community leaders.<sup>9</sup>

The state derived its definition of environmental justice from EPA's.<sup>10</sup> Further, legislation has directed the governor's Office of Planning and Research to coordinate the state's activities and share information about environmental justice programs with the Council on Environmental Quality, EPA, the General Accounting Office, the Office of Management and Budget, and other federal agencies. Finally, it has required the Office of Planning and Research to "review and evaluate any information from federal agencies that is obtained as a result of their respective regulatory activities under federal Executive Order 12898."<sup>11</sup>

The chairs of California's two most prominent boards, the Air Resources Board and the Governing Board for the South Coast Air Quality Management District, also spearheaded increased attention on environmental justice at their organizations. Dr. Alan Lloyd arrived at the Air Resources Board with a strong interest in community health and led the board to focus on environmental justice.<sup>12</sup> Shortly after becoming chair of the Governing Board for the South Coast Air Quality Management District, William Burke proposed a set of guiding principles and environmental justice initiatives that were adopted in 1997.<sup>13</sup>

## ENVIRONMENTAL JUSTICE LEGISLATION

The state legislature first addressed environmental justice more than a decade ago. Beginning in 1991, the legislature passed five environmental justice bills, all of which were vetoed.<sup>14</sup> With a new governor in 1999, however, environmental justice found a more receptive audience. Governor Davis signed six bills directly addressing environmental justice, and one dealing with the closely associated issue of clean-up levels for brownfield sites.

The first of these laws, Senate Bill 115,<sup>15</sup> was passed in 1999 and defines the term "environmental justice," gives the Office of Planning and Research a coordinating role related to environmental justice, and requires that Cal/EPA consider it when designing and operating its own programs and those of its boards, departments, and office.<sup>16</sup>

In its original form, Senate Bill 115 reintroduced previous legislation that placed environmental justice considerations into the environmental requirements of the California Environmental Quality Act (CEQA). This approach faced opposition from, among others, California Council for Environmental and Economic Balance (CCEEB), an organization that includes many of the state's largest businesses, labor unions, and public officials. CCEEB argued that state agencies should first have a clear strategy for addressing environmental justice issues rather than approaching it on a permit-by-permit basis.<sup>17</sup> The revised bill excluded the CEQA provisions,<sup>18</sup> and CCEEB dropped its opposition after these changes were made.<sup>19</sup> Meanwhile, community and environmental organizations remained supportive of Senate Bill 115, even without the CEQA requirements.<sup>20</sup>

The law defines environmental justice as "the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies."<sup>21</sup> It also requires the Office of Planning and Research to serve as coordinator and central information repository for environmental justice information. Specifically, the office was directed to:

- consult with the Secretaries of the California Environmental Protection Agency; the Resources Agency; the Trade and Commerce Agency; and the Business, Transportation and Housing Agency; the Working Group on Environmental Justice; any other appropriate state agencies; and all other interested members of the public and private sectors in the state
- coordinate the office's efforts and share information regarding environmental justice programs with the Council on Environmental Quality, the United States Environmental Protection Agency, the General Accounting Office, the Office of Management and Budget, and other federal agencies
- review and evaluate any information from federal agencies obtained as a result of their respective regulatory activities under Executive Order 12898, and from the Working Group on Environmental Justice<sup>22</sup>

The law directs Cal/EPA to adhere to five specific environmental justice principles in designing its mission, programs, policies, and standards:

- conduct its programs, policies, and activities that substantially affect human health or the environment in a manner that ensures the fair treatment of people of all races, cultures, and income levels, including minority populations and low-income populations of the state
- promote enforcement of all health and environmental statutes within its jurisdiction in a manner that ensures fair treatment of people of all races, cultures, and income levels, including minority populations and low-income populations in the state
- ensure greater public participation in the agency's development, adoption, and implementation of environmental regulations and policies
- improve research and data collection for programs within the agency related to the health of, and environment of, people of all races, cultures, and income levels, including minority populations and low-income populations in the state
- identify differential patterns of consumption of natural resources among people of different socioeconomic classifications for programs within the agency<sup>23</sup>

Although this law does not include substantive permitting standards, it provides clear policy direction for Cal/EPA to consider environmental justice in all its activities, including permitting.

The second environmental justice law, Senate Bill 89,<sup>24</sup> was signed in 2000. It requires Cal/EPA to convene an interagency working group and advisory council on environmental



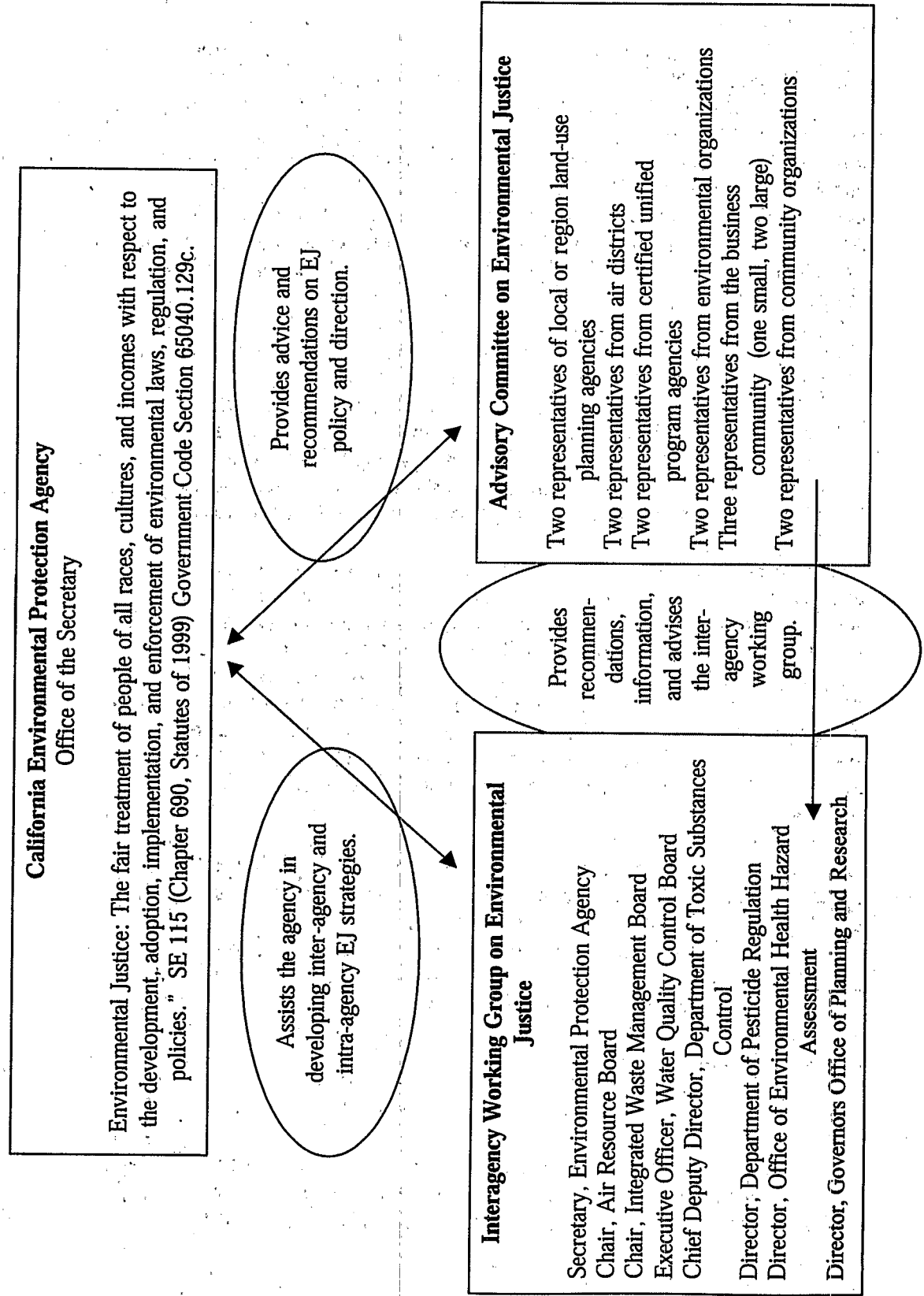
justice to provide information and recommendations to the working group.<sup>25</sup> The makeup and mission of the Working Group and Advisory Council are outlined in Figure 7.2.

The third law, Assembly Bill 1390, enacted in 2001, is based on findings by the South Coast Air Quality Management District from MATES II, completed in 1999. The study showed that diesel exhaust emissions are the overwhelming health hazard faced by district residents. Bill 1390 requires that not less than 50 percent of the funding appropriated through the year 2007 for three diesel mitigation programs be spent "in a manner that directly reduces air contaminants or the public health risk associated with air contaminants, in communities with the most significant exposure to air contaminants or localized air contaminants, or both, including communities of minority populations or low-income populations, or both."<sup>26</sup> This requirement applies only to air districts with populations in excess of one million people, but other air districts are encouraged to follow a similar funding approach. The business community was particularly interested in ensuring that the law use a performance standard, rather than specify the technology to be used to qualify for funding. This approach allows grants to be spent for low-emission diesel buses instead of just alternative fuel buses.<sup>27</sup>

The fourth law, Assembly Bill 1553,<sup>28</sup> also passed in 2001, focuses on local land-use issues. The Office of Planning and Research develops guidelines for general plans, the basic land-use planning documents used throughout the state. These guidelines are not mandatory but provide policy direction to local land-use agencies. This law requires the office to include guidelines for addressing environmental justice matters in city and county general plans in its next edition, but no later than July 1, 2003. The guidelines must recommend planning, zoning, and siting provisions that accomplish the following:

- equitable distribution of new public facilities and services that increase and enhance quality of life throughout the community, given the fiscal and legal constraints that restrict the siting of these facilities
- location, if any, of industrial facilities and uses that, even with the best available technology, will contain or produce material that, because of its quantity, concentration, or physical or chemical characteristics, poses a significant hazard to human health and safety, in a manner that seeks to avoid over-concentrating these uses in proximity to schools or residential dwellings
- location of new schools and residential dwellings in a manner that seeks to avoid locating these uses in proximity to industrial facilities and uses that will contain or produce material that because of its quantity, concentration, or physical or chemical characteristics, poses a significant hazard to human health or safety
- more livable communities by expanding opportunities for transit-oriented development so that residents minimize traffic and pollution impacts from traveling for purposes of work, shopping, schools, and recreation<sup>29</sup>

**FIGURE 7.2**  
**CALIFORNIA ENVIRONMENTAL JUSTICE WORKING GROUP AND ADVISORY COUNCIL**



California's fifth law, Senate Bill 32, passed in 2001, relates to clean-up levels at brownfield rehabilitation projects.<sup>30</sup> It requires Cal/EPA to develop a peer-review rating system to screen brownfield sites, but these numbers are to be considered "solely as a reference value that may be used by citizen groups, community organizations, property owners, developers, and local government officials to estimate the degree of effort that may be necessary to remediate a contaminated property."<sup>31</sup> Although the screening numbers do not have a regulatory effect, Cal/EPA is to develop separate screening levels for unrestricted land uses and restricted, non-residential land uses.<sup>32</sup> Following publication of the screening numbers, the agency is required to conduct three public workshops in various parts of the state to explain them and receive public comments. It must "actively seek out participation in the workshops from citizen groups, environmental organizations, community-based organizations that restore and redevelop contaminated properties for park, school, residential, commercial, open-space or other community purposes, property owners, developers, and local government officials."<sup>33</sup> On or before January 1, 2003, Cal/EPA must publish an information document to assist citizen groups, community-based organizations, interested laypersons, property owners, local government officials, developers, environmental organizations, and environmental consultants in understanding the factors to be taken into account — and the procedures that should be followed — when making site-investigation and remediation decisions.<sup>34</sup>

The sixth law, Senate Bill 828, enacted in 2001, sets a January 1, 2002 deadline for Cal/EPA to convene the interagency Working Group and Advisory Council on Environmental Justice, and it requires the agency to develop an agency-wide strategy for "identifying and addressing any gaps in existing programs, policies, or activities that may impede the achievement of environmental justice."<sup>35</sup> Once the agency-wide strategy is developed, each board, department, and office under Cal/EPA must develop its own environmental justice strategy using the same approach. Further, the law mandates that Cal/EPA report to the legislature every three years on implementation of these strategies.<sup>36</sup> Deadlines are set for each step, though it remains to be seen whether these efforts will produce changes in the agencies' programs.

In a recent law review article, a senior lawyer in the California Attorney General's office observed, "California's state administrative agencies should consider whether they could, or possibly must, include environmental justice in their permitting and planning review activities as a result of California's environmental justice statutes. These statutes manifest a public policy that governmental activities, that substantially affect human health or the environment, be conducted in a manner that ensures environmental justice."<sup>37</sup>

## **AGENCY PROGRAMS**

### **Office of Planning and Research**

The Office of Planning and Research (OPR) has responsibility for government-wide oversight of environmental justice programs and for developing environmental justice guidelines for local land-use plans. OPR is a part of the governor's office, and its specific duties include

comprehensive statewide planning, interagency coordination, local agency planning assistance, and managing the state environmental review process under CEQA. Giving OPR responsibility for interagency coordination on environmental justice issues and for reviewing and evaluating federal and state information, Senate Bill 115 helps to ensure that environmental justice is included in the governor's agenda.

OPR focuses on three environmental justice functions: surveying state agencies to identify whether they are involved in activities with environmental justice implications and providing training for affected agencies; convening a steering committee of state agencies and departments that meets biweekly to identify how best to address environmental justice concerns; and preparing environmental justice guidelines for local governments' land-use general plans.<sup>38</sup> Two OPR staff work on these areas.

OPR surveyed 130 state agencies. Of the 64 agencies that responded, 24 percent make or fund land-use decisions, 19 percent make permitting decisions, 24 percent write or produce regulations, and 29 percent make other decisions that may have environmental justice implications. Only 2 percent had a written environmental justice policy, and only 29 percent thought they were covered under Title VI of the Civil Rights Act of 1964. OPR has concluded, "There is a clear lack of knowledge about what environmental justice means, why it is important, and the ways in which environmental justice issues arise."<sup>39</sup> As a result, it has initiated a series of one-day workshops to teach state agencies about environmental justice, and how to address it in day-to-day work. OPR plans to follow these workshops with more specialized and technical training sessions for state agencies, as well as programs for local agency personnel.<sup>40</sup>

OPR recently held four environmental justice forums designed to create a statewide network of contacts at the community, local, state, and federal government levels. OPR also plans to evaluate recent state efforts to increase public involvement in agency processes, and to hold a formal public hearing as part of its obligation to prepare the guidelines for local land-use general plans.<sup>41</sup> Appendix E has a forum announcement that provides a useful example of how a government process can be explained in a way that the public can easily understand

### **California EPA**

California EPA (Cal/EPA) has taken several steps to integrate environmental justice into its work, such as appointing an assistant secretary for environmental justice; making environmental justice a strategic goal; adopting an environmental justice mission statement; coordinating an interagency environmental justice workgroup, and developing a training program for agency staff and employees of its boards, departments, and office. Cal/EPA also has begun to analyze the legal authority of its boards, departments, and office for integrating environmental justice concerns into their work.

At a legislative oversight hearing in September 2000, Cal/EPA announced that it would create the post of assistant secretary for environmental justice to serve as a focal point for

environmental justice activities in the agency. That position was filled by Romel Pascual in March 2001.<sup>42</sup>

### Strategic Vision

In July 2000, Cal/EPA issued its strategic vision which identifies eight goals designed to help the agency achieve "a California that enjoys a clean, healthy, sustainable environment that enhances the quality of life for current and future generations, and protects our diverse natural resources."<sup>43</sup> Goal 5 is specifically directed to environmental justice; it calls for Cal/EPA to "reduce or eliminate the disproportionate impacts of pollution on low-income and minority populations."<sup>44</sup> The strategic vision sets out four objectives to achieve this goal:

1. minimize the public health and environmental impacts of existing facilities
2. assist OPR and local land-use authorities in developing model local land-use ordinances that address siting of future hazardous materials, waste, transportation, or handling facilities and activities
3. reduce the impacts of pollution from existing hazardous materials, hazardous waste, waste transportation and handling facilities, or other activities
4. assist the California Department of Education in developing model school siting policies to avoid exposing children to pollution<sup>45</sup>

### Mission Statement and Environmental Justice Plans

Cal/EPA prepared the following draft mission statement for its environmental justice programs:

The mission of the Environmental Justice Program is to accord the highest respect and value to every individual and community. The California Environmental Protection Agency and its boards, departments and offices (BDOs) shall conduct their public health and environmental protection programs, policies and activities in a manner that is designed to promote equality and afford fair treatment, full access and full protection to all Californians, including low-income and minority populations.<sup>46</sup>

Cal/EPA identified seven program elements that it expects each board, department, and office to include in its individual environmental justice plans:

1. provide communities easy and full access to information
2. solicit community participation in decision-making
3. evaluate the current legal, regulatory, and policy frameworks and address gaps
4. develop timely resolution processes
5. identify and address data gaps
6. identify options for implementing mitigation
7. establish training programs<sup>47</sup>

### Interagency Working Group

Cal/EPA manages an interagency working group on environmental justice that is responsible for identifying gaps in board, department, or office programs that must be filled to improve the state's response to environmental justice issues. The working group also coordinates input from the Advisory Committee on Environmental Justice, whose first meeting was held on May 17-18, 2002, and ensures that each board, department, and office adopts an environmental justice mission statement and strategic plan consistent with the advisory committee recommendations.

### Training

Cal/EPA conducts a half-day environmental justice training program monthly for its staff, but it must increase the frequency to train all of its staff and to meet training needs for the Air Board's staff. The Air Board has committed to training its staff by June 2003. Environmental justice also is included in Cal/EPA's inspector training. The agency plans future training, including an environmental justice element for its employee training packet and a program to develop environmental justice champions in the boards, departments, and offices.<sup>48</sup>

### Other Cal/EPA Activities

Cal/EPA publishes an "Accomplishments and Priorities" report every six months, covering the activities of the agency and its boards, departments, and offices.<sup>49</sup> There is no requirement to report on environmental justice issues, but many reports have included this information. The biannual report provides an opportunity for the public to track the agency's progress on environmental justice issues. Cal/EPA's budget appropriation also requires it to submit quarterly reports to the legislature on its environmental justice programs.<sup>50</sup>

One of Cal/EPA's goals over the next year is to develop a legal strategy for environmental justice. This work will include examining the specific legal authorities of each board, department, and office to determine action that can be taken under existing law and to identify legal barriers that pose obstacles to addressing environmental justice concerns. A draft analysis of the legal authorities for the Department of Pesticides Regulation has been completed and is under internal review.<sup>51</sup>

### **Air Resources Board**

The California Air Resources Board (ARB) recently adopted what may be the most comprehensive environmental justice plan in the country. It based the plan on the results of its Neighborhood Assessment Work Plan, prepared in 2000 to help the board respond to environmental health concerns at the neighborhood level.

ARB has 11 members appointed by the governor and has responsibility for all statewide air policy issues. It has rulemaking authority and conducts some inspections, but regional air districts manage most of the day-to-day permitting, inspection, and enforcement activities. The board has about 1,000 staff in Sacramento and laboratories in Los Angeles, with the equivalent of six full-time positions assigned to environmental justice work.

### Neighborhood Assessment Work Plan

Beginning in early 2000, the incoming ARB chair, Dr. Alan Lloyd, directed his community health advisor to evaluate neighborhood impacts from air toxics. Following external and internal consultations, ARB staff developed a Neighborhood Assessment Work Plan<sup>52</sup> in June 2000. ARB viewed the plan as a way to develop the policies and tools needed to address the findings from the South Coast Air Quality Management District's MATES II study, and to start to implement the Board's new responsibilities under Senate Bill 115. The work plan has seven main tasks:

1. **Program Development:** investigate whether cumulative air pollution impacts differ among neighborhoods in a designated region. The program focuses on developing guidelines that ARB and other stakeholders use to evaluate cumulative impacts in a neighborhood. ARB plans to use maps created through a Geographic Information System to identify areas where cumulative impacts may be significant<sup>53</sup>
2. **Cumulative-Impact Assessment Methodology:** develop source-receptor-based cumulative impact/risk assessment methodologies suitable for evaluating neighborhood air pollution impacts from all nearby sources, including mobile sources, and for comparing neighborhood scale exposures within a region
3. **Barrio Logan Pilot Study:** develop an understanding of cumulative exposures and the mechanics of neighborhood-scale monitoring and impact evaluations
4. **Supplemental Neighborhood Monitoring and Impacts Evaluations:** refine the methodologies developed under task three using a second phase of neighborhood testing in two other areas of the state
5. **Health Evaluation Efforts:** review the information and methodologies available to evaluate cumulative impacts at the neighborhood level, initiate research to fill data gaps, and evaluate health impacts in neighborhoods that were monitored during Fall 2000
6. **Risk Reduction Strategies:** address in the near-term significant high-exposure or high-risk situations that may be identified by neighborhood monitoring and modeling, and evaluate long-term approaches that ARB, local air districts, and other public agencies can employ for adverse impacts at the neighborhood level
7. **Evaluation Guidelines:** develop guidelines — including technical protocols methodologies, and definitions of key terms — that can be used to develop a consistent, scientifically justifiable basis for determining whether the cumulative impacts of air pollutants at the neighborhood level are unusually high for particular communities<sup>54</sup>

### Environmental Justice Policies and Action Items

ARB's neighborhood assessment work plan led it to approve a detailed set of policies and action items designed to address environmental justice concerns.<sup>55</sup> Community and environmental groups strongly approved the document; more than 30 groups signed a joint letter of support.<sup>56</sup> The letter sets out steps they considered were necessary to ensure that ARB's policies would be effective, including swift action to ensure successful start-up, ongoing progress of the environmental justice programs, a staffing and funding plan, and making pollution prevention central to the programs.<sup>57</sup>

One controversial element of the document was whether ARB's policies and actions for reducing exposures to air toxics should merely "include" low-income and minority communities, or be targeted "especially" for them. Business interests favored the former, and community groups strongly urged the latter. ARB ultimately approved the document, including the "especially" language, at a public meeting where several community groups and key legislators urged the board to retain the more targeted wording.<sup>58</sup>

Given the precedent-setting nature of the ARB document, the complete text is included as Appendix F. The policies and some key action items include:

- **Integrating environmental justice into programs:** It shall be the ARB's policy to integrate environmental justice into all of our programs, policies, and regulations.
  - add an explicit discussion of whether proposed major programs, policies, and regulations treat fairly people of all races, cultures, geographic areas, and income levels, especially low-income and minority communities
  - develop and incorporate an environmental justice program element into our employee-training curriculum
  - conduct special air-monitoring studies in communities where environmental justice or other air-quality concerns exist, with the goal of assessing public health risk
- **Improving outreach:** It shall be the ARB's policy to strengthen our outreach and education efforts in all communities, especially low-income and minority communities, so that all Californians can fully participate in our public processes and share in the air quality benefits of our programs.
  - hold meetings in communities affected by our programs, policies, and regulations at times and in places that encourage public participation, such as evenings and weekends at centrally located community meeting rooms, libraries, and schools
  - in coordination with local air districts, make staff available to attend meetings with community organizations and neighborhood groups to listen and where appropriate, act upon community concerns



- develop and maintain a web-site that provides access to the best available information about sources of air pollution in neighborhoods
- create and distribute a simple, easy-to-read, and understandable public participation handbook
- **Reducing health risks:** It shall be the ARB's policy to work with local air districts to meet health-based air quality standards and reduce health risks from toxic air pollutants in all communities, especially low-income and minority communities, through the adoption of control measures and the promotion of pollution prevention programs.
  - prioritize toxic air pollutant control, including the ARB Diesel Risk Reduction Program, by targeting measures that provide immediate and achievable air-quality benefits, such as emissions reductions from transit buses, refuse trucks, and tanker trucks
  - develop new control measures that will reduce exposure to toxic air pollutants across the state; this analysis will include consideration of proximity of sources to sensitive populations
- **Strengthening enforcement:** It shall be the ARB's policy to work with the local air districts in our respective regulatory jurisdictions to strengthen enforcement activities at the community level across the state.
  - in coordination with local air districts and considering input from stakeholders, prioritize field inspection audits to address statewide categories of facilities that may have significant localized impacts and make those audit reports easily accessible to the public
  - work with local air districts to develop enhanced complaint-resolution processes for addressing environmental justice issues, including procedures
- **Reducing cumulative impact:** It shall be the ARB's policy to address, consider, and reduce cumulative emissions, exposures, and health risks when developing and implementing our programs.
  - develop technical tools for performing assessments of cumulative emissions, exposure, and health risk on a neighborhood scale and provide maps showing the results at the neighborhood level
  - conduct field studies to support air quality modeling efforts in communities throughout the state, including low-income and minority communities
  - identify necessary ARB risk reduction and research priorities based on the results of the neighborhood assessments and other information
- **Working with local governments:** It shall be the ARB's policy to work with local land-use agencies, transportation agencies, and air districts to develop ways to assess, consider, and reduce cumulative emissions, exposures, and

health risks from air pollution through general plans, permitting, and other local actions.

