Poisoned by Poverty: A Call to Improve Health Outcomes for Low-Income and Minority Children

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This special issue of CLEARINGHOUSE REVIEW grew out of a recent series of workshops on environmental health and environmental justice that the three of us organized for legal services housing attorneys.[1] The workshops were intended to challenge housing attorneys to view their work differently and perhaps more expansively; to look beyond maintaining a roof over their clients' heads and undertake advocacy to ensure that the dwellings and communities where legal services' clients live, play, and work are healthy environments.

In this REVIEW we hope to engage the broader antipoverty community to examine how to improve children's health outcomes as part of their routine delivery of legal services to the poor. This call to rethink advocacy efforts is not limited to housing law but extends to all areas of legal services practice including public benefits, education, juvenile, health, and community advocacy. The following articles profile examples of both individual service work and impact work on Children's Environmental Health and Environmental Justice matters. Readers can learn the terminology and relevant issues and how these disciplines relate to traditional areas of legal services practice. Most important, we hope to inspire readers to undertake focused advocacy efforts to improve health outcomes for low-income and minority children.

I. "Children's Environmental Health" and "Environmental Justice" Defined

The field of children's environmental health has been recognized at least since 1775 when a London physician documented the link between cancer and exposure to coal tar in young

[1]The workshops were part of the 2004 national meeting of the Housing Justice Network. Conference materials are available at: www.nhlp.org/lalshac/hjn2004_conference_materials.htm (some materials are password-protected).

chimney sweeps.[2] Today children face health risks from exposure to poisonous or unhealthful substances in their homes, schools, and communities. We now know that children generally are more susceptible than adults to harm from such environmental exposure.[3] In recent years children's environmental health—focused on protecting children from hazardous substances and insuring a healthy environment for them—has become a more distinct medical and public health discipline. It is also becoming a domain for grassroots activism and legal advocacy.

Hazardous substances are both organic and inorganic. Mold spores and cockroach antigens are examples of organic hazardous substances. Inorganic ones include lead and other heavy metals, toxic chemicals found in cleaning products, pesticides, and building materials, and air pollution from outdoor sources such as automobiles and industrial facilities, and indoor sources such as radon, carbon monoxide, and second-hand smoke. When exposed to hazardous substances children are put at risk of developing learning disabilities and loss of intelligence, chronic and acute respiratory diseases, cancers, illnesses caused by damage to the nervous system, and even death.[4]

The field of environmental justice (EJ) has become a distinct discipline in environmental law and policy only within the past twenty to twenty-five years. On the eve of Earth Day in 1987 the United Church of Christ's Commission for Racial Justice published a landmark report, *Toxic Wastes and Race*, which documented that race and ethnicity were the most significant factors in siting decisions involving waste facilities, landfills, and other environmentally hazardous facilities.[5] The U.S. Environmental Protection Agency (EPA) defines "environmental justice" as "the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies."[6] The international environmental justice movement is organized around a set of principles that generally call for an end to corporate and government policies responsible for "environmental racism."[7] Many environmental justice principles have been enacted into law at the federal, state, and local level through legislation and regulations and executive orders.[8]

While environmental justice does not concern itself with children exclusively and children's environmental health deals with some health problems that result in either minimal or no race and income disparities, advocates in both fields and their issues overlap significantly. For example, low-income children and children of color are most likely to be affected by environmentally induced diseases such as lead poisoning and asthma. Children from low-income families are eight times as likely to be lead-poisoned as those from higher-

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[2] C. Gerber et al., *Penis Carcinoma in a Young Chimney Sweep: Case Report 200 Years Following the Description of the First Occupational Disease*, 125 Schweizerische Medizinische Wochenschrift 1201–5 (1995).

[3] Cynthia F. Bearer, *How Are Children Different from Adults?* 103 (supp. 6) Environmental Health Perspectives 7–12 (1995).

[4] Thomas Matte & David Jacobs, *Housing and Health: Current Issues and Implications for Research and Programs*, 77 Journal of Urban Health 7, 11–16 (2000).