- provide education and outreach to local agencies on the use of the technical tools and guidance in land-use decisions
- work with local air districts to provide technical guidance to local agencies on measures that could be used to reduce or eliminate air quality impacts from specific types of sources
- **Supporting research and data collection:** It shall be the ARB's policy to support research and data collection needed to reduce cumulative emissions, exposure, and health risks, as appropriate, in all communities, especially low-income and minority communities.
  - investigate non-cancer health effects associated with acute, peak-pollutant episodes and long-term, low-level exposures that may trigger increases in the incidence of respiratory problems and neurological, developmental, and reproductive disorders
  - characterize near-source dispersion patterns for toxic air pollutants from selected point sources, areas sources, and roadways
  - identify biomarkers for air pollutants and assess individual exposures within specific communities
  - develop SIS for assessing health-based information within communities, and correlating that information to air pollution and socioeconomic factors<sup>59</sup>

ARB staff have identified several factors that have played an important role in achieving adoption of the environmental justice policy. First, community and environmental groups coordinated their comments, allowing them to assume a major role in negotiating with business groups and local air districts. Second, these groups told ARB to act quickly so it could ensure successful start-up and ongoing progress related to environmental justice. These organizations urged ARB to:

- develop an annual work plan, to start in July 2002
- issue a land-use guidance document to assist local air quality districts and land-use agencies in evaluating the air quality impacts of proposed projects
- issue a complaint resolution guidance document as a means to establish a process for resolving community complaints about air pollution sources
- issue a guidance document on assessing and reducing cumulative emissions, exposures, and impacts to assist local air districts in evaluating and reducing cumulative emissions exposures and health risks at neighborhood and community levels
- develop a plan for allocating ARB staff and funding to demonstrate how environmental justice policies and actions will be successfully accomplished
- make pollution prevention central to environmental justice programs<sup>60</sup>

Third, ARB developed its policy by focusing on public health issues and doing field community assessments to develop facts about community exposures that are hard to contradict, thereby reducing concerns often expressed by some businesses that environmental justice is more perception than reality. Because diesel emissions overwhelmed all other sources of air risks for urban areas, ARB has decided to focus on addressing that problem.<sup>61</sup>

#### Other ARB Activities

ARB began its work assuming that it had the legal authority to deal with environmental justice issues if it could establish that there are real adverse impacts on community health. The board already had identified diesel as a toxic air contaminant; the MATES II research study found diesel emissions to be the chief risk factor. Building on this finding, ARB established new regulatory programs to limit diesel emissions.<sup>62</sup> ARB also will start preparing an environmental justice analysis for all rulemaking packages under its general authority.<sup>63</sup>

In addition, ARB is doing GIS mapping to identify areas with high cumulative risks, and is integrating environmental justice issues into all of its programs. This effort includes a commitment to provide environmental justice awareness training to all ARB staff within one year. ARB also has considerable discretion to direct its monitoring and enforcement efforts to priority locations because it has ample flexibility to allocate its resources.<sup>64</sup>

Environmental justice concerns have created some interesting tradeoffs between ARB and the regional air districts. For example, some community groups have objected to the attention and resources paid to zero emissions vehicles. These groups believe that the vehicles are unaffordable for low-income people and that the time and money could be better spent on other risk reduction efforts that return more immediate benefits to people-of-color and low-income communities.<sup>65</sup>

#### **Department of Toxic Substances Control**

The Department of Toxic Substance Control (DTSC) manages the state's solid waste and hazardous waste, Superfund, brownfield clean-up, and pollution prevention programs. It employs about 1,000 people and has an annual budget of \$150 million.

#### Public Participation

DTSC became involved with environmental justice issues in the early 1990s due to its responsibility for issuing permits to waste facilities. As a result, DTSC developed a public participation manual in 1993.<sup>66</sup> The mission of DTSC's public participation program is "...to ensure that the public is informed and involved early; that their issues are heard; and that their comments are considered prior to final decisions by DTSC staff and management."<sup>67</sup> DTSC's vision statement for the program provides:

We recognize that all members of the public have a stake in our decisions, and they should have the opportunity and are encouraged to participate in developing

solutions to site cleanup and facility corrective action, determining the adequacy of permitting proposals, and encouraging reduction of hazardous waste generation.

We actively promote the tenets of public participation within DTSC; we advise technical staff; and we provide the community's perspective during the managerial decision-making process.

Culture and economic diversity is considered during our planning, decision-making, and in our outreach efforts. We recognize that all Californians are varied in their backgrounds, beliefs, and cultures, and we are sensitive to their needs.<sup>68</sup>

DTSC's public participation manual contains the following statement on coordinating with other government agencies to address cumulative impacts:

Communities are demanding that DTSC consider environmental justice in its allocation of resources and its decision-making processes. Often these communities raise the issue of "cumulative impacts" (multiple sources or multiple chemicals), which refers to the health and other social impacts of numerous industrial facilities (within and without DTSC's jurisdiction), hazardous waste sites, and other potential sources of pollution. In fact, often the concern includes "multiple sources" many of which may not be under DTSC's regulatory control. These issues are complex and often inter-related, and require the interaction of several government agencies at all levels. It makes good sense for DTSC, in its community assessment, to consider this and determine the necessary level of involvement from other agencies, not just in terms of DTSC's decision-making, but also in terms of questions and concerns that will be raised by community members.<sup>69</sup>

The manual concludes by reminding DTSC staff about individual and community rights:

Remember: all Californians are entitled to a clean environment, and have a right to information concerning decisions that affect their health and their community. DTSC recognizes that all Californians have a stake in the outcome of its decisions, and therefore shall take all necessary steps to ensure that communities have the opportunity to participate in the decision-making process. DTSC shall make decisions that take into account the concerns of all communities, and its decisions shall be non-discriminatory.<sup>70</sup>

DTSC employs 32 staff who work on public participation issues. One is assigned to every major waste site, and all are trained facilitators. The department encourages its staff to hold conversations with small groups from affected communities.

## Environmental Justice Policy

DTSC recently issued a draft environmental justice policy and expects to issue the final policy in mid-2002. The policy makes ten commitments for DTSC:

1. ensure that, to the extent feasible, its decisions, actions and rulemaking avoid adding to disproportionate environmental and/or health impacts on affected communities and reduce disproportionate environmental and related health impacts on such communities
2. promote investigation/cleanup of contaminated sites in areas with minority and low-income populations using voluntary and enforcement tools, allocating limited Orphan Site State funds in a fair manner and prioritizing active and backlog projects in order that public health and the environment are protected
3. continue regional efforts to remediate brownfields so that that they are returned to productive use
4. allocate its permitting, enforcement, and cleanup resources, to the extent feasible, so as to reduce disproportionate environmental and related health impacts on ethnic minority and low-income communities
5. explore available mitigation measures whenever the department's decision has the potential to adversely affect any community already experiencing disproportionate environmental and/or health impacts
6. consider regional impacts of the department's decisions and activities, utilizing Geographic Information System, census, and demographic data to more fully characterize areas surrounding sites and facilities, specifically indicating sensitive receptors and other facilities and sites that may have an impact on community health
7. participate in area studies dealing with health, sensitive receptors, family data, demographics, or other pertinent issues to ensure that permitting and site remediation decisions within targeted communities fully incorporate environmental justice concerns; and evaluate the need to initiate permit modifications or consider modifications to remediation plans to address disparate impacts that are identified as part of the area studies
8. work with Cal/EPA and its boards, departments, and office, and within the department, to promote implementation of policies and procedures that ensure that low-income and/or communities with minority populations have access to environmental and health-related information; this will include conducting assessments to determine language and cultural needs of a specific community, providing information in appropriate languages, and encouraging early and continuous public involvement; and will include a commitment that site-related public participation documents are made available on the department's web site in appropriate languages
9. work with Cal/EPA's External Advisory Committee for Environmental Justice to develop cross-media and cross-agency approaches to community concerns

10. provide ongoing training for the department staff and management regarding this policy and other fundamentals of environmental justice, emphasize environmental justice is the responsibility of all programs, and ensure implementation of this policy is incorporated into performance evaluations<sup>71</sup>

#### Other DTSC Activities

DTSC recently hired an environmental justice coordinator whose responsibility includes auditing DTSC's progress in implementing its environmental justice policy once it has been adopted. The department expects to provide basic environmental justice training for its staff using the program developed at Cal/EPA.<sup>72</sup>

Finally, DTSC is doing area-wide community assessments in five communities, including Southeast Los Angeles, East Los Angeles, and Richmond, that use GIS mapping to identify demographic characteristics and facility locations. Among other things, the assessments are looking at the location of sensitive receptors such as schools. Project managers will be expected to take this information into account whenever they are working on a waste permit in the mapped communities.<sup>73</sup>

#### **Southern California Air Quality Management District**

Air quality-related environmental justice concerns have long been a high priority in Los Angeles because of its heavy industrial base, large communities of people-of-color, and geography. The South Coast Air Quality Management District (AQMD) began to focus on these issues in 1997 with the adoption of guiding principles and initiatives. AQMD then conducted one of the most extensive air toxics studies in the United States, which formed the basis for an air toxics control plan that includes several new regulations.

#### Guiding Principles and Initiatives

AQMD based its environmental justice program on the guiding principles and initiatives adopted by its governing board in 1997. These principles hold that:

- All Basin residents have the right to live and work in an environment of clean air, free from airborne health threats.
- Government is obligated to protect the public health.
- The public and private sectors have the right to be informed of the scientific findings concerning hazardous and toxic emission levels, and to participate in the development and implementation of adequate environmental regulations in their community.
- The governing board is to uphold the civic expectation that the public and private sectors of the Basin will engage in practices that contribute to a healthy economy and truly livable environment.<sup>74</sup>

AQMD established environmental justice initiatives based on these principles. Key initiatives include:

- monthly town hall meetings to enable residents to participate more effectively in the district's policy-making process; these meetings have been a key source of information that have helped the district target the use of its mobile monitoring equipment
- improved ambient monitoring of air toxics — the MATES II study included fixed monitoring stations and new portable toxics monitoring equipment developed from this initiative
- community response teams to allow rapid deployment of AQMD personnel for emergencies related to airborne emissions, such as leaks or spills
- upgraded field inspection technology, such as better hand-held monitoring equipment, to improve the inspection and enforcement process
- changes in the permitting program for portable equipment to address neighborhood problems caused by temporary placement of portable diesel generators or other similar equipment
- development of a new source review regulation for facilities that emit air toxics and strengthen the existing rule for facility-wide limits on toxic air contaminants to require that certain types of facilities apply best available control technology for toxic emissions<sup>75</sup>

AQMD also created a 27-member environmental justice task force that reported to the governing board in August 1999. The task force recommended that:

- town hall meetings continue to give high priority to residents' complaints
- AQMD use mobile monitoring platforms developed for MATES II to conduct neighborhood monitoring on a prioritized basis and to implement the other elements of the original environmental justice initiative
- AQMD examine its trading programs, emissions inventory, and other information to determine whether any hot spots are occurring or being aggravated by AQMD trading programs
- AQMD develop a voluntary compact on environmental justice for consideration by local agencies, businesses, and community organizations<sup>76</sup>

A copy of the compact developed pursuant to this last recommendation is provided as Appendix G.

#### Multiple Air Toxics Exposure Study

In 1998, AQMD launched its second Multiple Air Toxics Exposure Study (MATES II). MATES II was critical to AQMD's environmental justice efforts because businesses wanted assurance that real pollution problems were identified using appropriate scientific techniques.<sup>77</sup> MATES II is one of the most comprehensive studies ever conducted in an urban environment,

costing more than<sup>78</sup> \$750,000, using a network of 10 fixed monitoring stations, and conducting micro-scale monitoring in 14 locations. Of the 24 monitoring locations, 15 were in Los Angeles County, and three each were located in Orange County, Riverside County and San Bernadino County, all part of the Greater Los Angeles area.

AQMD carried out the micro-scale monitoring using three mobile monitoring platforms in overseas shipping containers that were built specifically for the study and could easily be moved to targeted neighborhoods. The district typically stationed this equipment in a neighborhood for 30 days. More than 30 contaminants were measured, with more than 4,500 samples taken. The fixed network was designed to identify area-wide exposure to air pollutants, while the micro-scale monitoring was used to determine whether localized emission sources caused a significant increase in the concentration of certain toxic air contaminants. A technical review group, composed of representatives from academia, environmental groups, industry, and public agencies provided scientific guidance for the project (see Figure 7.3).<sup>79</sup>

MATES II found that diesel emissions were by far the greatest health risk for the region, although significant risk was also attributed to benzene and 1,3 butadiene, both constituents of regular gasoline. AQMD calculated the overall cancer risk in the South Coast Air Basin using standard EPA protocols and determined that the risk for the region averaged 1,400 in a million (see Figure 7.4).

#### **FIGURE 7.3**

##### **MATES II: AIR QUALITY CHARACTERIZATION ON THE NEIGHBORHOOD LEVEL**

- The second Multiple Air Toxics Exposure Study (MATES II) monitored and evaluated air pollution in California's South Coast Air Basin.
- MATES II was the result of environmental justice initiatives adopted by the South Coast Air Quality Management District's Governing Board in October 1997.
- The study characterized air quality on the neighborhood level using a combination of fixed and mobile monitors—sampling for more than 30 air pollutants, including both gases and particulates—augmented by an air-modeling program.

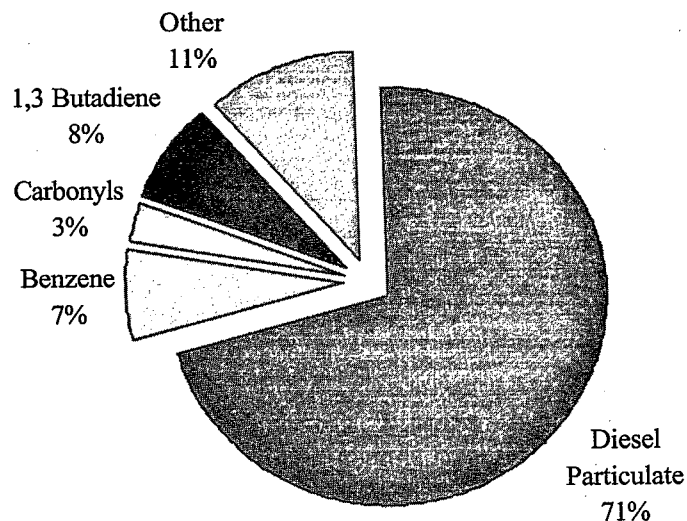
The MATES II study of the South Coast Air Basin concluded:

- Accurate air quality analysis on a neighborhood level is possible.
- Localized pollution "hot spots" can be detected.
- Mobile pollution sources have the strongest impact on local air toxics levels.
- The strongest concentration of air toxics can occur at the fence line of an emitting facility.
- Overall, risk from air toxics has continued to decrease with noticeable improvements for hexavalent chromium, benzene, and butadiene.

The MATES II study proved that it is possible to characterize neighborhood air quality accurately. Also, it validated an experimental design that can be used for future air quality characterization, both within and beyond the context of environmental justice.



FIGURE 7.4  
DISTRIBUTION OF TOXIC AIR POLLUTANTS IN THE SOUTH  
COAST AIR BASIN



Source: *Multiple Air Toxics Exposure Study, ES-1*. Available at [www.aqmd.ca.gov](http://www.aqmd.ca.gov)

The micro-scale monitoring did not identify any toxic air emissions that exceeded health standards at most of the 14 locations evaluated. However, the study identified styrene emission levels at one location that exceeded health standards, indicating that local "hot spots" may exist.<sup>80</sup>

AQMD took several actions in response to the results of MATES II, including:

- focusing even more on reducing diesel emissions
- adopting a new source review program for sources of air toxics
- developing an air toxics control plan that is likely to use existing legal authorities to adopt a series of new rules addressing dry cleaning solvents, the film cleaning industry, and methylene chloride emissions
- initiating a program that will assess cumulative risks at large facilities and require them to go on an "air toxics diet" if their total health risks exceed 25 in 1,000,000<sup>81</sup>

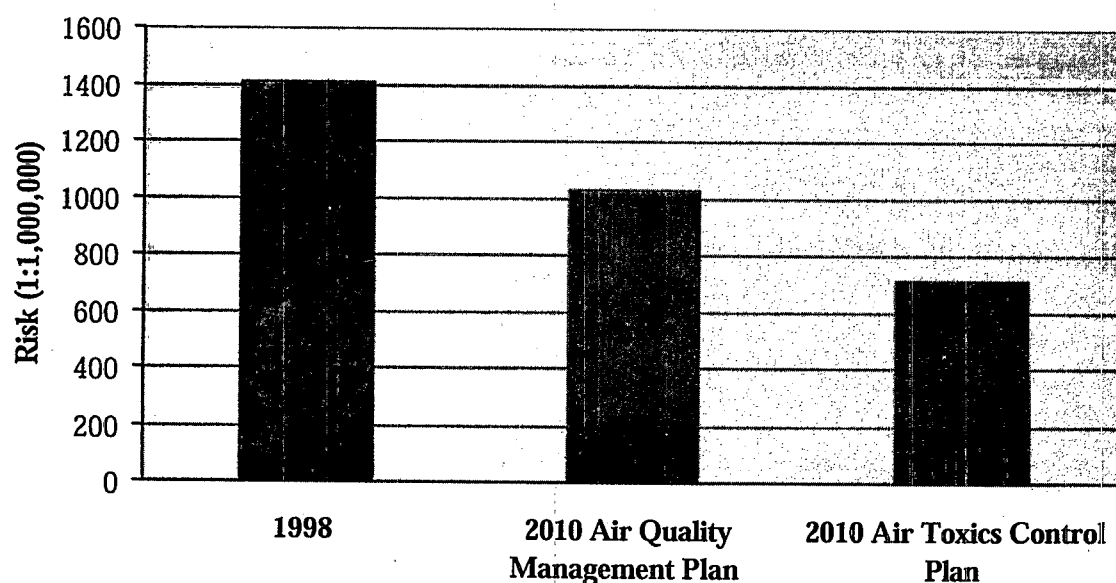
#### Air Toxics Control Plan

MATES II prompted AQMD to develop an air toxics control plan for the South Coast Basin. Before its adoption in 2000, the plan was presented to the public for review and comment in a

series of four public consultations. The plan is designed to reduce air toxics by an additional 31 percent beyond what would be expected by 2010 under existing local, state, and federal control programs (see Figure 7.5). The plan relies on a wide range of initiatives, such as:

- implementing the proposed new source review program for toxics and strengthening the facility-wide permitting program for toxic air contaminants
- developing new rules to control air toxics from chrome plating and dry cleaning, and new permitting guidelines for stationary source diesel generators
- increasing controls of toxic air emissions from consumer products
- developing a bus fleet rule that will encourage transit operations to retire dirtier buses or purchase alternative fuel buses
- developing more stringent emissions standards for new bus engines<sup>82</sup>

**FIGURE 7.5**  
**ESTIMATED AVERAGE SOUTH COAST AIR BASIN RISK LEVELS**



#### Other AQMD Activities

AQMD uses the MATES II mobile monitoring platforms to respond to community concerns about air pollution hot spots. The district has a long list of communities that want the monitors deployed in their areas; the list grows based on concerns raised during town hall meetings held by AQMD.<sup>83</sup>

The importance of the neighborhood monitoring capability is seen in the case of petroleum coke shipments at the ports of Los Angeles. Communities complained about wind-blown coke-dust coming from open storage at the ports, and neighborhood sampling detected high levels. The ability to document these emissions provided the basis for AQMD to adopt a new regulation requiring covers for storage piles and trucks that transport coke.<sup>84</sup>

Given the environmental issues involved, AQMD is considering whether to change the way it performs its functions under CEQA. The district is responsible for identifying air emission levels that might be deemed "significant" for purposes of environmental review. To facilitate this process, AQMD created a handbook that establishes threshold levels for air emissions that may produce significant adverse impacts. Agencies can use these levels when preparing environmental review documents to determine whether emissions might produce significant adverse impacts, but they are not regulatory thresholds. Currently, they are based only on new emissions from a proposed facility, but the district is considering changing the calculation to include new emissions and background levels so the significance determination will be based on cumulative emissions. This proposal is quite controversial.<sup>85</sup>

A new chairwoman, Norma Glover, has recently assumed leadership of AQMD's governing board. Among her "clear air initiatives" is the creation of a "strategic alliance on environmental justice." Most of the details of this alliance are not yet available, but the initiative will include developing an annual environmental justice work plan.<sup>86</sup>

## **ANALYSIS OF THE CALIFORNIA PROGRAM**

### **Leadership**

California's environmental justice leadership begins with the state legislature. In total, six laws enacted over the past three years that:

- set out clear expectations for Cal/EPA to "conduct its programs in a manner that ensures the fair treatment of people of all races, cultures, and income levels, including minority populations and low-income populations in the state"<sup>87</sup>
- require Cal/EPA and its boards, departments, and offices to develop a strategy for "identifying and addressing gaps in existing programs, policies, or activities that may impede the achievement of environmental justice"<sup>88</sup>
- give the Office of Planning and Research responsibility for environmental justice coordination, and increase the attention of the governor's office on these issues
- fund grants to reduce direct diesel emissions focused on people-of-color and low-income communities
- mandate an open, public process to develop screening for brownfield clean-up levels
- direct agencies to provide better guidance to local governments on how to take environmental justice into account when making land-use decisions

California's laws are largely process-oriented, requiring strategic planning, assessing program gaps, and setting up work groups. As such, they do not mandate agencies to take specific steps to resolve environmental justice issues. However, they do provide a clear policy basis for state agencies to focus on environmental justice issues and for state agency champions to initiate related programs. At the same time, the vetoes of several environmental justice bills prior to 1999 and an uncertain political climate raise the issue of whether adequate bipartisan support exists to maintain the momentum for addressing environmental justice.

Community and environmental organizations played an important role in California's environmental justice legislation and in the final approval of ARB's policies and actions for environmental justice.

State and regional agencies also have exercised leadership on environmental justice for several years. Cal/EPA created an assistant secretary for environmental justice and conducts environmental justice awareness training for its staff and those of its boards, departments, and office. Cal/EPA is integrating the issue into inspector training curriculum; is developing an agency-wide environmental justice strategy; and has included environmental justice as one of the eight goals in its strategic vision. Most recently, Cal/EPA reaffirmed its commitment to environmental justice in a 2002 memo issued by its secretary (see Appendix H).

Further, the Department of Toxic Substances Control developed enhanced public participation procedures in response to environmental justice issues raised in the waste facility siting process; trained its public participation staff to act as facilitators; hired an environmental justice coordinator; and recently issued a draft environmental justice policy.

ARB's Neighborhood Assessment Work Plan has begun to focus on how to understand neighborhood scale environmental problems, and its policies and actions for environmental justice are perhaps the most comprehensive approach in the nation for addressing environmental justice issues. ARB also assigned staff to work on such issues and has focused on specific methods for reducing air pollution in high-risk areas, starting with reducing diesel emissions.

The South Coast AQMD's MATES II study has yielded detailed data on regional and neighborhood toxic exposures, and has enabled the district to adopt new regulations limiting toxic emissions. Its air toxics control plan provides a road map for further toxics reduction over the next several years, and town hall meetings provide a continual opportunity for communities to express concerns and give feedback. The ongoing micro-scale monitoring program enables the district to respond to community concerns about air pollution hot spots.