[5] Commission for Racial Justice, United Church of Christ, Toxic Wastes and Race In The United States: A National Report on the Racial and Socioeconomic Characteristics of Communities with Hazardous Waste Sites (Public Data Access Inc. 1987).

[6] The definition, a statement of policy, appears at www.epa.gov/compliance/environmentaljustice/index.html

[7] "Principles of Environmental Justice," a seventeen-point manifesto adopted on October 27, 1991, at the First People of Color Environmental Leadership Summit held in Washington, D.C., is the most widely recognized statement of environmental justice principles. This document is available at www.weact.org/ej_principles.html. For a discussion of environmental racism, see *infra* II.

[8] The American Bar Association and Hastings College of Law released a survey of environmental justice laws and policies covering all fifty states. See Environmental Justice for All: A Fifty-State Survey of Legislation, Policies and Initiatives (Steven Bonorris et al. eds., 2004), available at www.abanet.org/irr/committees/environmental/statestudy.pdf.

income families, and African American children are at five times the risk of whites to be lead-poisoned.[9] Also, African American children are about three times as likely both to be hospitalized for and to die from asthma as white children.[10] Thus advocates in both fields increasingly work together on health, policy, and legal advocacy to reduce risks of exposure now and permanently control environmental risks for future generations.

II. The Science and Effects of Toxic Exposure

Children are often more heavily exposed than adults to environmental toxicants. They consume more food and water and have higher inhalation rates per pound of body weight than adults. Young children play close to the ground and come into contact with contaminated soil outdoors and with contaminated dust on surfaces and carpets indoors. Moreover, exposure to chemicals in breast milk affects infants and young children.[11] In terms of risk, children may also be more vulnerable to environmental pollutants because of differences in absorption, excretion, and metabolism. The cellular immaturity of children and the ongoing growth process account for this elevated risk.[12]

To protect children from the harmful effects of chemical and toxic exposure, advocates must learn to identify the "exposure pathways" by which children come into contact with toxic substances. Exposure pathways refer to how persons come into contact with a hazardous substance, whether it is a chemical, biological, or some other harmful substance.[13] For example, children inhale mold spores and cockroach antigens (both known to trigger asthma attacks) in homes and schools where water leaks and other chronic moisture problems persist. These same children may ingest harmful levels of lead-contaminated dust from normal hand-to-mouth behavior if they live in older housing with deteriorated lead-based paint. They breathe diesel fuel particles while on school playgrounds adjacent to idling buses. They absorb pesticide residues through the skin when playing in areas treated with pesticides. Indoor exposure is especially significant because children spend about 90 percent of their time indoors, mostly at home or at day care or school, and levels of many hazards are often an order of magnitude higher indoors.[14] This is not to minimize the health impact of outdoor exposure. A recent study, for example, suggests that outdoor air pollution alters the chromosomal code in fetuses whose mothers themselves do not smoke.[15] This results in heightened disease risk of, inter alia, asthma, the leading cause of emergency room visits and school absences for children.[16]

The types of exposure pathways described above illustrate the toxic exposure that occurs with greater frequency and severity in communities of color and low-income communities; this in turn causes residents of these communities to become "overburdened" with environmental pollution. The term "overburdened" is closely related to the concept of "disparate impact" found

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[9]Centers for Disease Control and Prevention, *Update on Blood Lead Levels—United States, 1991–1994,* 46 Morbidity and Mortality Weekly Report 141–46 (1997) (published erratum appears in *id.* at 607).

[10]Marsha Lillie-Blanton et al, Key Facts: Race, Ethnicity, and Medical Care: Update, June 2003 (Kaiser Family Foundation 2003).

[11]U.S. Environmental Protection Agency, No. EPA/600/P-00-002B, Child-Specific Exposure Factors Handbook (Interim Report) (2002), available at http://cfpub.epa.gov/ncea.

[12]*Id.* at 1-1; see also Bruce P. Lanphear et al., *Prevention of Lead Toxicity in U.S. Children*, 3 Ambulatory Pediatrics 27–36 (2003).