### **Accountability**

California's agencies do not have specific evaluation processes built into their environmental justice programs, but there are several accountability mechanisms. State law requires the secretary for environmental protection to prepare and submit to the governor and the

legislature a report on state environmental justice program implementation, starting on January 1, 2004.<sup>89</sup> Budget bill language requires quarterly reports to the legislature on the progress of environmental justice programs, although this mandate only extends through Fiscal Year 2002.<sup>90</sup> Cal/EPA's new advisory committee on environmental justice may serve as another mechanism to hold state agencies accountable because it is responsible for identifying agency gaps that limit the ability to achieve environmental justice. In addition, the Office of Planning and Research has a coordination role and could work to hold state agencies accountable in that capacity.

Other accountability mechanisms include ARB's request that staff report on their progress in implementing its policies and actions for environmental justice six months following their adoption and periodically thereafter.<sup>91</sup> The new board chair for the South Coast AQMD requested that staff conduct a 90-day review of the district's environmental justice program and proposed that the review occur annually in the future.<sup>92</sup> Some state agencies have begun to discuss how to translate environmental justice into expectations and factors for evaluating staff performance, but this process is not yet in place.

### **Permitting Authority and Procedures**

Of all the California agencies, the South Coast AQMD has taken the most direct steps to integrate environmental justice into permitting work. It has proposed new regulations based on health-risk data and has examined how it can use existing authorities and responsibilities under CEQA to address environmental justice concerns. As a result of the information generated by MATES II, the district proposed a new source review regulation for air toxics. Its facility-wide risk regulation requires facilities with total health risk levels higher than 25 in 1,000,000 to adopt an air toxics "diet." The district is considering a series of regulations that would limit air toxics emissions from dry cleaners, film cleaning operations, and methylene chloride emissions. AQMD also is considering an expanded approach to its advisory role under CEQA to evaluate background and new emissions when calculating threshold air emissions levels considered significant for purposes of environmental review.<sup>93</sup>

Although regional air districts conduct most of California's permitting work, ARB plays an important role as it adopts many of the statewide rules that regional air districts must use in their permits. ARB recently adopted a policy to "integrate environmental justice into all of our programs, policies and regulations."<sup>94</sup> Implementation includes an explicit discussion of whether proposed major programs, policies, and regulations fairly treat people of all races, cultures, geographic areas, and income levels, especially low-income and minority communities. ARB is working with stakeholders to review the board's current programs for addressing potential environmental justice problems, and to add new or modified elements consistent with ARB's environmental justice policies where program gaps exist.<sup>95</sup> It also is preparing additional diesel emissions restrictions to address high risks often concentrated in these communities.

ARB staff are aware that communities often are most concerned with acute exposures, yet it is difficult for air districts to deal with these situations.<sup>96</sup> ARB's neighborhood assessment process has helped to develop techniques for identifying neighborhood scale problems and ways to address them. ARB and DTSC both noted that their agencies have authority to exercise their discretion in recalling permits for reevaluation if circumstances indicate that existing permits are not adequately protective. However, neither agency has ever used this authority.<sup>97</sup>

DTSC has not yet directly accounted for environmental justice in its permitting processes. However, its draft environmental justice policy directs the department to do so by:

- ensuring that its decisions, actions, and rulemaking avoid adding to disproportionate impact, and reduce disproportionate impact where possible
- promoting site investigations and cleanup in areas with minority and low-income populations
- allocating its permitting, enforcement, and cleanup resources to the extent feasible, to reduce disproportionate impact
- exploring mitigation measures when the department's decision has the potential to adversely affect a community already experiencing disproportionate impact<sup>98</sup>

As stated previously, Cal/EPA does not have a role in program implementation, but one of its tasks is to help its boards, departments, and offices to identify program gaps that may limit their ability to achieve environmental justice. Part of this work is an analysis now underway to examine the legal authority for each board, department, and office to address environmental justice through permitting and other activities.<sup>99</sup>

### **Priority Setting and Risk Reduction**

ARB and AQMD focus on priority setting, risk reduction, and cumulative impacts. Developed as part of AQMD's environmental justice initiative, MATES II identified the region's highest risk pollutants and established a mobile monitoring capability that could be deployed in suspected hot spots. It also led to several new air toxics regulations. AQMD managers believe that the data and sound scientific base generated by MATES II were essential in supporting the new regulations and muting opposition for risk reduction efforts.<sup>100</sup>

Based largely on MATES II, AQMD adopted a ten-year air toxics control plan in March 2000. The plan targets a 31 percent reduction of residual risk by 2010, utilizing strategies for stationary and mobile sources.<sup>101</sup> AQMD also uses its town hall meetings to identify areas that are appropriate for additional monitoring, and it deploys mobile monitoring stations there to determine whether there are hot spots requiring additional attention.

ARB designed its neighborhood assessment process to identify high-risk areas and ways to address those risks. The board's new environmental justice policies include commitments to:

- reduce health risks from toxic air pollutants in all communities, especially low-income and minority communities, through adoption of control measures and the promotion of pollution prevention programs<sup>102</sup>
- assess, consider, and reduce cumulative emissions, exposures, and health risks when developing and implementing programs<sup>103</sup>
- work with local land-use agencies, transportation agencies, and air districts to develop ways to assess, consider, and reduce cumulative emissions, exposures, and health risks from air pollution through general plans, permitting, and other local actions<sup>104</sup>
- support research and data collection needed to reduce cumulative emissions, exposure, and health risks, as appropriate, in all communities, especially low-income and minority communities<sup>105</sup>

In the early 1990s, DTSC conducted the Vernon Community Assessment, which found that waste facilities can be very concentrated in some neighborhoods. This work was useful in developing the department's public participation manual. Although DTSC has focused its environmental justice work mostly on public participation issues, its new draft environmental justice policy provides that the department should "ensure that, to the extent feasible, its decisions, actions and rulemaking avoid adding to disproportionate environmental and/or health impacts on affected communities and reduce disproportionate environmental and health related impacts on such communities." <sup>106</sup>

Because Cal/EPA does not directly implement environmental programs, its initiatives have not focused on priority setting and risk reduction, except for efforts to identify gaps in the programs of its boards, departments, and offices.

### **Public Participation**

DTSC's public participation manual provides detailed guidance for working with communities on developing public participation plans, drafting fact sheets, preparing mailing lists, holding public meetings, responding to public comments, and making information available through web sites and other means. DTSC recently revised this manual to reflect, more directly, environmental justice concerns.

ARB's policies and actions for environmental justice call on the board to "strengthen our outreach and education efforts in all communities, especially low-income and minority communities, so that all Californians can fully participate in our public processes and share in the air quality benefits of our programs." <sup>107</sup> Actions identified under this policy include holding meetings in communities affected by ARB's programs at times and places that encourage public participation; making staff available to attend community meetings; preparing and distributing fact sheets describing ARB's environmental justice and community health programs; promoting community access to the best available air quality data; creating and distributing an easy-to-read public participation manual; and reducing fees charged for copying materials. <sup>108</sup>

AQMD holds monthly town hall meetings to elicit community concerns. These meetings have identified numerous air quality concerns and have served as a basis for deciding where to locate mobile monitoring equipment. The district also convened a multi-stakeholder environmental justice task force which provided recommendations on how AQMD can address environmental justice concerns. Although the task force disbanded after completing its work, AQMD will continue to report on the progress of its environmental justice initiatives via its web site until the tasks are completed.<sup>109</sup>

California does not have funding to pay for technical assistance for community groups. The non-profit Communities for a Better Environment (CBE) has staff scientists who provide independent technical advice to community organizations. CBE believes that technical assistance received from groups is more trusted than assistance provided through the state. However, its scientists are limited in the number of communities they can assist.<sup>110</sup> For communities not serviced by CBE, the questions of where and how to obtain technical assistance remain a significant dilemma that Cal/EPA's program has yet to address.

## RECOMMENDATIONS

- California's boards, offices, and departments should establish measurable program objectives for addressing environmental justice, develop accountability measures and procedures for achieving those objectives, and issue regular public reports about their progress in addressing environmental justice concerns.
- California's boards, offices, and departments should expand their efforts to locate and prioritize communities with high exposure to pollution by building upon programs like DTSC's Vernon County assessment and AQMD's MATES II study.
- California's boards, offices, and departments should use the findings from Cal/EPA's examination of existing state legal authorities to advise their staff about the legal options available to address environmental justice. Those findings should be communicated through a guidance document that can be easily understood and carried out by permit writers and other agency staff in their day-to-day work. Staff should use this document to determine whether existing state permits adequately protect health and the environment in people-of-color and low-income communities.
- California's boards, offices, and departments should take full advantage of Cal/EPA's office's coordinating authority so they can share experiences and best practices among all the entities under Cal/EPA and thereby more effectively address environmental justice concerns.



## ENDNOTES

- <sup>1</sup> www.census.gov.
- <sup>2</sup> California Environmental Protection Agency, *The History of the California Environmental Protection Agency* available at [www.calepa.ca.gov/about/history01/calepa.htm](http://www.calepa.ca.gov/about/history01/calepa.htm).
- <sup>3</sup> The California Environmental Protection Agency, *Strategic Vision* (July 2000) 5.
- <sup>4</sup> Barry Wallerstein, Operating Executive, South Coast Air Quality Management District, Interview (March 26, 2002).
- <sup>5</sup> Jim Marxen, Public Participation Chief, Department of Toxic Substances Control, and Vanessa Byrd, Chief, Education and Outreach Unit, Department of Toxic Substances Control, Interview (February 15, 2002).
- <sup>6</sup> Environmental Health Coalition, *Communities at Risk* (April 1993). Focusing on Barrio Logan in San Diego; Communities for a Better Environment, *Holding Our Breath: Environmental Injustice Exposed in Southeast Los Angeles* (July 1998).
- <sup>7</sup> *Holding Our Breath*, 5.
- <sup>8</sup> Romel Pascual, Remarks before the Academy Panel (February 12, 200). See Assembly Bill 937 (1991), Assembly Bill 3024 (1992), Senate Bill 451 (1997), Senate Bill 1113 (1997) and Assembly Bill 2237 (1998).
- <sup>9</sup> Jim Marxen and Vanessa Byrd, Interview.
- <sup>10</sup> Romel Pascual, Remarks.
- <sup>11</sup> Cal. Gov't Code section 65040.12 (West Supp. 2001).
- <sup>12</sup> Lynn Terry, Deputy Executive Officer, California Environmental Protection Agency, Air Resource Board, Interview (February 15, 2002).
- <sup>13</sup> South Coast Air Quality Management District Governing Board Meeting, *Environmental Justice Task Force Final Report* (August 13, 1997). At [www.aqmd.gov/hb/990824a.html](http://www.aqmd.gov/hb/990824a.html).
- <sup>14</sup> See Ellen Peter, "Implementing Environmental Justice: The New Agenda for California State Agencies" *Golden Gate University Law Review* (Spring 2000) 31: 8:543-54. Discussion of the history of the vetoed legislation including excerpts from some of the veto messages. These bills included:
  - Assembly Bill 937 (1991) that would have amended California's permit streamlining Act to require submission of project race and income demographics for high-impact development projects. Failure to submit the data required the permit denial, however agencies could not use the race and demographic data as a factor in their decisions
  - Assembly Bill 3024 (1992) that was similar to AB 937
  - Senate Bill 451 (1997) that would have integrated environmental justice into the land use element of the state's general plan for land use, establish long range planning mechanisms to ensure equitable distribution in the location of future waste facilities and avoid concentrating facilities near schools and residential neighborhoods
  - Senate Bill 1113 (1997) that would have amended the California Environmental Quality Act (CEQA) (the California analogue to the National Environmental Policy Act) to require the CEQA analysis to include identification and mitigation of adverse impacts on minority and low-income populations
  - Assembly Bill 2237 (1998) that would have directed certain loans and grants to ameliorate high and adverse effects on human health and the environment.
- <sup>15</sup> California Statutes 1999, Chapter 115.
- <sup>16</sup> Cal. Gov't Code section 65040.12 (West Supp. 2001); Cal. Pub. Res. Code section 72000 (West Supp. 2001).
- <sup>17</sup> Cindy Tuck, General Counsel, Interview (February 15, 2002). After reviewing and commenting on U.S. EPA's draft guidance for Title VI, Californians for Environmental and Economic Balance decided to develop a policy on Environmental Justice. That policy was adopted in 1999 and is available at <http://www.cceeb.org/documents/ej99.html>. More information on CCEEB and the environmental justice policy are available at [www.cceeb.org](http://www.cceeb.org). Pacific Gas & Electric, one of CCEEB's member organizations, adopted a detailed environmental justice policy in September 2001. Pacific Gas & Electric Company, *Environmental Justice Procedure* (September 2001).
- <sup>18</sup> See *Implementing Environmental Justice*, 550-54, for a discussion of the complex legislative history of SB 115.
- <sup>19</sup> Cindy Tuck, Interview.
- <sup>20</sup> Carlos Porras, Executive Director, Communities for a Better Environment and Joe Lyou, Director of Programs, League of Conservation Voters, Interview (March 4, 2002).

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- <sup>21</sup> Cal. Gov't Code section 65040.12(c) (West Supp. 2001).  
<sup>22</sup> Cal. Gov't Code section 65040.12 (b) (West Supp. 2001).  
<sup>23</sup> Cal. Pub. Res. Code section 72000 (West Supp. 2001).  
<sup>24</sup> California Statutes 2000, Chapter 728.  
<sup>25</sup> Cal. Pub. Res. Code sections 72001.5, 72002, and 72003 (West Supp. 2001).  
<sup>26</sup> California Statutes 2001, Chapter 763.  
<sup>27</sup> Cynthia McClain-Hill, McClain-Hill Associates, Attorneys at Law, Small Business Representative on Cal/EPA's Environmental Justice Advisory Council, Interview (March 5, 2002).  
<sup>28</sup> California Statutes, Chapter 762.  
<sup>29</sup> Cal. Gov't Code section 65040.12(d) (West Supp. 2001).  
<sup>30</sup> California Statutes 2001, Chapter 764.  
<sup>31</sup> Cal. Health and Safety Code section 57008(a)(3) (West Supp. 2001).  
<sup>32</sup> *Ibid.*, section 57008(b)(2).  
<sup>33</sup> *Ibid.*, section 57008(c)(2).  
<sup>34</sup> California Health and Safety Code section 57010(a) (West Supp. 2001).  
<sup>35</sup> California Statutes 2001, Chapter 765.  
<sup>36</sup> *Ibid.*  
<sup>37</sup> *Implementing Environmental Justice*, 585.  
<sup>38</sup> Available at [www.opr.ca.gov/ejustice/overview.shtml](http://www.opr.ca.gov/ejustice/overview.shtml)  
<sup>39</sup> *Ibid.*  
<sup>40</sup> *Ibid.*  
<sup>41</sup> [www.opr.ca.gov](http://www.opr.ca.gov), click on 2002 EJ Forums.  
<sup>42</sup> *Implementing Environmental Justice*, 563.  
<sup>43</sup> California Environmental Protection Agency, *Strategic Vision*, 9.  
<sup>44</sup> *Ibid.*, 22.  
<sup>45</sup> *Ibid.*  
<sup>46</sup> California Environmental Protection Agency, *Environmental Justice Program Fact Sheet*.  
<sup>47</sup> California Environmental Protection Agency, *Memorandum on Environmental Justice Mission Statement and Program Elements*.  
<sup>48</sup> Malinda Hall, Special Assistant for Environmental Justice and Carol Monahan, Assistant General Counsel, California Environmental Protection Agency, Interview (February 15, 2002).  
<sup>49</sup> See e.g., California Environmental Protection Agency, *Accomplishments and Priorities* (January thru June 2001) 5, 15, 80.  
<sup>50</sup> Romel Pascual, Interview.  
<sup>51</sup> Malinda Hall and Carol Monahan, Interview.  
<sup>52</sup> California Air Resources Board, *Neighborhood Assessment Work Plan* (June 30, 2000). At [www.arb.ca.gov/ch/napworkplan.htm](http://www.arb.ca.gov/ch/napworkplan.htm).  
<sup>53</sup> Lynn Terry, Remarks before the Academy Panel (February 12, 2002).  
<sup>54</sup> *Ibid.*  
<sup>55</sup> California Air Resources Board, *Policies and Actions for Environmental Justice* (December 13, 2001). At [www.arb.ca.gov](http://www.arb.ca.gov).  
<sup>56</sup> Letter from numerous community and environmental organizations to Chairman Alan Lloyd and Members of the Air Resources Board (December 6, 2001).  
<sup>57</sup> *Ibid.*  
<sup>58</sup> Romel Pascual, Interview.  
<sup>59</sup> *Policies and Actions for Environmental Justice*.  
<sup>60</sup> Letter from numerous community and environmental organization to Chairman Alan Lloyd and Members of the Air Resources Board (December 6, 2001).  
<sup>61</sup> Lynn Terry, Remarks.  
<sup>62</sup> Lynn Terry, Remarks.  
<sup>63</sup> *Ibid.*  
<sup>64</sup> *Ibid.*

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- <sup>65</sup> Romel Pascual, Interview.
- <sup>66</sup> Jim Marxen and Vanessa Byrd, Interview.
- <sup>67</sup> Department of Toxic Substances Control, *Public Participation Manual* (October 2001) iv.  
At [www.dtsc.ca.gov/lawsregulationspolicies/index.html](http://www.dtsc.ca.gov/lawsregulationspolicies/index.html) click on "policies and procedures."
- <sup>68</sup> Ibid.
- <sup>69</sup> Ibid., Chapters 2, 4.
- <sup>70</sup> Ibid.
- <sup>71</sup> Department of Toxic Substances Control, *Draft Environmental Justice Policy* at [www.dtsc.ca.gov](http://www.dtsc.ca.gov).
- <sup>72</sup> Jim Marxen and Vanessa Byrd, Interview.
- <sup>73</sup> Ibid.
- <sup>74</sup> South Coast Air Quality Management District, *An Air Toxics Control Plan for the Next Ten Years*, (March 2000) Appendix B. At [www.aqmd.gov/aqmp/atcp.html](http://www.aqmd.gov/aqmp/atcp.html).
- <sup>75</sup> Ibid.
- <sup>76</sup> South Coast Air Quality Management District, Board meeting materials from August 13, 1999, available at [www.aqmd.gov/hb/990824a.html](http://www.aqmd.gov/hb/990824a.html).
- <sup>77</sup> Barry Wallerstein, Interview.
- <sup>78</sup> South Coast Air Quality Management District, *Multiple Air Toxics Exposure Study ES-1*.  
At [www.aqmd.ca.gov](http://www.aqmd.ca.gov). AQMD conducted a less ambitious air toxics assessment in 1987. Key differences between MATES II and MATES I were that diesel emissions are now identified as a toxic emission and the AQMD had much better monitoring capabilities. Barry Wallerstein, Interview.
- <sup>79</sup> Ibid.
- <sup>80</sup> Ibid.
- <sup>81</sup> Barry Wallerstein, Interview.
- <sup>82</sup> *An Air Toxics Control Plan for the Next Ten Years*.
- <sup>83</sup> Ibid.
- <sup>84</sup> Barry Wallerstein, Interview.
- <sup>85</sup> Ibid. The City of Los Angeles is also revising its CEQA threshold guide to include environmental justice considerations. The new Guide, still in draft form, notes that city policy in its General Plan Framework element and in its proposed Transportation Element "is to 'assure fair treatment of people of all races, cultures, incomes and education levels with respect to development, implementation, and enforcement of environmental laws, regulations, and policies, including affirmative efforts to inform and involve environmental groups, especially environmental justice groups, in early planning stages through notification and two-way communication.' This assurance may involve efforts to identify and reach affected populations, including low-income and minority populations [in the CEQA process]." City of Los Angeles, L.A. *CQA Threshold Guide*, Draft (May 14, 1998). Renee Brandt, Environmental Supervisor, Air Quality Division, City of Los Angeles, Interview (March 5, 2002).
- <sup>86</sup> South Coast Air Quality Management District, *AQMD Adopts Work Plan for Chairman's Clean Air Initiative* (February 1, 2002). At [www.aqmd.gov/news1/governing\\_board/2002/bs2\\_01\\_02.htm](http://www.aqmd.gov/news1/governing_board/2002/bs2_01_02.htm).
- <sup>87</sup> Cal. Pub. Res. Code section 7200 (West Supp. 2001).
- <sup>88</sup> California Statutes 2001, Chapter 765.
- <sup>89</sup> Cal. Pub. Res. Code section 7115 (West Supp. 2001).
- <sup>90</sup> E-mail from Romel Pascual to Veronica Lenegan, (April 4, 2002).
- <sup>91</sup> E-mail from Lynn Terry to Veronica Lenegan, (April 4, 2002).
- <sup>92</sup> South Coast Air Quality Management District, *Eight Strategic Alliance Initiatives* (February 1, 2002).  
At [www.aqmd.gov/news1/strategic\\_alliance\\_initiatives.htm](http://www.aqmd.gov/news1/strategic_alliance_initiatives.htm)
- <sup>93</sup> Barry Wallerstein, Interview.
- <sup>94</sup> *Policies and Actions for Environmental Justice*, 3.
- <sup>95</sup> Ibid.
- <sup>96</sup> Lynn Terry, Remarks.
- <sup>97</sup> Lynn Terry and Ed Lowry, Remarks.
- <sup>98</sup> *Draft Environmental Justice Policy*.
- <sup>99</sup> Romel Pascual, Interview.

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<sup>100</sup> Barry Wallerstein, Interview.

<sup>101</sup> *An Air Toxics Control Plan for the Next Ten Years.*

<sup>102</sup> *Policies and Actions for Environmental Justice*, 6.

<sup>103</sup> *Ibid.*, 9.

<sup>104</sup> *Ibid.*, 10.

<sup>105</sup> *Ibid.*, 11.

<sup>106</sup> *Environmental Justice Policy*, Draft.

<sup>107</sup> *Policies and Plans for Environmental Justice*, 4.

<sup>108</sup> *Ibid.*, 5-6.

<sup>109</sup> See Environmental Justice Task Force, *Final Report to Governing Board* (August 13, 1999).  
At [www.aqmd.gov/hb/990824a.html](http://www.aqmd.gov/hb/990824a.html).

<sup>110</sup> Carlos Porras, Interview.

## CHAPTER EIGHT

### LESSONS LEARNED

The following "lessons learned" are organized according to the major themes drawn from the Panel's earlier work on environmental justice: leadership and accountability, setting priorities to reduce risk and pollution, permitting, and public participation. A fully formed environmental justice program incorporates all four themes. At the same time, the Panel recognizes that such programs likely will develop incrementally. To demonstrate the state's commitment and build public trust, the Panel recommends that states take some immediate actions to address community concerns – focusing on achieving results from the very start. The range of recommendations presented in this report allows states and other stakeholders to choose options that best fit individual circumstances and still provides states with the larger picture of the elements needed to address environmental justice.

#### LEADERSHIP AND ACCOUNTABILITY

Despite persistent and seemingly intractable environmental justice problems, the Panel has uncovered heartening evidence of leadership to address them on the part of state legislators, agency managers and staff, universities, businesses, community residents, and local governments. Each type of leader offers a distinct perspective, provides unique resources, and produces different solutions and results. Our study of four states demonstrates that to be successful, environmental justice efforts can benefit from leadership by all six types.

##### Legislative Leadership

**Finding 1:** Although states may have untapped legal authorities to address environmental justice issues, additional legislation can propel reluctant agencies forward, lend support and credence to the efforts of willing administrators, and launch activities that involve external parties.

Legislative leadership spurred new and significant environmental justice initiatives in California and Florida. The principal author of Florida's legislation credited a forum sponsored by the National Conference of State Legislators for sparking his interest in environmental justice issues,<sup>1</sup> demonstrating the importance of education in stimulating interest to enact environmental justice laws.

**Recommendation 1:** State environmental agencies and other interested organizations should support and encourage programs designed to provide better information to state legislators about environmental justice issues, including information about:

- the existence of disproportionately high concentrations of industrial facilities and contaminated sites in or near people-of-color and low-income communities

- the potential adverse health and environmental effects that could result from such siting practices
- the status of ongoing efforts to address environmental justice concerns in their respective states
- models of innovative, creative approaches for solving similar problems in other states

**Recommendation 2:** State legislators should examine environmental justice issues in their jurisdictions, as well as environmental justice legislation adopted by other states. They should consider legislation establishing clear legal authority to address and resolve their states' environmental justice problems.

### **Agency Leadership**

**Finding 2:** Champions are important for leading environmental justice initiatives because these programs require state agencies to change their traditional ways and adopt new strategies for doing business.

High-level executive leadership has been critical for developing environmental justice programs in several states. For example, the chair of the California Air Resources Board came to his position with a strong interest in community health, championed the board's neighborhood assessment process, and led the board's adoption of its environmental justice policies and actions in December, 2001. Similarly, the chair of the governing board for the South Coast Air Quality Management District played a major role in pushing the district to adopt environmental justice guiding principles and initiatives, launching the district's MATES II study, and encouraging new rules to address findings from MATES II.

Cal/EPA has an assistant commissioner for environmental justice, and the state's Department of Toxic Substances Control and Air Resources Board both have full-time environmental justice staff.

In Indiana, the Department of Environmental Management's commissioner and other senior staff identified environmental justice as an important concern for their state, obtained EPA funding to develop an environmental justice plan, and supported staff efforts to improve the state's public participation process.

Similarly, the former commissioner of New Jersey's Department of Environmental Protection credits his participation in EPA's National Environmental Justice Advisory Council for inspiring, at least in part, his leadership in publishing New Jersey's environmental justice policy, creating an environmental equity office and advisory council, and developing the state's proposed rule to expand public participation in permitting.<sup>2</sup>

The value of getting policymakers out into the community is demonstrated by what happened in New Jersey. After New Jersey's current environmental commissioner toured South Camden

neighborhoods, he initiated the comprehensive state-community partnership program.<sup>3</sup> California's South Coast Air Quality Management District holds its monthly town hall meetings in people-of-color and low-income communities. Such visits provide a learning experience to policymakers and signal the importance of environmental justice concerns to agency staff. Community members gain much-needed access and hope that their problems will be addressed.

**Recommendation 3:** States' highest-level executives, such as the governor, commissioner, and other agency heads, should articulate a clear commitment to environmental justice.

**Recommendation 4:** States should formalize their commitment to environmental justice in a written document that clearly establishes principles for state and local agencies to follow. This document could be an executive order, state policy, administrative order, or similar pronouncement.

**Recommendation 5:** States should ensure that their commitment is supported by an adequate administrative structure and allocation of resources to achieve full implementation of environmental justice policies. This structure might include an office or staff devoted to environmental justice. Agency officials with environmental justice responsibilities should report directly to the commissioner or department head.

**Recommendation 6:** States should ensure that their environmental justice policies produce actual results by fully integrating the policies into core agency missions — including state planning mechanisms — so they can permeate programs and govern day-to-day staff functions and activities. The program results should be regularly evaluated and reported to the public.

### **University Leadership**

**Finding 3:** University-based programs can play an important role in developing solutions to environmental justice concerns.

A significant part of Florida's environmental justice program is based at its universities, especially Florida A&M and South Florida University. Compared with state agencies, university-based programs may be:

- somewhat more insulated from political change, and thereby provide continuity to environmental justice programs
- better positioned to provide credible and trusted advice to citizens
- capable of conducting more extensive scientific research than state agencies
- effective intermediaries among competing interests
- strong advocates for citizens

Thus, university-based environmental justice programs can be a valuable addition to state programs, even though universities cannot directly address environmental justice concerns in the same way that regulatory agencies can through permitting or enforcement decisions.

**Recommendation 7:** State leaders should examine the role that universities can play in addressing environmental justice issues. However, university-based programs should not replace environmental justice programs at state regulatory agencies.

### **Community Leadership**

**Finding 4:** An active, informed citizenry is critical to the success of every state's environmental justice initiatives.

For each of the four states studied, Academy researchers found that community leaders played key roles as catalysts for developing environmental justice programs. For example, the Legal Environmental Assistance Foundation was a driving force behind legislation establishing Florida's Environmental Equity and Justice Commission. Organizations, such as Communities for a Better Environment and the League of Conservation Voters, helped to propel forward several California environmental justice laws. Along with dozens of other community and environmental groups, they also supported the Air Resources Board's policies and actions for environmental justice. The Indianapolis Urban League's Environmental Coalition studied the relationships among race, income, and air toxics and helped to build support for Indiana's environmental justice policies. In New Jersey, the South Camden Citizens in Action and other community groups highlighted the environmental justice problems of that neighborhood and forced the clean-up of its sewage treatment plant.

**Recommendation 8:** States should cultivate an active, informed citizenry on environmental issues, especially for those living in people-of-color and low-income communities where poverty, loose organization, lack of political power, or limited access to resources may limit citizen involvement. State agencies should use a variety of tools for achieving this goal, including:

- providing financial assistance to community organizations in the form of direct state funding or, where such funding is not available, such indirect assistance as educating community leaders about the availability of federal, state, or other grant programs, helping community groups apply for such grants, and providing community leaders with written descriptions of environmental problems and needs which can be used to prepare grant applications
- providing technical assistance to community organizations, like EPA's technical assistance grants and Technical Outreach Services to Communities<sup>4</sup> and the community outreach services provided by Florida A&M University
- establishing community or field liaisons, such as EPA's Superfund community liaison program which has been particularly helpful in working with New Jersey neighborhoods



- promoting and facilitating interaction between communities and businesses

Most importantly, state leaders should maintain an atmosphere that welcomes community involvement.

### **Business Leadership**

**Finding 5:** Some businesses and business organizations have recognized the importance of environmental justice, adopted environmental justice policies, and supported their states' environmental justice initiatives.

**Finding 6:** Business leaders have significant opportunities to improve their relationships with neighboring communities by moving beyond meeting minimum environmental requirements and responding directly to community concerns.

Businesses in all four states have been involved in environmental justice advisory panels or commissions. In Florida, the Chamber of Commerce has conducted training sessions to help businesses develop better ways of working with people-of-color and low-income communities.

In California, Pacific Gas & Electric Company adopted a corporate environmental justice policy, as did the California Council for Environmental and Economic Balance, an industry organization. The former contains the following findings:

- The environmental justice movement has become an important force in the protection of both urban and rural (including tribal) environments.
- As a matter of sound business strategy, adherence to environmental justice principles can expedite regulatory approvals by enabling regulators to make the case we [PG&E] have honored environmental justice principles.
- As a matter of sound and responsible corporate conduct, adhering to environmental justice principles is simply the right thing to do.
- If handled improperly, environmental justice conflicts can lead to significant delays, costs, and negative public opinion. Therefore, avoiding environmental justice challenges in the first place can help maintain confidence of our investor community.
- Pacific Gas & Electric has been, and will continue to be, a strong proponent of environmental justice as a civil rights issue.<sup>5</sup>

The policy then sets forth details on implementation:

Pacific Gas & Electric Corporation will conduct its operations in a manner that is consistent with and promotes environmental justice principles. We are committed to:

- A. Comply with the letter and spirit of environmental justice laws and regulations in our operation.

- B. Set high standards of environmental performance to minimize environmental impacts from our operations.
- C. Work diligently to address all environmental justice issues.
- D. Incorporate environmental justice considerations in the purchase of existing facilities and the planning and development of new facilities.
- E. Work with stakeholders to ensure that future development around our facilities is compatible with existing and planned facility use.
- F. Maintain open and responsive communications with all stakeholders.
- G. Communicate and reinforce our environmental justice values within the corporation.
- H. Accept responsibility for our operations, and in so doing work collaboratively with our neighbors and surrounding communities.<sup>6</sup>

Pacific Gas & Electric is implementing its policy by conducting staff training, placing environmental justice into the operating plans of all its departments, and including environmental justice requirements in its contract specifications.<sup>7</sup>

Businesses can take many steps to alleviate environmental justice concerns by going beyond the minimum requirements imposed by federal and state regulatory standards. For instance, they can redesign a site, replace old equipment, reduce use of hazardous substances, install additional pollution controls, obtain emission offsets, develop better operating and maintenance procedures, adopt pollution prevention measures, collect appropriate data, conduct studies, monitor truck traffic, install noise or dust controls, and deploy monitoring stations in locations that are generating community concerns. Often, businesses decide to undertake one or more of these measures in response to regulatory controls. Yet, they may benefit in other ways by responding to community concerns: saving costs, avoiding litigation, reducing tort liability, expediting decision-making, achieving certainty with respect to applicable regulatory requirements, avoiding labor disputes, building stronger community and worker relations, maintaining property values, stabilizing the adjacent neighborhood, and enhancing the quality of life for their workers. Before many of these non-regulatory motivating factors can come into play, however, businesses must be aware of community concerns.

**Recommendation 9:** State agencies should encourage business leadership in responding to environmental justice concerns by:

- providing information to help businesses understand environmental justice concerns
- developing environmental justice and/or community outreach guidance for business leaders and permit applicants
- using brownfield restoration as a mechanism to address environmental justice concerns

## **Local Government Leadership**

**Finding 7:** Local governments have many powers to address the environmental concerns of disadvantaged communities because local agencies decide on land-uses, geographic locations of industrial facilities and residential areas, site designs, distribution of public services and facilities, road construction, access to housing and public transit, and school siting.

Local land-use decisions can play an important role in aggravating or mitigating environmental justice concerns. California law requires the state to develop guidance for land-use planners that informs, but does not bind, local governments. Similarly, Florida's brownfield legislation requires that local governments which designate land for the program must obtain the views of affected community members on proposed redevelopment projects. These laws demonstrate practical ways for state agencies to work with local land-use officials on mitigating or avoiding environmental justice problems.

Some state agencies are taking the initiative to coordinate with local governments. For example, the policies and actions of California's Air Resources Board recognize the importance of local land-use decisions. They commit the board to working with local land-use officials by incorporating cumulative impact analyses into procedures and providing technical tools and guidance to avoid decisions that aggravate environmental justice problems.

Even without state agency guidance, some local governments have developed procedures to ensure that polluting facilities are not disproportionately sited in people-of-color or low-income communities. These procedures also are designed so that these communities reap at least some of the economic and employment benefits of industrial and commercial development within their neighborhoods. Contra Costa County in California has adopted an innovative "neighborhood first" hiring requirement as part of its land-use plan and permits for facility siting. Approved facilities are required to go through local programs for training and filling positions so that the benefits of new or expanded facilities go directly to the affected communities.<sup>8</sup>

Still, the disproportionate proximity of low-income and people-of-color communities near industrial sources — as evidenced by the studies outlined in this report — suggests there is an urgent need for additional guidance so that local governments can use their powers to address environmental justice problems.

**Recommendation 10:** States should assist local governments in understanding:

- the extent to which they have authority to address environmental justice issues
- the data available on the health, environment, and quality of life of local residents in high-risk communities
- various approaches that are available to solve environmental justice concerns

**Recommendation 11:** States should ensure that all local agencies with jurisdiction over potential environmental justice problems are provided with training, guidance documents, and/or educational materials prepared for local officials. States also should ensure that local governments have the necessary technical tools to use their legal authority wisely.

**Recommendation 12:** Each state should ensure that innovative, successful environmental justice best practices adopted by local governments within the state are reported to other local officials with similar responsibilities throughout the state.

### **Accountability**

**Finding 8:** None of the states in this study has adopted performance, outcome, or accountability measures for integrating environmental justice concerns into the daily operations of its environmental agencies. Without such measures, it will be difficult:

- for agency staff to know how to change their activities
- for agency managers, legislators, businesses, and communities to determine whether or how states' environmental justice initiatives are improving public health, environmental conditions, or overall quality of life in the communities to which they apply

**Finding 9:** California has required reports to the legislature that might help the public to assess the progress that state agencies have made in implementing environmental justice programs.

The California legislature has required Cal/EPA to report every three months on progress made implementing the state's strategic planning requirements. This reporting requirement is contained in appropriation language, which means the reports may only be prepared during the current fiscal year. State law also requires Cal/EPA to prepare annual reports to the legislature on the agency's environmental justice programs, beginning in 2004. Individual environmental boards, such as the Air Resources Board, also require periodic reports on environmental justice programs from the regional air districts.

**Recommendation 13:** States should ensure that their environmental justice programs produce results by:

- establishing clearly defined outcomes
- translating desired outcomes into clear performance goals
- evaluating program effectiveness at regular intervals, such as annual reports
- holding program managers and staff accountable for achieving desired performance goals
- tracking pollution levels in high-risk communities to determine if environmental problems, such as air and water pollution and waste disposal, are being solved

- tracking public health effects in high-risk communities to learn whether pollution-related problems are decreasing, such as tracking key health indicators like cancer, asthma, school attendance levels, and hospital admissions

## PERMITTING

### Legal Authorities

**Finding 10:** Only two of the states studied — California and Florida — have enacted laws specifically designed to address environmental justice, but none of these laws fully integrates environmental justice concerns into core environmental programs or permitting requirements.

**Finding 11:** A close review of state constitutions and state environmental, civil rights, public health, and other related laws may reveal that existing state laws provide legal authority to address environmental justice concerns.

The recent study by the Environmental Law Institute (ELI) found that federal laws give EPA “substantial and wide-ranging powers to pursue environmental justice,” even in situations where consideration is “not directly compelled by the underlying statutes.”<sup>9</sup> EPA’s legal authority to address environmental justice emanates from the National Environmental Policy Act; Title VI of the Civil Rights Act; Executive Order 12898; general administrative authority to exercise agency discretion; and media-specific environmental laws, such as the federal Clean Air and Clean Water Acts and hazardous and solid waste laws.

Because many state laws, rules, and policies are derived from, modeled on, or adopted in response to federal laws, regulations, policies, and guidance — including those examined by ELI — states may have substantial, untapped legal authorities to address environmental justice concerns. Hence, states should examine federal sources of legal authority and ELI’s discussion of these sources to learn how this analysis can inform their own interpretation of applicable state laws.

Of the four states in this study, only California has committed to a comprehensive examination of existing state legal authority for addressing environmental justice. That effort responds at least in part to legislation requiring that state agencies identify legal requirements that may pose barriers to alleviating environmental justice problems. California’s legal staff believe that this review will reveal state agencies already have significant authority to address environmental justice.

**Recommendation 14:** Each state should undertake a comprehensive analysis of existing legal authorities to address environmental justice, including whether:

- there is legal authority to address environmental justice in state constitutions or state public health, civil rights, administrative, and environmental laws
- they are required to address environmental justice

- they have discretion to address environmental justice in the absence of an explicit statutory directive
- there are legal barriers to addressing environmental justice

**Recommendation 15:** In analyzing their existing legal authorities, states should pay special attention to provisions of state law derived from, modeled on, or adopted in response to federal laws. When integrating such provisions, states should consider ELI's analysis of comparable federal laws.

**Recommendation 16:** States should ensure that their legal analysis clarifies the authority of permit writers to deny, condition, or require additional conditions or controls on permits for all regulated facilities located in or near high-risk communities.

**Recommendation 17:** States should communicate the results of their legal analysis to their agencies' staff in terms that can be easily understood and incorporated into day-to-day work by program personnel, such as permit writers.

## **Training**

**Finding 12:** Agency staff may have limited experience with environmental justice problems, including how to address these issues in their daily work.

Although some state officials have endeavored to initiate programs for addressing environmental justice, many with jurisdiction over decisions affecting health and environmental conditions in high-risk communities could benefit from a deeper understanding of those concerns and how to respond to them. Officials in California, Indiana, and New Jersey all emphasized the importance of environmental justice training for their agencies' staffs.

The need to educate state managers and staff on environmental justice is demonstrated by a 130-agency survey conducted by California's Office of Planning and Research. It revealed that, among the 64 agencies responding, 24 percent made or funded land-use decisions, 19 percent made permitting decisions, 24 percent wrote or produced regulations, and 29 percent made other decisions that may have environmental justice implications. Yet, only 2 percent of the agencies had written environmental justice policies, and only 29 percent thought that they needed to comply with Title VI of the Civil Rights Act.

In both the California and Indiana agencies, there was low staff awareness of environmental justice issues and how they can be addressed, a further indication that training is important for effectively dealing with environmental justice. State training programs may include at least three elements: (1) awareness of the nature of environmental justice problems, such as concentration of facilities or emissions in people-of-color and low-income communities; (2) examples of actions that agency staff can take to address these issues as part of their work; and (3) more focused training on how staff can incorporate environmental justice considerations into specific activities, such as issuing permits, monitoring pollution, or conducting inspections.

**Recommendation 18:** State agencies should commit to train, within a set period of time, all of their employees and managers on environmental justice. These training courses should address:

- how to identify potential environmental justice problems
- why solutions to environmental injustice are important
- what approaches can be used to solve environmental justice concerns
- when and how to coordinate solutions with federal and local agencies
- how to utilize non-agency — community, academic, and public health — resources to expand the range of available options
- how to improve public participation in environmental decision-making, especially in high-risk communities
- what types of additional information are needed to address environmental justice more fully and what can be done to improve such information gathering
- how to ensure that state enforcement adequately targets pollution problems in high-risk communities

### **Permitting Tools**

**Finding 13:** States have developed very few tools to help permit writers take environmental justice issues into consideration.

Thus far, Indiana and New Jersey environmental justice programs have focused on public participation, rather than on the content of permits. The only tools that Indiana has provided its permit writers are awareness training and a map of environmental justice areas of concern. Similarly, Cal/EPA and the California Department of Toxic Substances Control have conducted strategic planning, training, and public participation initiatives for environmental justice, but have not yet developed permitting tools.

However, California's Air Resources Board and the South Coast Air Quality Management District have implemented several steps that can directly assist permit writers in addressing environmental justice. These include developing new rules to address diesel and other toxic air emissions, increasing air toxic monitoring, installing mobile monitors in specific neighborhoods, and convening monthly neighborhood town hall meetings to identify other ongoing community concerns.

**Recommendation 19:** States should develop practical tools to help permit writers consider environmental justice in their day-to-day activities.

**Recommendation 20:** States should have mechanisms in place to ensure that permit writers have access to and use information commonly available to community residents but frequently unknown to regulatory officials, such as eyewitness accounts of permit violations; poor maintenance practices; odors; spills; illegal dumping; fish kills; presence of unpermitted,

under-permitted, or intermittently polluting facilities; and high levels of potentially pollution-related health problems like asthma or cancer.

**Recommendation 21:** Permit writers should be trained to seek and respond appropriately to information from communities facing higher risks where further research or investigation is warranted. This might require them to request additional information from permit applicants, insist on a site-specific study, coordinate with local government or public health officials, or refer potential violations to enforcement officials for further investigation.

**Recommendation 22:** Permit writers should be trained to incorporate the results of investigations into permitting decisions through appropriately crafted pollution limits, permit terms, permit conditions, and monitoring and reporting requirements, and to deny issuance of permits where warranted. Also, they will need clear instructions about their legal authority to address environmental justice problems, as well as adequate time and resources to respond to community concerns.

### **Eliminating Permit Backlogs**

**Finding 14:** Permit backlogs create barriers to addressing environmental justice issues.

Some new environmental justice state policies may not be implemented until current state permits for existing facilities expire. Those permits may be renegotiated to determine the revised conditions that will apply during new permit periods. In such situations, timeliness is critical to the efficacy of the programs. However, backlogs of expired and outdated permits awaiting review, modification, and renewal have long plagued many states' water permitting programs.

**Recommendation 23:** State agencies should eliminate any backlogs of permit renewals and commit to reviewing and modifying any expired permits on a timely basis. Permit renewals provide an opportunity for agencies to incorporate newly adopted pollution control requirements, account for new information on environmental stresses, mandate pollution prevention, reflect current operating and maintenance practices, and consider community concerns.

### **State Coordination with Local Governments**

**Finding 15:** State agencies are finding ways to coordinate their efforts with local land-use authorities. Together, they can provide better responses to environmental justice concerns.

**Finding 16:** Local governments may hold jurisdiction over solutions to environmental justice problems, and may have information that states can use to craft solutions, such as information relevant to permit writers.



Also, states have begun to experiment with increasing coordination with local governments on permit issuance.

**Recommendation 24:** When preparing permits for new and existing facilities, states should coordinate with local governments at the pre-application stage to:

- develop mechanisms to ensure permit writers obtain relevant information from local government officials
- give permit writers a clear understanding of their legal authority to address local concerns in state permits.

## **SETTING PRIORITIES TO REDUCE POLLUTION**

### **Data on Concentrations of Facilities**

**Finding 17:** States have found that data on the concentration of environmentally hazardous facilities — often presented in map form — are important tools to overcome skepticism about whether environmental justice is a real problem.

Florida's Commission of Environmental Equity and Justice, the Indianapolis Urban League, Indiana's DEM, Communities for a Better Environment, and California's Air Resources Board all have compiled and mapped data demonstrating that many potential environmental hazards or releases are concentrated in people-of-color and low-income communities. These data and maps formed the basis for Florida legislation establishing the Center for Environmental Equity and Justice, and they answered industry concerns in Indianapolis about environmental justice. They also have allowed Indiana DEM's permit staff to identify areas for additional attention, and provided support for the California Air Board's policies and actions on environmental justice.

**Recommendation 25:** To prioritize their risk reduction efforts, states should identify areas where there are concentrations of potential environmental hazards, or where disproportionately high exposures to environmental contaminants may occur.

### **Importance of Monitoring to Reduce Pollution**

**Finding 18:** Ambient monitoring data greatly facilitate better state targeting of resources and provide important support for new strategies to reduce hazardous exposures.

The South Coast Air Quality Management District's MATES II study is one of the most comprehensive studies of its kind. Using fixed and mobile monitoring, the district developed detailed data on area-wide levels of air toxics and neighborhood-specific exposures. Because data demonstrated that diesel emissions were the highest toxic hazard in the region, the study has driven California to focus significant efforts on reducing diesel emissions, and to target state grants to neighborhoods where emissions are highest — primarily people-of-color and

low-income communities. The data also have provided the technical basis for California's proposed rules regulating film developing and dry cleaning operations. Further, they have demonstrated that localized "hot spots" occur and have illustrated the value of mobile monitoring stations for responding to neighborhood complaints about excess air pollution.

**Recommendation 26:** States should conduct environmental monitoring to identify high risks at regional and neighborhood levels.

**Recommendation 27:** States should develop mobile monitoring stations or other means to investigate and respond to short-term or intermittent hazards in high-risk communities.

**Recommendation 28:** States should ensure that conventional monitoring stations for water quality, air toxics, ambient air quality, and bio-markers are dispersed throughout potential high-risk communities, allowing the state to detect and respond to local hot spots in these communities.

### **Need for Early and Visible Initiatives to Reduce Pollution**

**Finding 19:** Community members, neighborhood organizations, and other advocates may grow frustrated if state environmental justice programs do not include early and visible efforts to reduce health risks from pollution.

Thus far, most of these state programs have emphasized strategic planning and improved public participation. These steps are important for building environmental justice programs, but they can cause understandable frustration among residents with high exposures to pollution. Because they are frustrated by the lack of state action, some individuals and community groups are unwilling to participate in developing state environmental justice programs. Rather than just holding public meetings, they want states to undertake early, concrete, on-the-ground activities to reduce pollution.

**Recommendation 29:** Although states are developing longer term plans to address environmental justice issues, they should work on identifying and reducing the most obvious hazards in high risk communities, thus demonstrating that their programs produce concrete, real-world changes. Increased inspections and enforcement where there are concentrations of pollution sources can demonstrate a state agency's commitment to reducing health hazards.

### **Linking Environmental Justice and Community Health**

**Finding 20:** Using state environmental justice programs to address community health concerns may broaden support for these initiatives.

Florida linked its environmental justice program to community health concerns after the Environmental Equity and Justice Commission found that a disproportionate number of environmentally hazardous facilities were located near people-of-color and low-income

communities. The commission also determined that many residents located there had frequent health problems and lacked adequate health care facilities. Although the commission did not have data directly linking health problems to these facilities, advocates focused on health concerns and obtained broad support for locating new health clinics in these communities.

**Recommendation 30:** State environmental agencies should work with health agencies to determine whether increased access to community health services may help to address environmental justice concerns.

### **Enforcement**

**Finding 21:** Enforcement of environmental laws holds the key to producing benefits from the pollution control requirements that are part of an environmental justice program or are already embedded in existing state rules and permit conditions.

Until now, many environmental justice activities have sought to evaluate concerns about concentrations of industrial facilities and other pollution sources in residential neighborhoods. These at-risk communities are also frequently concerned about whether federal and state agencies effectively enforce the pollution control requirements applicable to nearby facilities. Put simply, polluting facilities could be causing health and environmental problems in adjacent communities, either because current environmental laws and permits are too weak to protect public health or because they are not being correctly applied and effectively enforced in communities that may lack political or legal power. Indiana has begun to address these issues by including environmental justice as a key element in its compliance and enforcement plan.