[13]U.S. Environmental Protection Agency, Emergency Response Program, Exposure Pathways (2004), available at www.epa.gov/superfund/programs/er/hazsubs/pathways.htm.

[14]Lance A. Wallace, U.S. Environmental Protection Agency, No. EPA/600/6-87/002a, The Total Exposure Assessment Methodology (TEAM) Study: Summary and Analysis: Volume I (1987).

[15]Associated Press, *Pollution Is Linked to Fetal Harm*, New York Times, Feb. 16, 2005 (Health Section).

[16]Centers for Disease Control and Prevention, *Surveillance for Asthma—United States, 1980–1999*, 51 Morbidity and Mortality Weekly Report, March 29, 2002, at 1.

in antidiscrimination laws.[17] But here the "disparate impact" is not caused by an action or policy per se. Instead the disparate impact results from the health effects caused by exposure to toxic substances that are more commonly found in communities of color and low income, as opposed to more affluent white communities. Evidence of how "overburdened" particular communities of color and low-income communities can become is gleaned from public health data such as asthma rates, lead-poisoning rates, low birth-weight rates, and rates of malnutrition broken down by race, ethnicity, and income; such evidence is gleaned also by mapping the location of sources of pollution within those communities.[18]

The term "environmental racism" refers to decisions by government and private actors that result in greater exposure to toxic substances in communities of color, and environmental justice extends that term to low-income communities. However, environmental racism and environmental justice also extend to actions that deprive communities of color and low-income communities from equal access to health-improving opportunities such as safe recreational space, both outdoors and indoors, where increased physical activity can help prevent health problems, such as obesity and diabetes, experienced disproportionately in low-income communities and communities of color.

III. The Law

Legal work on children's environmental health and environmental justice issues involves multiple sources of federal and state law since these issues often cross over many discrete areas of the law. This is particularly so for children's environmental health issues because they may implicate state and local housing codes, laws regarding lead paint and indoor air quality, zoning and planning laws, and facility siting laws. Two key pieces of legislation, the National Environmental Policy Act and the Civil Rights Act of 1964, lie at the heart of most legal work involving children's environmental health and environmental justice issues.

The National Environmental Policy Act and state environmental review acts (known as "little NEPAs") were among the first environmental laws enacted.[19] The Act requires federal agencies to take a "hard look" at the environmental impact of major federal actions that have a significant effect on the environment even after a proposal receives initial approval.[20] Typically the federal agency must complete either an environmental assessment or a detailed statement (called an "environmental impact statement") that discusses the effect of a proposed project on the environment and alternatives to the proposed project. However, the Act is "essentially procedural" and imposes no requirement that the alternative with the least environmental harm be chosen.[21] Nonetheless, the Act's process does provide for a forum for advocates to raise concerns about environmental consequences that particularly affect children or residents of low-income communities or both and to submit testimony or written comments on environmental assessments or environmental impact statements.

Much children's environmental health and environmental justice work implicates Title VI of the Civil Rights Act of 1964.[22] Section 601 of Title VI bars recipients of federal

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[17] See *infra* III.

[18] Links to websites that perform environmental mapping or give information about local pollution sources are found at the end of this article.

[19] National Environmental Policy Act, 42 U.S.C.S. §§ 4321 *et seq.* (2005). Fifteen states have adopted laws modeled on the Act: California, Connecticut, Georgia, Hawaii, Indiana, Maryland, Minnesota, Montana, New Jersey, New York, North Carolina, South Dakota, Virginia, Washington, and Wisconsin. *Panel Discussion: The Historical Development of SEQRA*, 65 Albany Law Review 323, 356, n.49 (2001).

[20] *Marsh v. Oregon Natural Resources Council*, 490 U.S. 360, 374 (U.S. 1989).

[21] *Strycker's Bay Neighborhood Council v. Karlen*, 444 U.S. 223, 227 (U.S. 1980).