**Recommendation 31:** States should commit to improving their environmental enforcement efforts in high-risk communities by:

- placing additional monitoring stations in these communities
- conducting more frequent and thorough inspections of facilities near those communities
- taking advantage of community knowledge about a facility's day-to-day operations
- ensuring that violations are promptly addressed by enforcement actions
- choosing the type of enforcement action — administrative, civil, or criminal — appropriate for the violation
- imposing monetary penalties that, to the extent permitted by law, reflect history of non-compliance and gravity of the offense, including increased pollution exposures in densely populated neighborhoods
- evaluating enforcement activities to ensure they address the most serious environmental hazards and effectively deter future violations

## **Targeting Efforts to Protect Communities of Concern**

**Finding 22:** States should develop practical ways to target their efforts on communities with high exposures to pollution.

Some state agencies, including those in Indiana and New Jersey, have approached environmental justice by identifying and focusing on people-of-color and low-income communities, located near concentrations of industrial facilities and contaminated sites, that suffer adverse impacts. These states are experimenting with screening tools to identify communities of concern. Other state agencies, like the California Air Board, have bypassed the thorny problems of identifying specific communities of concern and worked directly on reducing emissions from specific types of pollution, such as diesel emissions, concentrated in high-risk communities. Both approaches are valid ways to address environmental justice concerns, provided they are based on adequate data, are effectively implemented, and periodically evaluated.

**Recommendation 32:** State environmental justice programs should go beyond permitting to address other activities with important implications for high-risk communities, such as standard setting, enforcement, technical and compliance assistance, research, data gathering, and financial assistance.

**Recommendation 33:** States should update existing rules and promulgate new rules where necessary to ensure that specific categories of pollution sources concentrated in high-risk communities employ the latest, most effective pollution controls, operation and maintenance practices, and pollution prevention techniques.

**Recommendation 34:** When states seek to identify communities that may suffer high levels of exposure to environmental hazards, they should employ appropriate screening tools that:

- account for racial demographics and income
- use accurate and complete data
- provide multi-media data covering pollution of air, groundwater, surface water, and drinking water, plus waste disposal — all threats facing communities
- accurately detect exposures using an adequate monitoring network

## **PUBLIC PARTICIPATION**

### **Programs to Expand Public Participation**

**Finding 23:** States have implemented a broad range of public participation initiatives to address environmental justice concerns. The four states in this study have taken steps to enhance public participation, such as:

- developing guides to help citizens understand agency processes

- training citizens about how to participate effectively in agency decisions
- training agency staff about the value of community expertise and the need to listen to community concerns
- issuing public notices earlier in the agency decision-making process
- providing notices in more than one language
- writing easily understood notices, fact-sheets, and other documents
- publishing notices as advertisements rather than legal notices
- distributing notices to local institutions, such as community centers and churches
- building user-friendly web sites
- maintaining lists of community contacts
- holding meetings during the evening or weekends so it is easier for citizens to attend
- convening small groups, not large public meetings
- facilitating dialogues
- using community liaisons to establish closer ties with community leaders

The South Coast Air Quality Management District's monthly town hall meetings have further enhanced public participation by enabling district staff to meet with community members beyond the context of specific projects. The meetings have helped to build connections between the district and the community, and have provided essential information for directing some of the district's activities, such as deciding where to install mobile air toxic monitors.

**Recommendation 35:** State agencies should use the many proven practices for increasing public participation to ensure that citizens, especially those in communities with high exposures to pollution, understand decision-making processes, know when and how to participate, receive notice of actions that may affect their neighborhoods, understand those notices, enjoy the opportunity to participate at convenient times and places, and have access to information to participate effectively.

**Recommendation 36:** State agencies should train their staff to take local knowledge into account. Proactive problem-solving approaches include using a community liaison to work with high-risk communities — based on the successful approach developed for the federal Superfund program — or conducting town hall meetings like the South Coast Air Quality Management District's. These techniques can help state agencies to identify and solve problems early, save resources, and build better relationships between communities and government.

**Recommendation 37:** To involve high-risk communities more frequently and effectively in their environmental justice programs, states also should:

- involve citizens early in the permitting process
- frequently interact with community leaders and organizations at times and places convenient to them

- expand public participation in other programs important to high-risk communities, including standard-setting, enforcement, technical and compliance assistance, research, and information-gathering; and provide financial assistance to help groups participate

### **Advisory Committees**

**Finding 24:** Broadly representative advisory committees, given clear tasks, can play an important role in assisting states to develop environmental justice programs.

The four states studied have convened environmental justice advisory committees or councils, with varying degrees of success. The size, mission, authority, funding, and life-span of these bodies have differed significantly, but such groups can provide a constructive forum for exploring environmental justice issues among diverse constituencies. For state agencies, these committees also offer an avenue to gather information and advice about possible problem-solving approaches. For example, New Jersey DEP developed its proposed rule on expanded public participation following extensive discussion with its advisory council. Indiana DEM used an advisory committee to help in developing its environmental justice strategic plan. Business leaders have found such dialogues constructive.

Business representatives on New Jersey's council decided to participate in a second phase of deliberations and recommended expanding the council's membership to a wider circle of business leaders. However, community groups are more uncertain about the value of advisory committees. One state studied encountered difficulty in maintaining the interest of community representatives. In another, local community groups sometimes decided not to participate. In a third, a prominent community representative declared such councils to be "a waste of time."<sup>10</sup>

These different perspectives stem largely from the time required to build trust, develop an operating style, shape an agenda, deliberate, and reach consensus — or agree to disagree. This time commitment often contrasts with the sense of urgency experienced by community leaders who want rapid relief from substantial ongoing health or environmental hazards. Yet, states have some leeway to merge these differing perspectives; for example, they can ensure that their advisory committees have clear tasks and are adequately staffed, well run, and productive.

If states choose to establish advisory committees, they should use them to generate wide and diverse input for developing and improving environmental justice programs. However, states should recognize that committees have limited ability to provide prompt relief for hard-pressed community groups. Therefore, they are no substitute for direct, immediate agency actions that respond to the concerns of disadvantaged communities.

**Recommendation 38:** States can enhance the effectiveness of environmental justice advisory committees by ensuring that they:

- have a clear mission and task
- have definite time lines for completing each work phase
- are large enough to represent all key interest groups
- have adequate funding to do the work, including travel and other expenses for some committee members if needed
- are clearly able to influence state policy
- meet at times and places convenient for all committee members
- include an evaluative component to assess the committee's productivity

### **Using Brownfield Programs to Address Environmental Justice Concerns**

**Finding 25:** Well-designed state brownfield redevelopment programs can provide opportunities for communities to collaborate with state and local agencies on redevelopment projects. They can contribute significantly to alleviating environmental justice problems.

Florida's brownfield law requires community involvement in designing redevelopment projects. Clearwater's brownfield action agenda also identifies ways to increase community awareness of brownfields; improve community access to information; ensure community participation in decisions about brownfield redevelopment; develop the economic base of the brownfield neighborhoods; and create a healthy and safe environment there.

**Recommendation 39:** States should consider using brownfield programs to address environmental justice concerns by providing communities with a strong voice in redevelopment project design and focusing some redevelopment programs on reducing pollution in communities with high exposure levels.

## ENDNOTES

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<sup>1</sup> Josephus Eggleston, Jr., Commissioner, Broward County, Florida, Interview (March 12, 2002).

<sup>2</sup> The former New Jersey DEP commissioner was Mr. Robert Shinn.

<sup>3</sup> The current New Jersey DEP commissioner is Mr. Brad Campbell.

<sup>4</sup> For a discussion of these programs, see National Academy of Public Administration, *Environmental Justice in EPA Permitting: Reducing Pollution in High-Risk Communities is Integral to the Agency's Mission* (December 2001) 68.

<sup>5</sup> Pacific Gas & Electric Company, *PG&E's Environmental Justice Procedure* (September 2001) 4.

<sup>6</sup> *Ibid.*, 19.

<sup>7</sup> Robert Harris, Vice President, Environmental Affairs, Pacific Gas & Electric Company, Interview (February 14, 2002).

<sup>8</sup> James Kennedy, Deputy Director for Redevelopment, Contra Costa County Development Department, Interview (February 13, 2002).

<sup>9</sup> ELI Report, 1.

<sup>10</sup> Luke Cole, Director, Center for Race, Poverty and Environment, Interview (February 13, 2002).



## APPENDICES



## **APPENDIX A**

### **LIST OF INTERVIEWEES**

#### **CALIFORNIA**

**Renee Brandt**, Air Quality, City of Los Angeles, California  
**Luke Cole**, Center for Race, Poverty and Environment  
**Michael Dorsey**, Department of Environmental Health, San Diego County  
**Malinda Hall**, California Environmental Protection Agency  
**Robert Harris**, Pacific Gas & Electric (PG&E)  
**James Kennedy**, Contra Costa County Redevelopment Agency  
**Edward Lowry**, Department of Toxic Substance Control  
**Joseph Lyou**, California League of Conservation Voters Education Fund  
**Cynthia McClain-Hill**, McClain-Hill Associates  
**Carol Monahan**, California Environmental Protection Agency  
**Romel Pascual**, California Environmental Protection Agency  
**Carlos Porras**, Communities for a Better Environment  
**Lynn Terry**, California Air Resources Board  
**Cindy Tuck**, California Council for Environmental and Economic Balance  
**Barry Wallerstein**, South Coast Air Quality Management District  
**Holly Welles**, Pacific Gas & Electric (PG&E)

#### **FLORIDA**

**Miles Ballogg**, City of Clearwater, Florida  
**Marybel Nicholson Choice**, Greenberg Traurig, P.A.  
**Josephus Eggleston, Jr.**, Broward County, District 9  
**Richard Gragg**, Florida A & M, Center for Environmental Equity and Justice  
**Richard Harvey**, U.S. Environmental Protection Agency Region 4, South Florida Office  
**Jerry Krenz**, South Florida Water Management District  
**Cynthia Laramore**, South Florida Action  
**Michael Owens**, Florida Department of Environmental Protection  
**Roger Register**, Florida Department of Environmental Protection  
**Larry Robinson**, Florida A & M, Environmental Sciences Institute  
**Jan Rogers**, U.S. Environmental Protection Agency, Region 4, South Florida Office  
**Suzi Ruhl**, Legal Environmental Assistance Foundation

#### **INDIANA**

**Barbara Goldblatt**, Indiana Department of Environmental Management  
**Diane Henshel**, School of Public and Environmental Affairs, Indiana University  
**Lori Kaplan**, Indiana Department of Environmental Management  
**Mary Mulligan**, City of Gary, Office of Environmental Affairs

**John Mundell**, Mundell and Associates  
**Tom Neltner**, Improving Kids' Environment  
**Pamela O'Rourke**, Indiana Department of Environmental Management  
**David Parry**, Indiana Department of Environmental Management  
**Felicia Robinson**, Indiana Department of Environmental Management  
**Keith Veal**, Indiana Department of Environmental Management

## **NEW JERSEY**

**Valorie Caffee**, New Jersey Work Environment Council, Environmental and Economic Justice Alliance  
**Marlen Dooley**, New Jersey Department of Environmental Protection  
**Pamela Lyons**, New Jersey Department of Environmental Protection  
**Frederick Martin, Jr.**, City of Camden, New Jersey  
**Donald McCloskey**, Public Service Enterprise, Inc.  
**Bonnie Sanders**, South Camden Citizens in Action  
**Olga Pomar**, Attorney representing Bonnie Sanders, South Camden Citizens in Action  
**Robert C. Shinn Jr.**, New Jersey Department of Environmental Protection  
**Rev. Al Steward**, Waterfront South Neighborhood Partnership  
**Gary Sondermeyer**, New Jersey Department of Environmental Protection

## APPENDIX B

### PANEL AND STAFF BIOGRAPHIES

#### PANEL

**Philip J. Rutledge**, *Chair* - Professor Emeritus, School of Public and Environmental Affairs and former Special Assistant to the President, Indiana University. Former Director, Department of Human Resources, District of Columbia; Professor of Public Administration, Howard University; Director of Policy Analysis, National League of Cities and U.S. Conference of Mayors; Deputy Administrator, Social and Rehabilitation Service, U.S. Department of Health, Education and Welfare; Deputy Manpower Administrator, U.S. Department of Labor.

**A. James Barnes** - Professor and former Dean, School of Public and Environmental Affairs, and Professor, School of Law, Indiana University. Former positions with the U.S. Environmental Protection Agency: Deputy Administrator; General Counsel; Special Assistant to Administrator/Chief of Staff. Former General Counsel, U.S. Department of Agriculture; Partner, Beveridge & Diamond; Campaign Manager, Governor William G. Milliken (Michigan); Assistant to Deputy Attorney General and Special Assistant/Trial Attorney, U.S. Department of Justice.

**Jonathan B. Howes** - Special Assistant to the Chancellor and Professor of Planning and Policy, University of North Carolina at Chapel Hill. Former Secretary, Department of Environment, Health and Natural Resources (DEHNR), State of North Carolina; Research Professor and Director, Center for Urban and Regional Planning, University of North Carolina; Mayor, Town of Chapel Hill; Director, Urban Policy Center, Urban America, Inc.; Director, State and Local Planning Assistance, U.S. Department of Housing and Urban Development.

**Valerie Lemmie** - City Manager, City of Dayton, Ohio. Former City Manager, City of Petersburg, Virginia; Director, Department of Environmental Services, City of Arlington, Virginia; Assistant Professor, Howard University. Former positions with the Washington, D.C. Government: Deputy Director, Department of Consumer/Regulatory Affairs; Assistant to the Director, Department of Consumer/Regulatory Affairs; Project Director, Minority Business Development Services, One America, Inc; Special Assistant, Office of Business and Economic Development; Financial Policy Analyst/Course Manager, Office of Comptroller, Labor Department (on assignment from Kansas City, Missouri).

**David Mora** - City Manager, Salinas, California. Former City Manager, Oxnard, California; Manager, Los Gatos, California. Increasingly responsible positions with Santa Barbara, California, including: Director, Community Relations; Assistant to City Administrator; Deputy City Administrator.

**James Murley** - Director, Joint Center for Environmental and Urban Problems, Florida Atlantic University. Former Secretary and Director, Division of Resource Planning and Management, Department of Community Affairs, State of Florida; Executive Director, 1000 Friends of Florida. Former positions with the National Oceanic and Atmospheric Administration, U.S. Department of Commerce: Director, Coastal Program Office, Office of Coastal Zone Management (OCZM); Congressional Officer; Gulf Coast Regional Manager, OCZM.

**Eddie Williams** - President, Joint Center for Political and Economic Studies. Fortner Vice President for Public Affairs and Director, Center for Policy Study, The University of Chicago; Foreign Service Reserve Officer, U.S. Department of State; Staff Assistant, U.S. Senate Committee on Foreign Relations.

## **STAFF**

**Suellen Terrill Keiner** - Director, Center for the Economy and the Environment, National Academy of Public Administration. Former Senior Attorney and Director, Program on Environment, Governance and Management, the Environmental Law Institute; Director of Litigation, the Environmental Policy Institute; Assistant Solicitor and Deputy Assistant Secretary for Energy and Minerals, U.S. Department of Interior; Natural Resources Consultant, Council of State Planning Agencies; Attorney representing environmental and civil rights groups in citizen suits.

**William P. Shields** - Director of Communications, Office of Communications, National Academy of Public Administration; Adjunct Professor in Government, American University. Former Program Coordinator and Research Assistant, American University; Mayoral Writer, Executive Office of the Mayor of Providence, Rhode Island.

**Frances Dubrowski** - Senior Consultant, Private attorney and Adjunct Faculty, University of Maryland School of Public Affairs. Former Chair of Environmental Justice Committee, American Bar Association; Co-chair, D.C. Coalition on Environmental Justice; Director of the Clean Air, Clean Water, Regulatory Reform Projects, Natural Resources Defense Council; Assistant Attorney General, Pennsylvania Department of Environmental Resources.

**Ann E. Goode** - Senior Consultant, Center for the Economy and Environment, National Academy of Public Administration; Environmental Protection Agency: Acting Deputy Administrator, Office of Air and Radiation; Director, Office of Civil Rights; Chief of Staff, Office of Air and Radiation; Assistant Director for Regional Affairs, Office of Atmospheric Programs. Special Assistant to the Director, U.S. Commission on Civil Rights; Staff Associate, National Research Council.

**LeRoy (Lee) Paddock** - Senior Consultant, Principal, Paddock Environmental Research and Consulting; Visiting Scholar, Environmental Law Institute. Former Director of Environmental Policy, Minnesota Attorney General's Office; Senior Environmental Counsel, National Association of Attorneys General; Assistant Attorney General, Minnesota Attorney General's Office.

**Mark Hertko** - Research Assistant, Center for the Economy and Environment, National Academy of Public Administration.

**Stacey Keaton** - Research Assistant, Center for the Economy and Environment, National Academy of Public Administration.

**Veronica L. Lenegan** - Research Assistant, Center for the Economy and Environment, National Academy of Public Administration.

**Charlene Walsh** - Administrative Assistant, Center for the Economy and Environment, National Academy of Public Administration.

**Megan Bonner** – Intern, Center for the Economy and Environment, National Academy of Public Administration.

**Anne Emory** – Intern, Center for the Economy and Environment, National Academy of Public Administration.

The Academy gratefully acknowledges additional legal research performed by Anna Chesser and Xiao Yan Yang from the University of Virginia School of Law.





## **APPENDIX C**

### **New Jersey Department of Environmental Protection Proposed Rule N.J. A.C. 7:1F**

#### **SUBCHAPTER 1. GENERAL PROVISIONS**

##### **7:1F-1.1 Scope and Applicability**

(a) This chapter establishes the components and requirements of the Department's expanded community participation process by which permit applicants and communities will consider potential Environmental Equity concerns prior to the issuance by the Department of a new, renewed or modified permit or approval.

(b) This chapter shall apply to applicants for new permits, permit renewals, and major modifications to existing permits for major facilities as defined at N.J.A.C. 7:1F-1.3.

(c) This chapter shall also apply to applicants for other Department issued permits or approvals where the permit applicant or a community requests that the Department initiate the Expanded Community Participation Process for Environmental Equity. These permits and approvals include those issued pursuant to the New Jersey Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq., and its implementing regulations at N.J.A.C. 7:14A; the New Jersey Air Pollution Control Act, N.J.S.A. 26:2C-1 et seq., and its implementing regulations at N.J.A.C. 7:27; the New Jersey Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq. and its implementing regulations at N.J.A.C. 7:26A, N.J.A.C. 7:26 and N.J.A.C. 7:26G; the New Jersey Pollution Prevention Act, N.J.S.A. 13:1D-35 et seq. and its implementing regulations at N.J.A.C. 7:1K.

(d) The requirements of this chapter apply in addition to applicable permit review and issuance requirements established under the statutes and rules identified in (c) above.

(e) As further outlined in 2.1 below, the Department will identify and require certain applicants to participate in the Expanded Community Participation Process for Environmental Equity at N.J.A.C. 7:1F-2. As further described in N.J.A.C. 7:1F-2.4 below, a community may petition the Department to request that an applicant complete the Expanded Community Participation Process for Environmental Equity at N.J.A.C. 7:1F-2.

##### **7:1F-1.2 Severability**

If any section, subsection, provision, clause or portion of this chapter is adjudged unconstitutional or invalid by a court of competent jurisdiction, the remainder of this chapter shall not be affected thereby.

### 7:1F-1.3 Definitions

The following words and terms, when used in this chapter, shall have the following meanings unless the context clearly indicates otherwise:

"Alternative Dispute Resolution" means an alternative to litigation where permit applicants, community representatives and local government representatives may negotiate, with the Department acting as mediator, to find provisions under applicable regulatory authorities that can be included in draft permits or approvals.

"Community" means one or more person(s) living in a geographic area of New Jersey that is likely to be impacted by the proposed project that is the subject of an application or approval to which this chapter applies.

"Department" means the Department of Environmental Protection.

"Environmental Equity" means the fair and equitable treatment in environmental decision-making of the citizens of all New Jersey communities regardless of race, color, income or national origin.

"Environmental Equity Advisory Council" means the New Jersey Department of Environmental Protection's Advisory Council on Environmental Equity established by New Jersey Department of Environmental Protection Commissioner's Administrative Order No. 1998-15, as supplemented by Administrative Order No. 2000-01.

"Environmental Equity certification form", "EE certification form", "DEP-EE01 or DEPEE02" means a form stating that a permit applicant has been informed by the Department of the Expanded Community Participation Process for Environmental Equity and a signature by a permit applicant indicating whether the applicant intends to complete the Expanded Community Participation Process for Environmental Equity.

"Environmental Equity Screening Model" means a computer program established by the Department that relates census data to environmental exposure data for individual geographic units of appropriate scale such as census tracts.

"Guide to Administering an Effective Environmental Equity Process" means a guidance document developed by the Department that is available to assist the regulated community in complying with outreach to a community pursuant to N.J.A.C. 7:1F-2.5. The Guide to Administering an Effective Environmental Equity Process is intended to provide information to permit applicants on issues such as how to identify community members for outreach activities, what kinds of outreach activities are appropriate for various types of projects, what methods of information exchange can be used, and what resources are available to community members to evaluate potential impacts from proposed projects.

"Impact Analysis" means an analysis of pollution sources for existing community health characteristics and the projected impact of the facility on the surrounding environment, including, but not limited to: air monitoring data such as ozone, air toxics, particulate matter, carbon monoxide, lead, nitrogen dioxide, sulfur dioxide, volatile organic compounds; releases to surface and ground water; existence of New Jersey Known Contaminated Sites; and other community-specific health or environmental data.

"Key Community Leaders" means a group of individuals identified by a permit applicant, in consultation with the Department, to participate in development and implementation of a Community Outreach and Involvement Plan. These individuals may represent, for example, local residents, local businesses, neighborhood associations, school representatives, religious groups, civic organizations, environmental organizations, other non-governmental organizations, health care providers, local government officials, officials responsible for emergency response, and labor unions.

"Major facility" means any facility regulated by the New Jersey Water Pollution Control Act, N.J.S.A. 58:10A-1 et. seq. and meeting the criteria for a major facility at N.J.A.C. 7:14A-1.2; any facility regulated by the New Jersey Air Pollution Control Act, N.J.S.A. 26:2C-1 et. seq. and meeting the criteria for a major facility at N.J.A.C. 7:27-22.1; any facility regulated by the New Jersey Solid Waste Management Act, N.J.S.A. 13:1E-1 et. seq. and meeting the criteria for a solid waste facility at N.J.A.C. 7:26-1.4; any facility regulated by the New Jersey Solid Waste Management Act, N.J.S.A. 13:1E-1 et. seq. and meeting the criteria for a recycling center that handles Class B, C, or D recyclable materials at N.J.A.C. 7:26A-1.3; any facility regulated by the New Jersey Solid Waste Management Act, N.J.S.A. 13:1E-1 et. seq. and meeting the criteria for a medical waste facility defined as both a commercial facility and a destination facility at N.J.A.C. 7:26- 3A.5; or any facility regulated by the New Jersey Solid Waste Management Act, N.J.S.A. 13:1E-1 et. seq. and meeting the criteria for a hazardous waste facility subject to permitting under N.J.A.C. 7:26G-1 and 40 CFR 270.1(c).

"Major modification" means any change in activity at an existing permitted facility regulated by the New Jersey Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq. that meets the criteria at N.J.A.C. 7:14A-16.4; any change in activity at an existing permitted facility regulated by the New Jersey Solid Waste Management Act, N.J.S.A. 13:1E-1 et. seq. that meets the criteria at N.J.A.C. 7:26-2.6(a)4i; any change in activity at an existing permitted facility regulated by the New Jersey Air Pollution Control Act, N.J.S.A. 26:2C-1 et. seq. that meets the criteria for a "significant modification" at N.J.A.C. 7:27- 22.24; or any change in activity at an existing permitted facility regulated by the New Jersey Solid Waste Management Act, N.J.S.A. 13:1E-1 et. seq. that meets the criteria for a hazardous waste Class 3 permit modification pursuant to 40 CFR 270.42.