[22] Title VI of the Civil Rights Act of 1964, 42 U.S.C.S. §§ 2000d *et seq.* (2005).

funds from discriminating against any person on the basis of race, color, or national origin in the administration of the recipients' programs or activities.[23] Title VI's ban against discrimination does not apply merely to activities that are federally funded but to all of the recipient's activities.[24] A claimant under Section 601 of Title VI must prove that the recipient intended to discriminate on the basis of race, color, or national origin.[25]

Section 602 of Title VI authorized federal agencies to promulgate regulations to implement Section 601.[26] Typically those regulations incorporate a disparate impact standard, whereby a claimant need only show that the complained-of action by the claimant had a discriminatory impact on the basis of race, color, or national origin. For example, the EPA's Title VI regulations proscribe federal-fund-recipient actions that have either the intent or effect of subjecting persons to discrimination on the basis of race, color, national origin, or sex.[27] While the EPA's Title VI regulations provide a legal basis for environmental justice challenges to governmental action, those regulations may not be enforced in court by way of a private right of action under Title VI.[28] Lower courts are divided on whether regulations promulgated under Section 602 of Title VI may be enforced against state and local governments under 42 U.S.C. 1983.[29] Private parties may still file, with the EPA's Office of Civil Rights, administrative complaints alleging violations of the EPA's Title VI regulations against recipients of federal funds.[30] Moreover, advocates may file administrative complaints at the state environmental agency level since recipients with more than fifteen employees are required to have grievance procedures that assure the prompt and fair resolution of complaints alleging violations of Title VI.[31]

IV. Integration of New Disciplines into Traditional Legal Services

Legal issues related to children's environmental health and environmental justice cut across many traditional legal services practice areas; but, because those issues do not fall neatly into a single traditional category, they have not become part of everyday legal services work. For example, a family with a lead-poisoned child may have a leaking roof (causing deterioration of lead-based paint), need a Medicaid referral for a developmental assessment, be threatened with school suspension for unruly behavior, and face welfare sanctions when the family misses a food stamp eligibility interview due to a conflicting health clinic appointment. While field offices customarily address these discrete, routine problems that stem from the lead poisoning—housing conditions, access to health care, education rights, and rights to public benefits—the most crucial legal issues, such as ensuring the proper identification and subsequent

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[23] 42 U.S.C.S. § 2000d (2005).

[24] *Cureton v. National Collegiate Athletic Association*, 198 F.3d 107, 115 (3d Cir. 1999) ("[when] Congress passed the Civil Rights Restoration Act of 1987 … [it] thereby modified Title VI so that it encompasses programs or activities of a recipient of Federal financial assistance on an institution-wide basis").

[25] *Alexander v. Sandoval,* 532 U.S. 275 (2001) (Clearinghouse No. 51,706).

[26] 42 U.S.C.S. § 2000d-1 (2005).

[27] 40 C.F.R. §7.35 (b)–(c) (2005)

[28] *Sandoval,* 532 U.S. at 275.

[29] Compare *South Camden Citizens in Action v. New Jersey Department of Environmental Protection*, 274 F.3d 771, 788 (3d Cir. 2001) (the disparate impact regulations of the U.S. Environmental Protection Agency (EPA) cannot create a federal right enforceable through Section 1983), with *Lucero v. Detroit Public Schools*, 160 F. Supp. 2d 767, 784–85 (D. Mich. 2001) (intended beneficiaries—including African American and Hispanic plaintiffs—of regulations promulgated under Title VI may enforce the EPA's disparate impact regulations Section 1983). See also Jane Perkins, *Using Section 1983 to Enforce Federal Laws*, 38 Clearinghouse Review 720 (March–April 2005).

[30] 40 C.F.R. § 7.120 (2005).

[31] *Id.* § 7.90 (2005).

safe control of lead hazards in the home, often go unaddressed.

At first glance, integrating children's environmental health and environmental justice work into a field office's work plan may appear difficult because the work requires mastery of new technical, scientific and medical knowledge. However, many legal aid programs already do work that can be replicated and applied in these new disciplines. Legal aid lawyers may take for granted the amount of specialized knowledge they draw upon daily for, say, Supplemental Security Income hearings or a veteran's benefits appeal. Obtaining subject-matter expertise is simply part of the legal aid attorney's job. Expert testimony also may be required, although, again, this is common in other traditional legal aid cases. As with the use of experts in traditional work, the best experts may be willing to collaborate with a legal services office at low or no cost.