"One Stop" means an administrative process of the Department whereby projects requiring permits or approvals from two or more media programs are coordinated by a team leader who helps the permit applicant identify all necessary Department permits, identifies which permits affect the timing and sequence of an applicant's project, and coordinates the activities of

various permitting programs to ensure a coordinated application and permit issuance procedure. "Threshold value" means the result of the Environmental Equity screening model that indicates whether a community may be disproportionately impacted when compared to a statewide average for a given racial or ethnic group. This result is equal to an increase in the deviation from a score of 1 in the Environmental Equity screening model.

## **SUBCHAPTER 2. REQUIREMENTS OF THE EXPANDED COMMUNITY PARTICIPATION PROCESS FOR ENVIRONMENTAL EQUITY**

### **7:1F 2.1 Pre-application Meeting**

(a) Applicants for a new permit, permit renewal, or major modification to existing permits for major facilities as defined at N.J.A.C. 7:1F-1.3 are required to participate in a pre-application meeting with the Department. Applicants shall make a request for such pre-application meeting to the Department as early in the application planning process as possible prior to submission of a permit application. Applicants for permit renewals shall request such pre-application meeting at least 6 months prior to expiration of the permit.

(b) An applicant for one or more permit(s) issued by a single regulatory program shall make a request to arrange a pre-application meeting directly to that regulatory program. An applicant for permits from two or more regulatory programs shall make a request for a pre-application meeting to the Office of Pollution Prevention and Permit Coordination so that the applicant may take advantage of the Department's One Stop process.

(c) For purposes of this chapter, the permit applicant shall provide the following to the Department at or before the pre-application meeting:

1. A description of the project including background information on the facility or project, including history, products, processes, number of employees, size of facility and hours of operation;
2. Project design and location information; and
3. An estimated schedule for the project.

(d) The Department will inform the applicant of the Expanded Community Participation Process for Environmental Equity as set forth in N.J.A.C. 7:1F-2 at the preapplication meeting. The Department shall also provide a copy of the Guide to Administering an Effective Environmental Equity Process.

### **7:1F-2.2 Department Screening Process For Permit Applicants**

(a) At or before the pre-application for a new permit, permit renewal, or major modification to existing permits for major facilities as defined at N.J.A.C. 7:1F-1.3, the Department shall conduct an environmental equity screening using the Environmental Equity Screening Model.

(b) The Department shall notify the applicant, in writing, of the results of the screening and provide the applicant with a certification form for signature pursuant to N.J.A.C. 7:1F-2.4. below.

(c) If the Department determines, based on the screening model, that the facility is located in an area where the threshold value has been exceeded, the applicant is required to complete the steps outlined in section 2.5-2.7 below.

(d) If the Department determines, based on the screening model, that the facility is located in an area where the threshold value has not been exceeded, the Department will encourage the permit applicant to follow the steps in section 2.5 - 2.7 below.

### **7:1F-2.3 Community Petitions for Expanded Community Participation Process for Environmental Equity**

(a) A community may petition the Department in writing to request that an applicant for any of the following permits or approvals complete the Expanded Community Participation Process for Environmental Equity: the New Jersey Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq., and its implementing regulations at N.J.A.C. 7:14A; the New Jersey Air Pollution Control Act, N.J.S.A. 26:2C-1 et seq., and its implementing regulations at N.J.A.C. 7:27; the New Jersey Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq. and its implementing regulations at N.J.A.C. 7:26A, N.J.A.C. 7:26 and N.J.A.C. 7:26G; or the New Jersey Pollution Prevention Act, N.J.S.A. 13:1D-35 et seq. and its implementing regulations at N.J.A.C. 7:1K. Such petition shall be submitted in writing to the Office of Equal Opportunity, Contract Assistance and Environmental Equity, New Jersey Department of Environmental Protection, P.O. Box 402, Trenton, New Jersey, 08625-0402.

(b) Upon receipt of a petition identified in (a) above, the Department shall determine whether the application is for a new permit, permit renewal, or major modification to existing permits for major facilities subject to the requirements of N.J.A.C. 7:1F-2.1 (a). The Department shall report the results of the Environmental Equity screening conducted in accordance with N.J.A.C. 7:1F-2.2 to the petitioner and the status of any ongoing outreach activities or the status of the permit.

(c) If the permit applicant is not subject to N.J.A.C. 7:1F-2.1(a), the Department shall determine the status of the application. The Department shall notify the applicant of the petition and inform the applicant of the Expanded Community Participation Process for Environmental Equity N.J.A.C. 7:1F. The Department shall also provide a copy of the Guide to Administering an Effective Environmental Equity Process.

(d) The Department shall conduct an environmental equity screening in accordance with N.J.A.C. 7:1F-2.2.

(e) The Department shall notify the applicant and the petitioner, in writing, of the results of the screening and provide the applicant with an Environmental Equity certification form for signature pursuant to N.J.A.C. 2.4 below.

1. If the Department determines, based on the model, that the facility is located in an area where the threshold value has been exceeded, Department shall notify the permit applicant, in writing, it is required to complete the steps in N.J.A.C. 7:1F-2.5 through 2.7.

2. If the Department determines, based on the model, that the facility is located in an area where the threshold value has not been exceeded, the Department shall notify the applicant in writing of the result, and shall encourage the applicant to complete the requirements of N.J.A.C. 7:1F-2.5 through 2.7.

(f) The applicant shall follow the steps of the certification process outlined at N.J.A.C. 7:1F-2.4 below.

(g) If the applicant fails to complete the certification process at N.J.A.C. 7:1F-2.4, the Department shall either:

1. Deem the application administratively incomplete and return the application; or

2. In instances where a petition is received following the Department's determination that a application is administratively complete, the Department shall not issue a final permit until and unless the applicant completes the certification process at N.J.A.C. 7:1F-2.4.

(h) Upon receipt of the signed certification, the Department shall notify the petitioner in writing of the applicant's decision whether to participate.

#### **7:1F-2.4 Applicant Acknowledgement/Certification of Decision**

(a) Pursuant to the application process at N.J.A.C. 7:1F-2.2(b) above or the petition process at N.J.A.C. 7:1F-2.3 (e) above, the Department shall provide the applicant with a DEP-EE01 or DEP-EE02 certification form by certified mail.

(b) All applicants are required to submit a completed EE certification form within 14 days of receiving the form from the Department. (c) Applicants who are required by the Department to conduct outreach pursuant to N.J.A.C. 7:1F-2.2(c) above or pursuant to the petition process at N.J.A.C. 7:1F-2.3(e) above, shall complete an EE01 certification form and certify that:

1. They were informed of the Expanded Community Participation Process for Environmental Equity at N.J.A.C. 7:1F-2 and;

2. They understand that their permit application will not be considered complete until the Department receives the EE01 certification form stating that the applicant agrees to begin the Expanded Community Participation Process at N.J.A.C. 7:1F-2.

(d) Applicants who are not required by the Department to conduct outreach pursuant to section 2.2(d) or pursuant to the petition process at 2.3(e) 2 , shall complete an EE02 certification form and state that:

1. They were informed of the Expanded Community Participation Process for Environmental Equity at N.J.A.C. 7:1F-2 and;

2. They elect or decline to participate in the Expanded Community Participation Process for Environmental Equity at N.J.A.C. 7:1F-2.

(e) All EE certification forms shall be signed by the highest ranking official in charge of operations in New Jersey.

(f) The Department will keep the EE certification form in its file as part of the public record for the permit application.

(g) Any applicant who participates in the Expanded Community Participation Process for Environmental Equity at N.J.A.C. 7:1F-2 must complete all of the steps outlined in N.J.A.C. 7:1F-2.5 through 2.7 in order to receive a Finding of Completion from the Department pursuant to N.J.A.C. 7:1F-2.8.

(h) An application for a new permit, permit renewal, or major modification to an existing permit for a major facility, or any other permit application for which the Department receives a petition pursuant to N.J.A.C. 7:1F-2.3 will not be considered administratively complete until a signed EE certification form is received by the Department.

(i) If an applicant who is required by the Department to conduct outreach pursuant to N.J.A.C. 7:1F-2.2(c), fails to complete an EE01 certification form or refuses to conduct the outreach process, the Department shall deem the application administratively incomplete and return the application.

## **2.5 Preparation of Community Outreach and Involvement Plan**

(a) A permit applicant who participates in the Expanded Community Participation Process for Environmental Equity shall prepare a Community Outreach and Involvement Plan.

(b) At a minimum, a Community Outreach and Involvement Plan shall include:

i. A Fact Sheet, including a brief description of the project including background information on the facility or project, including history, products, processes, number of employees, size of facility and hours of operation;

ii. An Outreach Strategy, including a brief description of who in a community will be impacted by the proposed project, what information will be provided to potentially impacted communities, and how the applicant intends to communicate with a community and resolve issues; and

iii. A critical path schedule, using the information submitted by the permit applicant in N.J.A.C. 7:1F-2.1 above. The schedule shall include an identification of the timing and sequence of permit applications and associated permit review timeframes, and a schedule with the initial meeting and additional outreach activities described in N.J.A.C. 7:1F-2.7.

#### **7:1F-2.6 Submittal of Community Outreach and Involvement Plan**

(a) Once a draft Community Outreach and Involvement Plan has been prepared, it shall be submitted to the Department. The Department shall make a determination as to whether the draft Community Outreach and Involvement Plan meets the minimum requirements specified at N.J.A.C. 7:1F-2.5.

(b) A permit applicant shall submit a copy of the draft Community Outreach and Involvement Plan to the Key Community Leaders identified by the permit applicant, in consultation with the Department.

#### **7:1F-2.7 Implementation of Community Outreach and Involvement Plan**

a) The Department shall lead an Initial Meeting with Key Community Leaders, the permit applicant, and local government representatives at the beginning of the permit application process. Representatives of local governments will be invited to participate with the Department to provide guidance as necessary about allowable activities pursuant to applicable laws and regulations. At the Initial Meeting, the permit applicant shall:

1. Describe the parameters of the proposed project;
2. Provide information to community members about how the proposed project will affect the health, environment and quality of life in the community;
3. Present the critical path schedule developed under N.J.A.C. 7:1F-2.5(b)iii; and
4. Take comment from attendees. Unless the applicant has provided a stenographer to take minutes of the meeting, any comments suggesting changes to the plan or permit shall be submitted by the attendee in writing within 5 business days of the meeting.

(b) Following the initial meeting, a permit applicant shall revise the Community Outreach Strategy and the critical path schedule, as appropriate, and based on comments received at the initial meeting, to include additional outreach activities with Key Community Leaders or other community representatives to attempt to reach consensus on any concerns related to facility



operations and impacts on the community and the environment. The Department shall participate in such additional outreach activities. A permit applicant shall submit the revised Community Outreach Strategy and revised critical path schedule to the Department and the key community leaders within 20 working days of the Initial Meeting.

(c) If a permit applicant conducts additional outreach activities described in (b) above, applicants should refer to the Guide to Administering an Effective Environmental Equity Process for additional information.

#### **7:1F-2.8 Incorporating areas of agreement into the permit or voluntary agreement**

(a) Each area of agreement related to facility operations will be incorporated into the applicant's draft or final permit or approval, as applicable. Such areas of agreement are limited to those that are enforceable under the applicable statutes and implementing rules.

(b) Areas of agreement between community members and the permit applicant that are not enforceable under applicable statutes and implementing rules may be included in an agreement between the parties that will be maintained in the Department's public records.

#### **7:1F-2.9 Alternative Dispute Resolution**

(a) If, at the conclusion of the outreach process, specific, identifiable issues remain in controversy, the permit applicant and the community may voluntarily avail themselves of the Department's Alternative Dispute Resolution process.

1. Requests for Alternate Dispute Resolution shall be made in writing and be directed to the Office of Dispute Resolution, P.O. Box 402, Trenton, N.J. 08625-0402. If the Department determines that the matter is suitable for mediation, it shall notify the permit applicant and community, and inform them of the procedures and schedule for mediation.

2. Any areas of agreement regarding enforceable permit conditions that result from the Alternative Dispute Resolution process shall be incorporated into the permit applicant's draft or final permit or approval.

#### **7:1F-2.10 Finding of Completion**

(a) An applicant may request a review by the Department of the process undertaken and the identifiable issues that remain in controversy at any time following completion of the requirements of N.J.A.C. 7:1F-2.5 through 2.7.

(b) If, based on its review, the Department determines that the permit applicant has made a good faith effort to comply with the requirements described in N.J.A.C. 7:1F-2.5 through 2.7, the applicant will be considered to have completed the Expanded Community Participation Process for Environmental Equity. The Department shall provide the applicant a Finding of Completion in writing and shall include a finding that an applicant has made a good faith effort to comply with the requirements of N.J.A.C. 7:1F-2.5 through 2.7 in the draft permit or

approval, permit renewal, major modification to and existing permit or final permit as applicable.

(c) If the Department determines that the applicant has not made a good faith effort to comply with the requirements of N.J.A.C. 7:1F-2.5 through 2.7, and the applicant is required to conduct the Expanded Community Participation Process pursuant to N.J.A.C. 7:1F-2.2(c) or 2.3, the Department will not issue a permit, renewal or major modification as applicable.

(d) If the Department determines that the applicant has not made a good faith effort to comply with the requirements of N.J.A.C. 7:1F-2.5 through 2.7, and the applicant is not required to conduct the Expanded Community Participation Process pursuant to N.J.A.C. 7:1F-2.2(d) or 2.3(e)(2), the Department will include a finding that the applicant did not complete the requirements of N.J.A.C. 7:1F- 2.5 through 2.7 in the draft permit or approval, permit renewal, major modification to and existing permit or final permit as applicable.

#### **7:1F-2.11 Requirement to Conduct Impact Analysis**

(a) If at the conclusion of the outreach process or at the conclusion of the Alternative Dispute Resolution process specific, relevant, identifiable issues remain in controversy and the facility is required to conduct outreach pursuant to section 2.2(c) above or pursuant to the petition process at 2.3(e)1 above, the Department shall require the facility to conduct an Impact Analysis. The specific content of the analysis will be defined on a case by case basis in a meeting with the Department and the applicant. The impact analysis shall include an analysis of pollution sources to determine existing community health characteristics and the projected impact of the facility on the surrounding environment, including, but not limited to: air monitoring data such as ozone, air toxics, particulate matter, carbon monoxide, lead, nitrogen dioxide, sulfur dioxide, volatile organic compounds; releases to surface and ground water; existence of New Jersey Known Contaminated Sites; and other community-specific health or environmental data. Upon completion of the Impact Analysis, the Department may, in its discretion, impose permit conditions consistent with applicable law.

#### **7:1F-2.12 Permit Review and Issuance**

(a) Any draft or final permit or approval into which the Department has incorporated the finding of the completion of the Expanded Community Participation Process for Environmental Equity pursuant to N.J.A.C. 7:1F-2.8 shall be subject to the applicable procedures for permit review and issuance under the New Jersey Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq., and its implementing regulations at N.J.A.C. 7:14A; the New Jersey Air Pollution Control Act, N.J.S.A. 26:2C-1 et seq., and its implementing regulations at N.J.A.C. 7:27; the New Jersey Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq. and its implementing regulations at N.J.A.C. 7:26A, N.J.A.C. 7:26 and N.J.A.C. 7:26G; or the New Jersey Pollution Prevention Act, N.J.S.A. 13:1D-35 et seq. and its implementing regulations at N.J.A.C. 7:1K.

(b) For permit applications where the Department has discretion in determining the need for a public meeting, the Department will consider an applicant's completion of the Expanded Community Participation Process for Environmental Equity in determining the need for a public hearing and in determining the length of time required for public comment on draft permit actions.



## APPENDIX D

### BASIS AND BACKGROUND

#### NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION ENVIRONMENTAL EQUITY SCREENING MODEL

February 4, 2002

### OVERVIEW

This document represents the technical basis and background for the New Jersey Department of Environmental Protection Environmental Equity Screening Model. This model relates census and exposure data so that a threshold value can be determined.

Among the uses of New Jersey's Environmental Equity modeling evaluation are screening permit applications and responding to petitions from communities regarding any permit covered by the scope of N.J.A.C. 7:1F-1 et. seq. These objectives are not well served by the previous technical work in this field. Most existing guidance and methodologies for addressing Environmental Equity concerns fall into one of two categories. The first is exemplified by the USEPA guidance (1) which provides a detailed analysis scheme developed after a case comes to the attention of a regulatory agency due to a complaint. The EPA approach provides many alternatives for the analytic strategy such as the use of ambient monitoring data, modeled exposures, known releases or stored pollutants. While the New Jersey approach is consistent with the EPA guidance, it was necessary to choose a particular path and select among the alternatives because of the need to develop a proactive screening. The second category, which is found in the technical literature, documents broad environmental equity trends with statistical analysis but no clear mechanism for a site-specific analysis (2,3,4,5).

New Jersey's goals require a system, which can accomplish both the site specific analysis and statewide coverage within one framework of analysis. This is due to the fact that many permit applications will be analyzed in the absence of a complaint ( i.e., DEP prefers to conduct an "upfront analysis" prior to permit issuance) and applications may appear for consideration at any location in the state at any time. Therefore, for a timely and consistent response to permitting applications the Department must make many of the choices which might, in a complaint driven system, be directed by community concerns. These choices include the geographic boundaries of the analytic subunits such as census tracts and the type and number of stressors to be considered. Stressors are defined as those factors that may adversely affect the population.

To satisfy these goals the Department has constructed a model which evaluates census data and exposure data from various stressors such as air pollutants and hazardous sites, which are summarized at the census tract level. These data are combined and analyzed so that a statewide ethnic specific ratio can be determined. A ratio of greater than 1 indicates the ethnic group (subpopulation) under consideration is receiving more than the statewide average effect

from the stressors and a ratio of less than 1 indicates less than the average statewide effect. A ratio of 1 means that the subpopulation has exactly the same exposure as the population as a whole. A ratio (score) of 1 will be used as the threshold value against which potential changes in exposure by race or ethnicity caused by new facilities will be evaluated.

The screening described in this procedure is based entirely on preexisting conditions of exposure and demographics. All databases used in the construction of this model are continually changing and will only be updated at intervals determined by the nature of the database. For example, the census data is updated every five years. Other databases may be updated yearly or quarterly.

## METHODS

### DATA QUALITY

In the U.S. EPA July 2000 "Draft Revised Guidance for Investigating Title VI Administrative Complaints Challenging Permits" (1) it is stated that data will be evaluated for sufficient "scope, completeness, and accuracy." These are desirable attributes of data in any context but particularly for an environmental equity analysis because of the very large number and variability of potential data sources. At its root an equity analysis involves a comparison of populations which differ by race and exposure and live in different places. For screening purposes, detailed data about a single location has little to no value because there is no possibility of comparison. Therefore the scope of the data is a very important limiting factor in an environmental equity analysis. Sufficient scope in the New Jersey context means that any data must be available for as wide and uniform a geographic coverage as possible throughout the State.

Data completeness implies that there are a sufficient number of entries for there to be a fair representation of information across race and ethnic categories. A few widely scattered data elements in the state would not be enough to capture any trend by race, location, and exposure. Data accuracy means that normal standard methods of collection and quality assurance have been applied to the data set. Also, accuracy requires that measurements or modeled estimates are sufficiently resolved so that if significant variations in a given parameter exist in different regions they will be detected.

### DATA TYPES

#### *Census*

The United States 1995 census update was used for the implementation of the current model because it is the most recent census data available. The model can be revised when new census data becomes available. The race and ethnicity categories are European, African, Latin, Asian, Native and Other Americans. Census data for model implementation was resolved at the census tract level. There were 1,937 census tracts in New Jersey in 1995.

## *Stressors*

New Jersey has chosen to initially evaluate four stressors because the data have sufficient scope, completeness, and accuracy. Three of them are descriptions of air pollution and one is a list of contaminated sites. The air pollution stressors may represent chemical exposure to the population while the proximity to contaminated sites may or may not result in increased exposures to chemicals. The exposure estimates from the air pollutants are in some cases the result of measurements from several locations in the state, and in one case (air toxics) is a modeled estimate based on point source emissions data. The contaminated site data are simply a count by census tract.

The four categories of data that comprise the exposure portion of the analysis are: the National Air Toxics Inventory (NTI), New Jersey ozone measurements, New Jersey 2.5 micrometer and below particulate matter in air measurements (PM 2.5), and the New Jersey Known Contaminated Sites List (KCSL). Each data set was analyzed with the equity screening model whereby the location and magnitude of the effect and census tract specific demographics were analyzed as the relevant variables.

The atmospheric dispersion of toxic chemicals from sources identified in the NTI were modeled with the U.S. EPA approved ISCST3 model (6). Concentrations of each chemical from each source were estimated at the center of each census tract. Each toxic chemical concentration result was used as input to a cumulative exposure and human health risk method using EPA protocols (7) in each of the 1,937 census tracts. The NTI data are updated every three years by the U.S. EPA's Emissions Factor and Inventory Group (EFIG) within the Office of Air Quality Planning and Standards (OAQPS).

Ozone measurements were examined at all 15 New Jersey stations and the number of days above the 8 hour standard determined. The number of days over the standard was used as the data element for the analysis. These data are collected by the NJDEP and are updated quarterly.

Analysis of impact from particulate matter below 2.5 micrometers was used from the year 2000 from measurements at 19 stations throughout New Jersey. These data are collected by the NJDEP and are updated quarterly.

The New Jersey KCSL up to the end of the year 2000 contained 7,053 entries. The spatial coordinates of each entry were identified as belonging to a census tract. The number of sites in each census tract was determined and was one of the bases of the threshold analysis. These data are collected by the NJDEP and are updated annually.

## DATA ANALYSIS

### *Equity*

The screening model has been developed based on modification of previous work by Susan Perlin, which was published in an article in the journal *Environmental Science and Technology* (8). The model functions by multiplying the population of each ethnicity in each census tract by the exposure in that census tract. This is repeated for each of the four exposure related databases (air toxics, ozone, PM2.5, and the KCSL list). For each database the products in all census tracts are added up to produce a sum of products for each ethnicity. The sum of the products is divided by the total number of people of that ethnicity in the state to produce a fraction. That ethnic specific fraction is divided by a similarly derived fraction based on the total population in each census tract to produce a population emission ratio for a particular subpopulation (PERs). The PERs is an expression of on average how much the specific ethnic group is exposed compared to the total population. If the PERs is above 1, it means that that group receives a greater than average exposure; if this value is below 1, it receives less than average exposure.

For example, to evaluate potential exposures by race, a weighted average for African Americans and non-African Americans can be calculated for all census tracts in the state. The weighted average for African Americans can be calculated by multiplying the amount of exposure in each tract by the number of African Americans in each tract, summing this product across census tracts and then dividing by the total number of African Americans. A weighted average can be calculated for the whole population the same way. Finally, the ratio of the weighted average for African Americans to the weighted average for the whole population can be calculated to find where the score falls in relation to the ratio of 1.

Equation (1) was derived from Perlin (8) and describes the mathematical relationship among the variables evaluated for the screening threshold determination.

$$PER_s = \frac{\sum R_s}{S} \div \frac{\sum R_w}{W}$$

Where:

PERs =	Population Emissions Ratio for sub-population s (ethnicity)
R =	rating
s =	number of people in sub-population in census tract
S =	number of people in sub-population in state
w =	number of people in census tract
W =	number of people in state



One PERs was determined for each of the 6 race or ethnicity census categories for each stressor. Each census category is considered a subpopulation. A PERs can be considered a score whereby 1 means that the subpopulation has exactly the same exposure as the population as a whole for whatever stressor is being considered. Each stressor is considered separately and any stressor with a score greater than 1 for any ethnicity undergoes further analysis to determine the threshold value.

The rating (R) term in the equation is different for each of the four stressors (PM 2.5 etc). Each stressor has an independently derived rating for each of the 1,937 census tracts. For example, for the KCSL the rating is the number of sites in a particular census tract. For air toxics, it is the risk from the combined effects of all the point sources included in the NTI data, which would affect a particular census tract. For ozone and PM2.5, it is the number of days there were exceedances of the air standard in the census tract where the measurements were taken.

The  $\frac{\sum R_s}{S}$  term means that for each census tract the risk, or whatever is the appropriate

summary for a particular stressor, is multiplied by the census tract specific sub-population count in that tract (i.e., number of Asian Americans). This product is added up for all the 1,937 census tracts. The sum of the products is divided by the total number of that sub-population (Asian Americans) in the state. This results in the weighted average risk for everyone of that sub-population in the state. The same procedure is carried out for the whole (W) population in the state regardless of race or ethnicity using the  $\frac{\sum R_w}{W}$  term in the

denominator. The equity equation divides the weighted sub-population rating by the weighted whole population rating to obtain the ratio or score.

### *Locational Sensitivity Analysis*

The PERs score is statewide and does not measure any actual or potential impacts from any individual local proposed permit activities. The purpose of the screening is to provide specific advice based on the location of a proposed new facility. Therefore, another analysis is necessary to assess the sensitivity of any location to environmental equity concerns through a simulation procedure.

The locational sensitivity analysis is accomplished by adding a percentage increase in rating to each census tract in turn and then recalculating the score. This can be seen with equation 1 as follows: the rating (R) is increased in only one census tract. The new R is multiplied by the subpopulation (s) and total population (w) counts for that census tract. A new score (PERs) is calculated. The original score is subtracted from the new score. The change in score is called the delta. The change in R for that census tract is returned back to its original value and the same procedure is carried out again with a different census tract.

That second census tract now also has its own delta. This procedure is repeated 1,937 times with the result that each of the 1,937 census tracts has its own delta. These deltas vary in magnitude and can be either positive or negative. If the delta is positive, it means that the change caused an increase in the score and if negative, a decrease in score. A positive delta would, therefore, raise impact concerns for the area, since the score would get further away from 1 in a positive direction. Any increase in an area of negative delta would decrease impact concern because the score would get further from 1 in a negative direction. The result of this process (calculating a delta) is an upfront determination of the effect of an increase in exposure to the local population for each census tract. It is a statewide simulation of the effect of adding emissions at any location before they happen so that any future proposal may be evaluated quickly and comprehensively.

#### *Threshold Value Determination*

There are four steps in the determination of the threshold value using the environmental equity screening model. The first step is to determine the statewide score for each ethnic group for each stressor. The second step is to find the deltas. The third step is to carry out a spatial analysis with results of the locational sensitivity analyses (deltas). The fourth step is to find the boundary of transition between positive and negative deltas. This boundary is the spatial interpretation of the threshold value.

The first step in the screening is to calculate an overall statewide score for each race or ethnicity for each stressor using equation 1 as described in the equity data analysis section. There are 6 census categories and 4 stressors, which result in 24 different scores (PERs). All of the 24 scores are either above or below 1.

The second step is only carried out for those ethnic/stressor combinations for which scores are above 1. Scores below 1 indicate that the weight of existing conditions is already favorable for environmental equity for that ethnic group/stressor combination.

In the third step, the individual deltas of different magnitude and sign (as have been determined in the locational sensitivity analysis simulation procedure for all the census tracts) are now used for a spatial analysis. The spatial analysis allows estimation (interpolation) between deltas of different magnitude. The larger positive deltas indicate a greater potential in those census tracts to an increase in impact than those census tracts with smaller positive deltas. All census tracts with negative deltas of any magnitude are at no risk of increased equity impact. The purpose of the spatial analysis is to interpolate between the census tract specific delta data so that the best estimate is made of potential impact areas. A procedure known as "inverse distance squared weighting" is used in the equity model. All the census tract deltas, both positive and negative, are analyzed. This analysis is repeated for each of the 24 possible scores found to be above 1. The spatial analysis produces boundaries which demarcate areas of identical potential impact through interpolation.

In the fourth step, the boundary of transition between positive and negative is found. This boundary will pass through census tracts as a result of the interpolation mechanism (inverse squared weighting). All those locations within the boundary on the positive side (areas with more overall impact) will be considered to have exceeded the threshold value.

## REFERENCES

1. U.S. Environmental Protection Agency. Draft Revised Guidance For Investigating Title VI Administrative Complaints Challenging Permits, July 2000.
2. A. Szasz and M. Meuser, "Unintended, Inexorable: The Production of Environmental Inequalities in Santa Clara County, California", *American Behavioral Scientist*, Vol. 43 No. 4 January 2000 602-632
3. R. Zimmerman, "Social Equity and Environmental Risk", *Risk Analysis*, Vol. 13 No. 6, 1993 649-666.
4. M. Greenberg and M. Cidon, "Broadening the Definition of Environmental Equity: A Framework for States and Local Governments", *Population Research and Policy Review*, Vol. 16 1997 397-413.
5. G. Mills and K. Niuhauser, "Quantitative Methods for Environmental Justice Assessment of Transportation", *Risk Analysis*, Vol. 20 No. 3 2000 377-384.
6. 40 CFR Ch. I Appendix W to Part 51 Guideline on Air Quality Models
7. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response. Human Health Risk Assessment Protocol for Hazardous Waste Combustion Facilities, July 1998.
8. S. Perlin, R. Setzer, J. Creason, and K. Sexton, "Distribution of Industrial Air Emissions by Income and Race in The United States: An Approach Using the Toxic Release Inventory", *Environ. Sci. Technol.*, Vol. 29 No. 1 1995 69-80.



## APPENDIX E

### CALIFORNIA ENVIRONMENTAL JUSTICE FORUMS 2002

Hosted by the Governor's Office of Planning & Research

Tuesday, January 20, 2002

1:00 p.m. — 7:00 p.m.

Salinas Community Center  
940 N. Main Street  
Salinas, CA

Tuesday, February 12, 2002

1:00 p.m. — 7:00 p.m.

Ronald Reagan Building  
300 South Spring Street  
Los Angeles, CA

Saturday, February 23, 2002

1:00 p.m. — 7:00 p.m.

Dunsmuir Community Center Building  
4841 Dunsmuir Avenue  
Dunsmuir, CA

Tuesday, February 26, 2002

1:00 p.m. — 7:00 p.m.

San Francisco Civic Center Complex  
455 Golden Gate Avenue  
San Francisco, CA

#### What is Environmental Justice?

According to California law, environmental justice (EJ) is the "the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws and policies."

#### Goals and Objectives of the Forums

- Create a network of EJ contacts at the community and local, state, and federal government levels
- Evaluate recent efforts to increase meaningful public involvement in governmental processes
- Hold a public hearing on EJ Guidelines for local general plans

**Public Hearing:** General Plan Environmental Justice Guidelines — begins 4:00 p.m. at each Forum Assembly Bill 1553 (Keeley, Chapter 762, Statutes of 2001) requires the Governor's Office of Planning and Research to prepare guidelines for addressing environmental justice matters in city and county general plans. As part of each EJ Forum, OPR will hold a public hearing to receive input prior to the preparation of the draft guidelines. There is no need for you to R.S.V.P. if you are only coming to the public hearing portion of the day, but please R.S.V.P. below for planning purposes, if you will be attending the other segments of the Forum. See attachment for more information.

**Discussion Panel:** There will be a panel at each Forum intended to engage everyone in a discussion regarding meaningful public involvement in governmental decision making. Panelists will include a range of experts on public participation who will provide their insights and evaluations of recent governmental agency public participation efforts.

**Networking and Information Sharing:** Organizations and agencies are encouraged to set up an informational booth regarding their EJ related activities. These booths are intended to educate others about your agency or organization and its role relating to EJ. There will be designated times during the forums for participants to visit the booths. If you are interested in having a booth, please fill out the appropriate portion of this form and return it no later than 2 weeks before the date of the forum you wish to attend.

Please R.S.V.P. by returning the attached form to:

Governor's Office of Planning & Research; C/O: Environmental Justice  
Forum; P.O. Box 3044, Room 200; Sacramento, CA 95812-3044

Or fax to:

(916) 323-2675

Questions? Please contact: Bonnie Chiu at (916) 323-9033 or [Bonnie.Chiu@opr.ca.gov](mailto:Bonnie.Chiu@opr.ca.gov)  
(Please do not R.S.V.P. by phone)

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Name \_\_\_\_\_ Organization/Agency \_\_\_\_\_

Address \_\_\_\_\_ City \_\_\_\_\_

Phone \_\_\_\_\_ Fax \_\_\_\_\_ E-mail \_\_\_\_\_

Location (please check all that apply) San Francisco \_ Salinas \_ Los Angeles \_ Dunsmuir \_

I am planning to attend panel/booths: Yes \_ No \_ Will your organization/agency need a booth? Yes \_ No \_

If you need special accommodations or translation, please contact Bonnie Chiu at (916) 323-9033 at least 10 working days prior to the Forum you wish to attend.



## **APPENDIX F**

### **POLICIES AND ACTIONS FOR ENVIRONMENTAL JUSTICE**

**Approved on December 13, 2001**

#### **AIR RESOURCES BOARD POLICIES AND ACTIONS FOR ENVIRONMENTAL JUSTICE**

##### **Introduction**

The California Air Resources Board (ARB/Board) is committed to making the achievement of environmental justice an integral part of its activities. State law defines environmental justice as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies.<sup>1</sup> The Board approved these Environmental Justice Policies and Actions (Policies) on December 13, 2001, to establish a framework for incorporating environmental justice into the ARB's programs consistent with the directives of State law. These Policies apply to all communities in California, but recognize that environmental justice issues have been raised more in the context of low-income and minority communities. A number of specific actions support each Policy.

While these Policies focus on ARB as an organization, they also reflect the need for the local air pollution control and air quality management districts (local air districts) and other local agencies to play their part. The local air districts are most directly responsible for the regulation of air pollution from businesses and industries in California. Local land-use agencies are directly responsible for the siting of new air pollution sources, and local air districts also play an important role by issuing permits for new sources of air pollution. We are committed to working as partners with these agencies to improve the available information that local agencies use to make planning and permitting decisions. We are also committed to continuing our aggressive program to control motor vehicle pollution, the principal source of air toxics and other emissions leading to the violation of clean air standards. By working together to improve siting and mitigation practices, and further controlling sources within ARB's jurisdiction, we can help address environmental justice issues at the community level throughout California.

Over the past twenty years, ARB, local air districts, and federal air pollution control programs have made substantial progress towards achieving federal and State air quality standards. These achievements have reduced the exposures of California's residents to air pollution. Remarkably, during this same period, the State population has increased almost 45 percent and the daily number of vehicle miles traveled in the State has increased almost 90 percent.

**REDUCTIONS IN AIR POLLUTANTS \***  
**1980 - 1999**

<b>Ozone</b>	<b>- 53%</b>
<b>Carbon Monoxide +</b>	<b>- 35%</b>
<b>Particulate Matter -</b>	<b>- 21%</b>

\* Ambient air quality standards exist for these air pollutants; statewide average, as measured by air monitoring stations.

+ State ambient air quality standard achieved in all but a portion of Los Angeles County and the City of Calexico.

- 1988 - 1999, non-desert areas.

Despite this progress, many areas in California still exceed health-based air quality standards for ozone and particulate matter. Air monitoring shows that over 90 percent of Californians breathe unhealthy levels of one or both of these air pollutants during some part of the year. Attaining the health-based standards for ozone and particulate matter is essential to protect the health of all Californians.

Statewide health risk from the most widespread toxic air pollutants has also been substantially reduced through the combined efforts of ARB and local air district actions. Nevertheless, there is a general consensus that the statewide health risk posed by toxic air pollutants remains too high. In addition, some communities experience higher exposures than others as a result of the cumulative impacts of air pollution from multiple mobile, commercial, industrial, and other sources.

The Board shall dedicate resources and work with local air districts to develop narrowly tailored remedies to reduce emissions, exposures, and health risks in communities. The ARB's Diesel Risk Reduction Program is our most important priority for reducing toxic air pollutants because particulate matter from diesel-fueled engines accounts for 70 percent of the known cancer risk in communities that is attributed to exposure to toxic air pollutants. This Program alone is designed to achieve a 75 percent reduction in the emissions and associated health risk by 2010. However, other control efforts will be necessary to address the health risks posed by toxic air pollutants. We will continue to prioritize our efforts to reduce cumulative emissions of toxic air pollutants by considering the public exposure to, and the health risk caused by, those toxic air pollutants.



Underlying these Policies is a recognition that we need to engage community members in a meaningful way as we carry out our activities. People should have the best possible information about the air they breathe and what is being done to reduce unhealthy air pollution in their communities. In particular, we will work to make information related to air pollution and community health more accessible to the residents of low-income and minority communities so that they can take a more active role in decisions affecting air pollution in their communities. We are also committed to working with local air districts to enhance existing complaint-resolution processes, and to listen to and, as appropriate, act upon community concerns.

**REDUCTIONS IN TOXIC  
AIR POLLUTANTS \***

**1990 - 1999**

<b>Lead +</b>	<b>- 95%</b>
<b>Benzene -</b>	<b>- 67%</b>
<b>Hexavalent Chromium</b>	<b>- 59%</b>
<b>Perchloroethylene</b>	<b>- 59%</b>
<b>1,3-Butadiene</b>	<b>- 45%</b>
<b>Diesel Particulate</b>	<b>- 40%</b>
<b>Methylene Chloride</b>	<b>- 39%</b>

\* Identified by the Board as cancer-causing toxic air contaminants; statewide average, as measured by air monitoring stations.

+ 1980 - 1999

These Policies are intended to promote the fair treatment of all Californians and cover the full spectrum of ARB activities. While our primary focus is meeting ambient air quality standards and reducing health risks from toxic air pollutants, efforts such as air monitoring and research are needed to better understand the connections between air pollution and health. Effective enforcement of air pollution control requirements in all communities is also critical to achieving environmental justice. Education and outreach complete the picture in terms of providing the opportunity for the full participation of all communities. Finally, we recognize our obligation to work closely with all stakeholders—communities, environmental and public health organizations, industry, business owners, other agencies, and all other interested parties—to successfully implement our Environmental Justice Policies.

**ARB Policies and Actions for Environmental Justice**

**I. It shall be the ARB's policy to integrate environmental justice into all of our programs, policies, and regulations.**

As an organization, we will make environmental justice considerations a standard practice in the way we do business. Our programs are comprehensive and include adopting regulations, funding clean air projects through incentive programs, and conducting air monitoring, emissions assessments, employee training, enforcement, research, public outreach, and education. In each program area, we will keep an environmental justice perspective as we set priorities, identify program gaps, and assess the benefits and adverse impacts of our programs, policies, and regulations.

Specific actions include the following:

- Add an explicit discussion of whether proposed major programs, policies, and regulations treat fairly people of all races, cultures, geographic areas, and income levels, especially low-income and minority communities.
- Work with local air districts and stakeholders to address, as appropriate, community concerns about air pollution emissions, exposures, and health risks, including enhanced public outreach.
- Work with stakeholders to review current ARB programs to address potential environmental justice implications and add new or modified elements consistent with these Policies where there are program gaps.
- Develop and incorporate an environmental justice program element into our employee-training curriculum.
- Annually provide a staff briefing to the Board at a public meeting regarding ongoing and planned activities. Issue a written annual status report identifying action items accomplished and a proposed work plan outlining the action items for the next year. The work plan shall include quantitative goals for emissions reductions and promote the use of pollution-prevention strategies by ARB to achieve those goals.
- Conduct special air-monitoring studies in communities where environmental justice or other air-quality concerns exist, with the goal of assessing public health risks. Compare that information to relevant regional data. Current studies include Oakland, Barrio Logan (San Diego), Boyle Heights, and Wilmington.
- Work with local air districts to develop guidelines for implementation of AB 1390 (Firebaugh, 2001.) (This new law provides that not less than 50 percent of the funds for certain mobile source programs, such as the Carl Moyer Air Quality Standards Attainment Program and programs for the purchase of reduced-emissions

school buses, are expended in communities with the most significant exposure to air contaminants, including, but not limited to, low-income and minority communities.)

**II. It shall be the ARB's policy to strengthen our outreach and education efforts in all communities, especially low-income and minority communities, so that all Californians can fully participate in our public processes and share in the air quality benefits of our programs.**

We want to enhance the participation of the public in State and local decisionmaking processes. To accomplish this, we will solicit input from communities, develop additional information on air quality in communities, make this information more accessible, and educate communities on the public process used to make State and local decisions. In partnership with local air districts, we will provide communities, including low-income and minority communities, the opportunity to participate in the decision-making processes.

Specific actions include the following:

- Hold meetings in communities affected by our programs, policies, and regulations at times and in places that encourage public participation, such as evenings and weekends at centrally located community meeting rooms, libraries, and schools.
- Assess the need for and provide translation services at public meetings.
- Hold community meetings to update residents on the results of any special air monitoring programs conducted in their neighborhood.
- In coordination with local air districts, make staff available to attend meetings of community organizations and neighborhood groups to listen to and, where appropriate, act upon community concerns.
- Establish within the Chairman's Office of Community Health a specific contact person for environmental justice issues.
- Increase public awareness of ARB's actions in protecting public health through the K-12 education system and through outreach opportunities at the community level.
- Make air-quality and regulatory information available to communities in an easily understood and useful format, including fact sheets, mailings, brochures, and web pages, in English and other languages
- Distribute fact sheets in English, and other languages, regarding the Children's Environmental Health Program, the Community Health Program, and our Environmental Justice Policies.

- Develop and maintain a web site dedicated to community health that includes information on children's health issues, neighborhood air monitoring results, pollution prevention, risk reduction, and environmental justice activities.
- Develop and maintain a web site that provides access to the best available information about sources of air pollution in neighborhoods. Include on the web-site ongoing activities to improve the quality of the information, and note the limitations and uncertainties associated with that information.
- Allow, encourage, and promote community access to the best available information in our databases on air quality, emission inventory, and other information archives.
- Distribute information in multiple languages, as needed, on how to contact the Chairman's Office of Community Health and our Public Information Office to obtain information and assistance regarding the Board's EJ programs, including how to participate in public processes.
- Create and distribute a simple, easy-to-read, and understandable public participation handbook.
- Consistent with State statutes, minimize, reduce, and where practicable, eliminate fees for public information and enhance access to that information, and encourage local air districts to do the same.

**III. It shall be the ARB's policy to work with local air districts to meet health based air quality standards and reduce health risks from toxic air pollutants in all communities, especially low-income and minority communities, through the adoption of control measures and the promotion of pollution prevention programs.**

Preventing and reducing air pollution is the Board's highest priority. In doing so, we are committed to achieving environmental justice. The public health framework of our efforts to reduce air pollution is the attainment of State and federal ambient air quality standards and reduction of health risks from toxic air pollutants. The framework includes a variety of measures that must be adopted at the local, State, and federal level. As part of these efforts, we must focus on both the regional and neighborhood levels.

In reducing statewide emissions of toxic air pollutants, we will prioritize our efforts by focusing on those pollutants contributing the majority of the exposure and public health risk, including those pollutants identified by the Office of Environmental Health Hazard Assessment under the Children's Environmental Health Protection Program as potentially causing infants and children to be more susceptible to illness. In the

prioritization process, we will consider ARB and local air district air quality assessments and other available data.

Specific actions include the following:

- Develop the ARB Clean Air Plan to assist in the achievement of federal and State ambient air quality standards and to reduce health risks posed by toxic air pollutants.
- Prioritize toxic air pollutant control efforts, including the ARB Diesel Risk Reduction Program, by targeting measures that provide immediate and achievable air-quality benefits, such as emissions reductions from transit buses, refuse trucks, and tanker trucks.
- Develop control measures for other mobile sources of diesel particulate matter.
- Work with local air districts to develop control measures to reduce diesel particulate matter from stationary, portable, and marine diesel engines.
- Review, revise, and develop, as appropriate, modeling tools and control measures for sources of toxic air pollutants that may present significant near-source risks to residents and are common to communities across the State, including consideration of proximity. For example, ARB is reviewing the control measure to reduce hexavalent chromium from plating facilities and evaluating additional perchloroethylene emission reduction opportunities from dry-cleaning facilities.
- Review existing and evaluate new or revised control measures for toxic air pollutants identified by the Office of Environmental Health Hazard Assessment (OEHHA) under the Children's Environmental Health Protection Program as potentially causing infants and children to be more susceptible to illness. These toxic air pollutants include lead, acrolein, diesel particulate matter, polycyclic organic matter, and dioxins.
- Develop new control measures that will reduce exposure to toxic air pollutants across the State. This analysis will include the consideration of proximity of sources to sensitive populations. Currently under development is an air toxics control measure (ATCM) for formaldehyde from composite wood products. These products are often used in portable buildings and manufactured housing and are of concern due to public exposure and health impacts to children.
- As part of our pollution-prevention efforts, promote and encourage the deployment of zero- and near-zero emissions technologies in communities, especially low-income and minority communities. These technologies include alternate power units for trucks and ZEVs [zero emissions vehicles].

- Work with the local air districts to implement incentive programs in communities, especially low-income and minority communities, with the most significant exposure to air pollution, consistent with AB 1390 (Firebaugh).
- Work with local air districts to establish a pilot pollution-prevention outreach program for auto body refinishers to minimize emissions from spray applications.
- Conduct special ambient dioxins monitoring and stationary sourcetesting study in California.
- Work with the Bureau of Automotive Repair to conduct additional low income vehicle repair and assistance programs and promote the Smog Check Consumer Assistance Program in low-income and minority communities.

**IV. It shall be the ARB's policy to work with the local air districts in our respective regulatory jurisdictions to strengthen enforcement activities at the community level across the State.**

The ARB will work with local air districts to improve statewide compliance with all applicable air quality requirements for air pollution sources, whether under ARB or local air district jurisdiction. We want to assure that all complaints are promptly investigated and feedback is provided to the public on actions taken in response to those complaints. We will review our own enforcement activities and redirect efforts where we can achieve a more direct community benefit and will incorporate an environmental justice element into our enforcement training curriculum.

Specific actions include the following:

- In coordination with local air districts and considering input from stakeholders, prioritize field inspection audits to address statewide categories of facilities that may have significant localized impacts and make those audit reports easily accessible to the public.
- Conduct roadside inspections of heavy-duty diesel vehicles in all regions of the State, especially in low-income and minority communities.
- Develop and incorporate an environmental-justice awareness element into our enforcement-training curriculum to promote fair enforcement for all communities.
- Support local air district efforts to ensure that when there is facility noncompliance, the air-pollution-reduction projects or mitigation fees imposed in lieu of penalties will benefit the air quality of the impacted communities.

- Work with the local air districts to develop enhanced complaint resolution processes for addressing environmental justice issues, including procedures that ARB staff will follow when complaints are made to the ARB.
- Work with the local air districts to improve accessibility of information regarding enforcement activities and actions, including notices of violations, monetary penalties, and other settlements of those violations.
- Assist local air districts on specific issues of community concern.

**V. It shall be the ARB's policy to assess, consider, and reduce cumulative emissions, exposures, and health risks when developing and implementing our programs.**

While health risks occur from exposures to cumulative emissions from all sources, motor vehicles are the single, largest contributor on a statewide basis. Current ARB air-quality programs—diesel risk reduction, ozone attainment, particulate matter attainment, zero- or low-emission motor vehicles, air toxics control measures, and consumer products—all help to improve the air quality and reduce cumulative health risks statewide. Nevertheless, current State and federal air quality standards are still exceeded in many areas of California, and there is a general consensus that the statewide health risk posed by toxic air pollutants remains too high. In addition, some communities experience higher exposures than others as a result of the cumulative impacts of air pollution from multiple sources—cars, trucks, trains, ships, off-road equipment, industrial and commercial facilities, paints, household products, and others. We will continue to work with local air districts to reduce emissions as needed to achieve and maintain State and federal air quality standards. For air toxics, we will continue to assess emissions and the associated public exposure and health risk. We will look for new opportunities to reduce cumulative health risk in all communities and to achieve emissions reductions where such reductions are shown to benefit public health, consistent with existing statutory authorities.

We must improve our ability to understand the cumulative public health impacts of air pollution by better assessing emissions, exposures, and health risks within communities. The Office of Environmental Health Hazard Assessment will help us define the health risks for potentially significant toxic air pollutants, and we will reduce emissions where such emissions reductions are shown to benefit public health. We will provide this information publicly in an easily understood way. As many of these activities are dependent upon data available at the local level, we will work very closely with the local air districts to prioritize and focus resources on those activities that will provide the greatest public health benefit.