Reclassifying work already done by the field program but performed under different names and by multiple teams is often necessary to incorporate children's environmental health and environmental justice work successfully into the day-to-day delivery of legal services. One promising service delivery model involves collaborative efforts between health care providers and providers of legal services, where patients' health problems are treated as both medical and legal problems. For example, Boston Medical Center created the Family Advocacy Program as a legal aid office located in the hospital.[32] The program's casework might involve representation of young patients with asthma or lead poisoning in landlord-tenant disputes to obtain repairs that better control residential health hazards or to ensure the needed relocation of families in emergency situations. The program also undertakes systemic reform projects such as advocating broad-scale policy changes within the Boston code enforcement agency and local housing authorities.

Another approach to delivering legal services on children's environmental health issues involves creating a specialized unit or program within the legal services office. In North Carolina the statewide legal services program established the Environmental Poverty Law Clinic to provide low-income communities and residents of North Carolina with the necessary tools to ensure a safe and healthy environment in their communities, on the job, and in their homes.[33] Staffed by two full time attorneys, the clinic provides direct representation on environmental issues to low-income individuals, conducts education and outreach activities across the state, and connects low-income individuals and communities with private pro bono attorneys. The work of the clinic involves safe drinking water, toxic waste, lead poisoning, indoor air quality, and the siting of landfills and other environmental nuisances.

Individual advocates can advance children's environmental health in numerous ways. Advocates in either unrestricted programs or restricted programs where advocates are invited by government or elected officials can help develop new state and local legislation, and testify or submit comments in favor of legislation and regulations that are protective of children's environmental health.[34] Where environmental justice laws and policies have already been enacted at the state level, legal aid advocates can work to enforce those laws by using litigation and nonlitigation strategies.[35] Advocates may also form research partnerships with

[32]More information on the Family Advocacy Program can be found at www.bmc.org/pediatrics/special/fap/.

[33]Additional information on the Environmental Poverty Law Clinic and its activities is available (using Internet Explorer only) at www.legalaidnc.org/eplp/default.asp.

[34]E.g., recently laws to reduce dangers from lead paint were enacted in New York City, Cleveland, Rhode Island, Indiana, California, and Ohio, and a law that sets standards for mold remediation was enacted in Texas.

[35]For state environmental justice laws and policies, see *supra* note 8. See, e.g., *Hartford Park Tenants Association v. Rhode Island Department of Environmental. Management,* No. C.A. 99-3748 (R.I. Super. Ct. filed Aug. 1999) (Clearinghouse No. 52,717) (challenge to state environmental agency's decision to permit construction of two public school buildings on top of the former Providence City Dump under, inter alia, Rhode Island's "environmental equity" law, R.I. GEN. LAWS § 23-19.14-5 (2005)).

community groups and members of the scientific community to identify environmental causes of child health problems, document their impact and health disparities in low-income and minority communities, and use these findings to press for legal redress. Such partnerships are known as "community-based participatory research" projects where members of the "researched community" are themselves trained by the researchers and then paid (again, by the researchers) to play roles ranging from assisting in the study design to data collection.[36]

V. Appropriate Remedies

Once engaged in children's environmental health and environmental justice work, attorneys have an important role in formulating remedies that redress environmental injuries sustained by low-income and minority children. At the very least, remedies should further the two aspects of environmental justice referred to in the EPA definition of that term: preventing a disparate impact on low-income and minority communities through the adoption of precautionary approaches toward environmental risks; and ensuring that these communities are meaningfully involved in future government decisions that affect the health of children who live there.[37]

Precautionary remedies are clearly necessary given the absence of health-based regulatory standards for most of the toxic chemicals found in children's environments. Where such standards have been set, often exposure levels once considered to be safe are found to cause harm after all when scientists (postrelease and postexposure) become better able to measure the ill effects. This is especially true for children because regulatory standards for toxic chemicals are usually developed, if at all, with respect to the health effect on adults, who are significantly less vulnerable than children to such exposure.

Consider the case of lead's historic use as an additive to paint. Some paint companies knew enough about lead's dangers before 1900 to advertise that certain paints were not made with toxic lead.[38] Yet a vague evolving risk assessment was used to justify continued use of lead in paint until the federal government banned it in 1978.[39] Between lead's introduction into paint at the turn of the twentieth century and the mid-1960s, the U.S Public Health Service considered any blood lead level in children below 60 micrograms per deciliter of whole blood to be "safe." However, since then, that agency has lowered its elevated blood lead level "safety" standard from 60 to 40, to 30, to 25, and now to10 micrograms per deciliter of whole blood.[40] Even more recent research suggests that blood lead levels below 10 micrograms per deciliter are not safe either and that the greatest decremental loss of intelligence due to lead absorption—some 7.4 I.Q. points—may occur during the initial elevation from 1 to 10 micrograms of lead per deciliter.[41] Knowing what we know now about lead, clearly children's health would have been better served by prohibiting the adding of lead to paint until lead was proven scientifically safe for its intended use in relation to young children. Further, if at the

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[36] National Institute of Environmental Health Sciences, Successful Models of Participatory Community-Based Research: Final Report (2000), available at www.niehs.nih.gov/translat/cbr-final.pdf.

[37] See *supra* note 6 and accompanying text.

[38] National Research Council, Measuring Lead Exposure in Infants, Children, and Other Sensitive Populations 25 (1993). A copy of an old lead-free paint advertisement from 1897 is available at http://www.nap.edu/openbook/030904927X/html/25.html.

[39] Effective February 27, 1978, the Consumer Product Safety Commission banned from consumer use most paint and similar surface coating materials with 0.06 percent or more of lead content by weight (42 Fed. Reg. 44199 (Sept. 1, 1977); codified at 16 C.F.R. pt. 1303).

[40] Centers for Disease Control and Prevention, Preventing Lead Poisoning in Young Children 7–15 (1991). See also Agency for Toxic Substances and Disease Registry, Lead Toxicity 33 (2000) (Figure 1), available at http://atsdr1.atsdr.cdc.gov:8080/HEC/CSEM/lead/lead.pdf.

[41] Richard. L. Canfield et al., *Intellectual Impairment in Children with Blood Lead Concentrations below 10 ?g per Deciliter*, 348 New England Journal of Medicine 1517–26 (2003).

time lead was considered for use as a paint additive, not enough was known about the harmful effects to young children of adding lead to paint, the additive should have been prohibited until its safety could be established within a reasonable degree of medical certainty.

The current regulatory approach to toxic exposure, obviously has not proven effective in preventing harm to the public. The current approach erroneously assumes that there is an "acceptable" level of risk to society from toxic exposure, that there is or will be developed later sufficient scientific knowledge of the risks involved to make judgments about what levels of risk are acceptable, and that those risks can be managed safely even if they are identified after exposure has harmed young children. Environmental advocates worldwide are urging that the current regulatory approach be replaced with a new environmental protection paradigm called the "precautionary principle."[42] The most widely accepted statement of the precautionary principle reads: "When an activity raises threat of harm to human health or environment, precautionary measures should be taken even if some cause[-]and[-]effect relationships are not fully established scientifically."[43] The precautionary principle is beginning to make its way into laws, policies, and international treaties and agreements. Recent examples of the manifestation of this principle are a new San Francisco Precautionary Principle Ordinance and a new European Union law known as Research, Evaluation, and Authorization of Chemicals, requiring chemical makers to give evidence of safety for their products before they can be marketed.[44] The EPA has revised its guidelines for carcinogen risk assessment to account for the different and special vulnerability of young children to the harmful effects of exposure to carcinogens.[45]