Specific actions include the following:

- Publicly release and place on the ARB web-site maps showing estimated cancer health risks on a regional basis, using the best available scientific methodologies and noting the limitations and uncertainty associated with the data and methodologies.
- Develop and place on the ARB web-site local and regional maps showing air pollution emissions sources using the ARB emission inventory database.
- Develop technical tools for performing assessments of cumulative emissions, exposure, and health risk on a neighborhood scale and provide maps showing the results at the neighborhood level. Such tools will be validated and peer-reviewed prior to use as a regulatory tool.
- Conduct field studies to support the air quality modeling efforts in communities throughout the State, including low-income and minority communities. Current studies underway include Barrio Logan in San Diego County and Wilmington in Los Angeles County.
- Update mapping data on an ongoing basis.
- Identify necessary ARB risk reduction and research priorities based on the results of the neighborhood assessments and other information.

**VI. It shall be the ARB's policy to work with local land-use agencies, transportation agencies, and air districts to develop ways to assess, consider, and reduce cumulative emissions, exposures, and health risks from air pollution through general plans, permitting, and other local actions.**

We recognize that local agencies have a primary role in decisions affecting land use, community health, and welfare. Local land-use agencies and transportation agencies are directly responsible for the planning and siting of new air pollution sources, and local air districts also play an important role by issuing permits for new industrial sources of air pollution. As such, we are committed to working as partners with these agencies and other stakeholders to develop the technical tools and guidance necessary to consider the cumulative impacts of local sources of air pollution. The technical tools and guidance are intended to assist the local agencies in their planning and permitting actions, including the consideration of siting alternatives and air pollution mitigation measures, and shall be peer reviewed and technically valid.

We will develop these technical tools and guidance to address, as appropriate, cumulative emissions, exposures, and health risks from sources of air pollution. We will follow ARB's existing science-based approach of evaluating public health impacts. This approach will ensure that issues are addressed from a broad, programmatic



perspective and provide certainty to local agencies, the business community, and the public that decisions regarding cumulative impacts are addressed fairly and consistently. Once the technical tools and guidance are jointly developed and peer-reviewed, we will work with local agencies to best incorporate them into their existing permitting and land-use processes.

Specific actions include the following:

- Conduct joint programs with local air districts, land-use agencies (i.e., cities and counties), school districts, transportation agencies, and other stakeholders to understand local issues and develop ways to incorporate cumulative-impacts analyses into local air district and land use agency processes.
- Provide education and outreach to local agencies on the use of the technical tools and guidance in land-use decisions.
- Work with the local air districts to provide technical guidance to local agencies on measures that could be used to reduce or eliminate air quality impacts for specific types of sources.
- Work with the local air districts and others to maintain and compile a list of possible mitigation measures to reduce air pollution impacts for specific types of projects and the siting of sensitive receptors (e.g., schools).
- Work with Cal/EPA and the Office of Planning and Research to address environmental justice matters in city and county general plans, as required by AB 1553 (Keeley, 2001).

**VII. It shall be the ARB's policy to support research and data collection needed to reduce cumulative emissions, exposure, and health risks, as appropriate, in all communities, especially low-income and minority communities.**

The ARB's health research program continues to advance our ability to identify and understand air pollution's health effects. California's communities have a diversity of sensitive populations, and the health research program is increasing our understanding of the health effects of air pollution on those populations, including children, asthmatics, those with heart and lung disease, elderly, and other groups that may have a special sensitivity to air pollution. However, more research is needed to better characterize the variety of potential air pollution exposures within specific communities and people's health status as it relates to air pollution.

Specific actions include the following:

- Investigate non-cancer health effects associated with acute, peak pollutant episodes and long-term, low-level exposures that may trigger increases in the incidence of respiratory problems and neurological, developmental, and reproductive disorders.
- Characterize near-source dispersion patterns for toxic air pollutants, from selected point sources, area sources, and roadways.
- Develop better methods to monitor community exposures through controlled scientific studies. To support this effort, develop continuous monitoring systems and miniaturized monitoring technologies.
- Identify biomarkers for air pollutants and assess individual exposures within specific communities.
- Develop geographic-based information systems for assessing health based information within communities, and correlating that information to air pollution and socioeconomic factors.
- Conduct periodic surveys to establish a baseline and to measure progress in reducing air pollution-related health concerns, with initial emphasis in low-income and minority communities.
- Refine models to estimate cumulative emissions, exposures, and health risks at the neighborhood level, compare those risks to the risk at the regional level, and have those models peer-reviewed.

## CONCLUSION

The ARB is committed to integrating environmental justice into all of its programs, policies, and regulations. We will continue to improve our outreach efforts in all California communities, ensuring that everyone has an opportunity to participate fully in the development and implementation of those programs, policies and regulations. As an oversight agency and partner with local air districts, and as an advisory agency to land-use agencies, we will work with these and other stakeholders to jointly develop the technical tools and guidance necessary to consider the cumulative air pollution impacts of local sources of air pollution. We will participate in the Cal/EPA Environmental Justice Working Group as environmental justice policies are developed for the entire agency. Even while this work is being done, we are taking steps today to reduce exposure and health risks in communities. Our goal is to ensure that all Californians, especially children and the elderly, can live, work, learn, and play in a healthful environment.

## ENDNOTE

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<sup>1</sup> Senate Bill 115, Solis, 1999; California Government Code § 65040.12<sup>o</sup>.



## APPENDIX G

### ENVIRONMENTAL JUSTICE TASK FORCE - CALIFORNIA ENVIRONMENTAL JUSTICE COMPACT

**Whereas**, human health and quality of life are dependent upon a healthful environment; and

**Whereas**, no individual or community should bear a disproportionate burden of environmental pollution; and

**Whereas**, all people are entitled to clean air, land, water and food; to uncontaminated neighborhoods and work places; and to public open space and recreation; and

**Whereas**, all people regardless of income, race or ethnicity are entitled to a clean, healthful environment; and

**Whereas**, all individuals, businesses, communities and levels of government must collaborate, communicate and cooperate on environmental issues of mutual concern; and the environmental agenda must reflect the priorities of all communities in the region including the priorities of low-income communities, communities of color and indigenous peoples; and

**Whereas**, the education, nurturing and development of youth must be a central concern in the formulation of sustainable policies into the future; and

**Whereas**, it is imperative to have a strong economy, a healthful environment and a just society; environmental values and protection of public health must be an integral part of economic and social policy; and

**Whereas**, individuals, communities, businesses and government must be accountable for the environmental consequences of their policies and practices; and

**Whereas**, a healthful environment encompasses clean air, clean water and clean land, and problems cannot be shifted from one environmental medium to another; and

**Whereas**, all individuals and communities must be equal partners in the development and implementation of public policy and public decision-making on issues affecting them, including environmental needs assessment, planning, implementation, enforcement and evaluation; and

**Whereas**, information and resources must be made available to neighborhoods and communities to evaluate projects and policies that affect them; and

June 3, 1999

**Whereas**, policy-making bodies, such as boards, commissions and councils, should fairly represent the demographic diversity of the region as well as afford community groups the same status and treatment as business or government entities who have matters before that body; and

**Whereas**, all workers are entitled to a safe and healthful work environment, free of significant environmental hazards or unlawful risks, without being forced to choose between an unsafe workplace and unemployment; and

**Whereas**, employees have a right to know about environmental dangers from the workplace; and

**Whereas**, by adopting principles of environmental justice it is affirmed that actions and policies must be based on mutual respect and justice for all; and

**Whereas**, Environmental Justice policies and programs must be founded on sound science; and

**Whereas**, pollution prevention must be a priority; and

**Whereas**, environmental justice is a cornerstone for a sustainable urban environment for current and future generations.

**Therefore**, we the *(name of organization)* agree to include environmental equity and justice as a policy of our organization.

Approved this \_\_\_\_ day of \_\_\_\_ year.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Title

Available at <<http://www.aqmd.gov/hb/990824a.html>>

June 3, 1999

## APPENDIX H

### MEMORANDUM

TO: All Cal/EPA Employees  
FROM: Winston H. Hickox  
Agency Secretary

DATE: March 29, 2002  
SUBJECT: CAL/EPA'S COMMITMENT TO ENVIRONMENTAL JUSTICE

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California has long been a pioneer in taking initiative to reduce environmental and public health risks posed by air and water pollution, solid and hazardous waste management, and pesticide application. In this tradition, our Golden State stands as one of the nation's leaders on the issue of environmental justice, being one of the first states in the Nation to have passed legislation to codify environmental justice in state statute; in fact, Governor Davis signed six bills related to environmental justice since 1999.

**Cal/EPA is firmly committed to the achievement of environmental justice.**

Environmental justice for all Californians is an Agency priority.

Accordingly, we must continue to seek opportunities to implement environmental justice principles, **especially those with a concerted, cross-media approach** to ensure the integration of environmental justice into all programs, policies, and activities within our Boards, Departments, and Office (BDOs).

Our environmental justice mission reflects the Agency's commitment to this issue:

*"To accord the highest respect and value to every individual and community, the Cal/EPA and its BDOs shall conduct our public health and environmental protection programs, policies and activities in a manner that is designed to promote equality and afford fair treatment, full access and full protection to all Californians, including low income and minority populations."*

As I've stated before, "Protecting human health and the environment is a job that is never done" and indeed, the opportunities for analysis and action for environmental justice in California are varied and great. The Goal of our mission will be attained when all Californians, regardless of race, culture, or income, enjoy the same degree of protection from environmental and health hazards and equal access to our decision making processes.

Environmental justice is defined in statute as, "The fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and

enforcement of environmental laws, regulations and policies." (Government Code Section 65040.12)

Statute obligates the Agency and its BDOs to do the following:

- Conduct all programs, policies, and activities within Cal/EPA and its BDOs in a manner that ensures the fair treatment of people of all races, cultures, and income levels, including minority populations and low-income populations of the State;
- Promote enforcement of all health and environmental statutes within its jurisdiction in a manner that ensures the fair treatment of all Californians, irrespective of race, culture, and income;
- Ensure greater public participation from environmental justice stakeholders in the development, adoption, and implementation of environmental regulations and policies;
- Improve research and data collection for programs relating to the health and environment of people of all races, cultures, and income levels, including minority populations and low-income populations of the State.
- Identify among people of different socioeconomic classifications differential patterns of consumption of natural resources for our programs.

Clearly, there is no one simple solution to environment injustice, but rather a host of existing procedural and programmatic tools available to address the issue. In order to achieve meaningful environmental justice, we should, as a procedural and practical matter:

- Enhance our mechanisms for public involvement and input at all levels of the decision-making process to ensure early, accessible and meaningful participation of all stakeholders (e.g. fact sheets, availability of language translation, and enhanced public outreach);
- Invest in capacity development of all stake holders, particularly those historically not engaged in the decision making process (e.g. technical assistance at the community level and leveraging of resources to support local environmental justice efforts);
- Explore opportunities to address environmental justice within current statutory and regulatory structures and identify any necessary changes or clarifications;
- Create partnerships with stakeholders in the environmental decision-making process, understanding that environmental justice requires a collaborative approach at all levels;
- Utilize research and proactive tools and approaches to environmental justice issues, such as cumulative impact analysis and pollution prevention to inform how we prioritize, develop, and implement our efforts to reduce and/or eliminate environmental pollution and deliver the benefits of environmental protection; and



- In light of our State's current economic situation, we must be more vigilant in ensuring environmental justice remains a priority and resources continue to be directed this key issue.

I have asked each of the Boards, Departments, and Office to incorporate environmental justice into their overall strategic plans. This has been accomplished and now we need to move forward in earnest to implement those plans. To assist in our efforts, there are a number of resources I recommend you become familiar with and take advantage of as follows:

- **The Interagency Working Group on Environmental Justice (IWG):** I chair this group along with the Governor's Office of Planning and Research Director, including all the heads of the Boards, Departments, and Office within Cal/EPA. IWG is responsible for guiding programmatic and policy development related to environmental justice;
- **The External Cal/EPA Advisory Committee on Environmental Justice:** This Committee is made up of various EJ stakeholders from community groups, environmental organizations, business, local/regional planning agencies, air districts, and Certified Unified Program Agencies to provide advice and consultation on environmental justice to Cal/EPA;
- **The Cal/EPA Environmental Justice Website**  
([www.calepa.ca.gov/EnvJustice/](http://www.calepa.ca.gov/EnvJustice/)): The website contains the most current information on environmental justice concerns including a Calendar of Events on environmental justice occurring throughout the State.
- **Cal/EPA Environmental Justice Fundamentals Training Program**  
(<http://epanet/EnvJustice/training>): The training is offered at various times throughout the year to bring greater awareness of environmental justice issues within Cal/EPA.

Let's continue to work in this spirit to ensure environmental justice is not a series of paper exercises, but is a tangible goal attained for and by all Californians. The Assistant Secretary for Environmental Justice, Romel Pascual, and his staff are available to assist you.

I appreciate your continued support in this matter.



## BIBLIOGRAPHY

- Ballogg, Miles. City of Clearwater, Brownfields Coordinator. Interview, April 11, 2002.
- Brandt, Renee. City of Los Angeles, Air Quality Division, Environmental Supervisor. Interview, March 5, 2002.
- Brown, Dr. C Perry. Florida A & M University. Interview, March 7, 2002.
- Byrd, Vanessa. California Environmental Protection Agency, Department of Toxic Substances Control, Education and Outreach Unit, Chief. Interview, February 15, 2002.
- Caffee, Valorie. New Jersey Work Environment Council, Environmental and Economic Justice Alliance, Director of Organizing. Interview, January 8, 2002.
- California Air Resources Board. *Neighborhood Assessment Work Plan*. June, 2000. Available at [www.arb.ca.gov/ch/napworkplan.htm](http://www.arb.ca.gov/ch/napworkplan.htm).
- California Air Resources Board. *Policies and Actions for Environmental Justice*. December 13, 2001. Available at [www.arb.ca.gov](http://www.arb.ca.gov).
- California Environmental Protection Agency. *Accomplishments and Priorities*. January thru June, 2001.
- California Environmental Protection Agency, Department of Toxic Substances Control. *Public Participation Manual*. October, 2001. Available at [www.dtsc.ca.gov/lawsregulationspolicies/index.html](http://www.dtsc.ca.gov/lawsregulationspolicies/index.html).
- California Environmental Protection Agency. *Memorandum: Environmental Justice Mission Statement and Program Elements*. Undated.
- California Environmental Protection Agency. *Strategic Vision*. July 2000.
- California Environmental Protection Agency. *The History of the California Environmental Protection Agency*. Available at [www.calepa.ca.gov/about/historyo1/calepa.htm](http://www.calepa.ca.gov/about/historyo1/calepa.htm).
- City of Clearwater Brownfields Program. *City of Clearwater Brownfields Area Environmental Justice Action Agenda*. September 7, 2000.

- Cole, Luke. Center for Race, Poverty and the Environment, Director. Interview, February 13, 2002.
- Communities for a Better Environment. *Holding Our Breathe: Environmental Injustice Exposed in Southeast Los Angeles*. July 1998.
- Dooley, Marlen. New Jersey Department of Environmental Protection, General Counsel. Interview, January 7, 2002.
- Dorsey, Michael. Department of Environmental Health, San Diego County, Chief. Interview, February 14, 2002.
- Eggelletion, Jr., Josephus. Broward County, District 9, Commissioner. Interview, March 12, 2002.
- Environmental Health Coalition. *Communities at Risk*. April 1993.
- Environmental Law Institute. *Opportunities For Advancing Environmental Justice: An Analysis of U.S. EPA Statutory Authority*. November 2001.
- Executive Order 12898. *Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations*. 1994.
- Florida A&M University Environmental Sciences Institute, Center for Environmental Equity and Justice. Homepage available at <http://www.famu.edu/acad/colleges/>.
- Florida Department of Environmental Protection. *Florida Brownfields Redevelopment Act 2001 Annual Report*. January 31, 2002.
- Florida Environmental Equity and Justice Commission Final Report*.
- Goldblatt, Barbara. Indiana Department of Environmental Management, Environmental Justice Program, Program Facilitator. Interview, February 4, 2002.
- Gragg, Richard. Florida A & M, Center for Environmental Equity and Justice, Director. Interview, March 7, 2002.
- Hall, Malinda. California Environmental Protection Agency, Office of the Secretary, Policy and Intergovernmental Relations. Interview, February 15, 2002.
- Harvey, Richard. U.S. Environmental Protection Agency Region 4, South Florida Office, Director. Interview, March 11, 2002.

- Harris, Robert. Pacific Gas and Electric (PG&E), Vice President of Environmental Affairs. Interview, February 14, 2002.
- Indiana Department of Environmental Management. *Clean Air Bulletin*. Volume 3, Issue 1, August 2000.
- Indiana Department of Environmental Management. *Compliance/Enforcement Planning Process*.
- Indiana Department of Environmental Management. *Draft Facilitation Protocol (outline) for Resolution of Environmental Justice Disputes*.
- Indiana Department of Environmental Management. *Draft Operating Procedures for Enhanced Public Participation*.
- Indiana Department of Environmental Management. *Environmental Performance Partnership Agreement: A Strategic Partnership between U.S. EPA Region V and the Indiana Department of Environmental Management*. 2001-2003.
- Indiana Department of Environmental Management. *Getting Involved in Environmental Decision Making: Highlights from IDEM's Guide for Citizen Participation*. Undated. Available at [www.in.gov/idem/guides/publicparticipation](http://www.in.gov/idem/guides/publicparticipation).
- Indiana Department of Environmental Management. *IDEM's Guide for Citizen Participation: How to Make Your Voice Heard on Community Environmental Issues*. 2001. Available at [www.in.gov/idem/guides/publicparticipation](http://www.in.gov/idem/guides/publicparticipation).
- Indianapolis Urban League Environmental Coalition. *Race, Income and Toxic Air Releases in Indianapolis, Indiana*. May 2000.
- International City County Managers Association. *Righting the Wrong: A Model Plan for Environmental Justice in Brownfields Redevelopment*. 2001.
- Kaplan, Lori. Indiana Department of Environmental Management, Commissioner. Interview, April 9, 2002.
- Kennedy, James. Contra Costa County Redevelopment Agency, Redevelopment Director. Interview, February 13, 2002.
- Krenz, Jerry. South Florida Water Management District. Interview, March 11, 2002.
- Laramore, Cynthia. South Florida Action, Executive Director. Interview, April 1, 2002.

- Lowry, Edwin F. Environmental Protection Agency, California Department of Toxic Substances Control, Executive Office, Director. Interview, February 11, 2002.
- Lyons, Pamela. New Jersey Department of Environmental Protection, Equal Opportunity, Contract Assistance and Environmental Equity, Director. Interview, January 7, 2002.
- Lyou, Joseph. California League of Conservation Voters Education Fund, Director of Programs. Interview, March 4, 2002.
- Martin, Jr., Frederick. City of Camden, Division of Planning, Director. Interview, January 8, 2002.
- Marxen, Jim. California Environmental Protection Agency, Department of Toxic Substances Control, Public Participation, Chief. Interview, February 15, 2002.
- McClain-Hill, Cynthia. McClain-Hill Associates, Attorney. Interview, March 5, 2002.
- McCloskey, Donald. Public Service Enterprise, Inc. Interview, April 3, 2002.
- Monahan, Carol. California Environmental Protection Agency, Office of the Secretary, Law Enforcement and Counsel. Interview, February 15, 2002.
- Mulligan, Mary. Indiana Department of Environmental Management, Interim Advisory Committee on Environmental Justice, Member. Interview, March 27, 2002.
- Mundell, John. Mundell and Associates, President. Interview, March 27, 2002.
- National Academy of Public Administration. *environment.gov: Transferring Environmental Protection for the 21<sup>st</sup> Century*. November 2000.
- National Academy of Public Administration. *Environmental Justice in EPA Permitting: Reducing Pollution in High-Risk Communities is Integral to the Agency's Mission*. December 2001.
- National Academy of Public Administration. *Setting Priorities, Getting Results: A New Direction for EPA*. 1995.
- National Advisory Council on Environmental Policy and Technology. *Next Steps for EPA, State and Local Environmental Justice Programs*. March 1, 1999.
- Neltner, Tom. Improving Kids' Environment, Executive Director. Interview, April 2,

2002.

New Jersey Department of Environmental Protection. *Administrative Order No. 1998-15*. October 22, 1998.

New Jersey Department of Environmental Protection. *Administrative Order No. 1999-05*. April 27, 1999.

New Jersey Department of Environmental Protection. *Administrative Order No. 2001-01*. February 8, 2000.

Nicholson Choice, Marybel. Greenberg Traurig, P.A., Shareholder. Interview, April 1, 2002.

O'Rourke, Pamela. Indiana Department of Environmental Management, Senior Environmental Manager. Interview, February 4, 2002.

Owens, Michael. Florida Department of Environmental Protection, Deputy Ombudsman. Interview, March 11, 2002.

Pacific Gas & Electric Company. *Environmental Justice Procedure*. September 2001.

Parry, David. Indiana Department of Environmental Management, Environmental Permit Coordinator. Interview, February 4, 2002.

Pascual, Romel. California Environmental Protection Agency, Environmental Justice Program, Assistant Secretary. Interview, February 12, 2002.

Perlin, Susan A., et al. "Distribution of Industrial Air Emissions by Income and Race in the United States: An Approach Using the Toxic Release Inventory," *Environmental Science and Technology*, Vo. 29, no. 1, 1995.

Peter, Ellen. "Implementing Environmental Justice: The New Agenda for California State Agencies," *Golden Gate University Law Review*, 2000.

Pomar, Olga. Camden Regional Legal Services, Attorney. Interview, March 14, 2002.

Porras, Carlos. Communities for a Better Environment, Executive Director. Interview, March 4, 2002.

Register, Roger. Florida Department of Environmental Protection, Brownfields Liaison. Interview, March 8, 2002.

- Robinson, Felicia. Indiana Department of Environmental Management, Legal Affairs, Deputy Commissioner. Interview, March 4, 2002.
- Robinson, Larry. Florida A & M, Environmental Sciences Institute, Director. Interview, March 7, 2002.
- Rogers, Jan. U.S. Environmental Protection Agency Region 4, South Florida Office, Waste Programs Coordinator. Interview, March 11, 2002.
- Ruhl, Suzi. Legal Environmental Assistance Foundation, President. Interview, March 8, 2002.
- Sanders, Bonnie. South Camden Citizens in Action, President. Interview, March 15, 2002.
- Shinn, Robert C. New Jersey Department of Environmental Protection, Commissioner. Interview, January 7, 2002.
- Sondermeyer, Gary. New Jersey Department of Environmental Protection, Chief of Staff. Interview, January 7, 2002.
- Sparrow, Malcolm K. *The Regulatory Craft: Controlling Risks, Solving Problems, and Managing Compliance*. Brookings Institute Press, 2000.
- Steward, Rev. Al. Waterfront South Neighborhood Partnership, Executive Director. Interview, January 8, 2002.
- South Coast Air Quality Management District. *An Air Toxics Control Plan for the Next Ten Years*. March 2000. Available at [www.aqmd.gov/aqmp/atcp.html](http://www.aqmd.gov/aqmp/atcp.html).
- South Coast Air Quality Management District. *Eight Strategic Alliance Initiatives*. February 1, 2002. Available at [www.aqmd.gov/news1/strategic\\_alliance\\_initatives.htm](http://www.aqmd.gov/news1/strategic_alliance_initatives.htm).
- South Coast Air Quality Management District. *Environmental Justice Task Force Final Report*. August 13, 1999. Available at <http://www.aqmd.gov/hb/990824a.html>.
- South Coast Air Quality Management District. *Multiple Air Toxics Exposure Study*. Undated. Available at [www.aqmd.ca.gov](http://www.aqmd.ca.gov).
- Terry, Lynn. California Environmental Protection Agency, Air Resources Board,



Executive Office, Deputy Executive Officer. Interview, February 11, 2002.

Tuck, Cindy. California Council for Environmental and Economic Balance (CCEEB), General Counsel. Interview, February 15, 2002.

U.S. Army Corps of Engineers, and the South Florida Water Management District. *Comprehensive Everglades Restoration Plan: Environmental and Economic Equity Program Management Plan*. August 2001.

U.S. Army Corps of Engineers, and the South Florida Water Management District. *Public Outreach Program Management Plan*. August 2001.

U.S. Environmental Protection Agency, Region V. *Agenda for Action*. 1996.

Veal, Keith. Indiana Department of Environmental Management, Environmental Justice Director. Interview, February 4, 2002.

Wallerstein, Barry R. South Coast Air Quality Management District, Operating Executive. Interview, March 26, 2002.

Welles, Holly. Pacific Gas and Electric (PG&E), Environmental Policy Specialist. Interview, February 14, 2002.