Children's environmental health and environmental justice remedies must also rectify the historic exclusion of low income and minority communities from environmental decision making. A recent National Academy of Public Administration study of local planning commissions and zoning boards found that most planning and zoning board members are men, most members are 40 years old or older, more than nine out of ten members are white, and boards contain mostly professionals and few, if any, nonprofessional or community representatives.[46] Moreover, government decision making occurs at locations outside low-income and minority communities and at forums where English is the only language spoken. Low-income and minority communities are further disadvantaged in environmental decision making since those decisions are based on interpretations of scientific data and theories by so-called environmental experts. Few low-income and minority communities have the financial resources to hire their own experts, and, unlike in more affluent white communities, few community members will have gained the requisite expertise through their own education or professional experience.

The objective of any remedies directed against environmental decision-making bodies to further public participation by

[42]See, e.g., Nancy Myers, *The Rise of the Precautionary Principle: A Social Movement Gathers Strength*, 25 MULTINATIONAL MONITOR (Sept. 2004), at *http://multinationalmonitor.org/mm2004/09012004/september04corp1.html*. Additional information on the precautionary principle is available from the Science and Environmental Health Network, www.sehn.org/.

[43]The Wingspread Consensus Statement on the Precautionary Principle, adopted in January 1998, available at www.sehn.org/wing.html. This principle was adopted at the Wingspread Conference on the Precautionary Principle convened by the Science and Environmental Health Network, the Johnson Foundation, the W. Alton Jones Foundation, the C.S. Fund, and the Lowell Center for Sustainable Production at the University of Massachusetts–Lowell. The thirty-two conference participants included treaty negotiators, activists, scholars, and scientists from the United States, Canada, and Europe.

[44]SAN FRANCISCO ENVIRONMENT CODE ch. 1, § 100-104 (enacted June 17, 2003), available at http://temp.sfgov.org/sfenvironment/aboutus/innovative/pp/sfpp.htm. Information on Research, Evaluation, and Authorization of Chemicals is available at http://europa.eu.int/comm/enterprise/reach/.

[45]U.S. Environmental Protection Agency Final Guidelines available at http://cfpub.epa.gov/ncea/raf/recordisplay.cfm?deid=116283.

[46]NATIONAL ACADEMY OF PUBLIC ADMINISTRATION, ADDRESSING COMMUNITY CONCERNS: HOW ENVIRONMENTAL JUSTICE RELATES TO LAND USE PLANNING AND ZONING 50 (2003) available at http://www.napawash.org/Pubs/EJ.pdf.

low-income and minority communities should be to engage as many members of the affected community as possible at a meaningful time and place and in a meaningful manner.[47] The mechanisms by which decision-making bodies can enhance public participation by low-income and minority communities include the following: developing and implementing public involvement plans, forming community stakeholder groups or advisory committees, making technical assistance grants to community groups, and conducting informational meetings in the community where interpreters are available. Filing discrimination complaints with the EPA under Title VI of the Civil Rights Act of 1964 (or the threat of filing such complaints) may be the necessary catalyst to change the decision-making processes of environmental decision-making bodies.[48]

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Legal aid lawyers are best positioned to lead the needed charge for improved health outcomes for low-income and minority children. Due to their poverty, our clients bear the brunt of poor environmental decision making; and their children, the most vulnerable of all, lack the legal capacity either to consent or to object to this intergenerational onslaught of toxic burden. Low-income and minority communities historically have been difficult to organize, and even when organized their voices go largely unheeded. Moreover, those communities lack the resources to hire their own lawyers when environmental agencies, corporations, and local governments ignore their voices and inflict further environmental injury. The natural, logical, and expected voices for these children are legal aid lawyers. We hope that the following articles serve as a call to action for this important charge.

ADDITIONAL RESOURCES ON THE INTERNET

www.cehrc.org. Link to Community Environmental Health Resource Center, a project of the Alliance for Healthy Homes. Contains low-tech tools for checking high-risk homes for environmental health hazards and resources for using hazard-investigation results to win corrective action and policy change.

www.ncsl.org/programs/environ/envhealth/cehdb.htm. National Conference of State Legislatures' environmental health legislation database includes pending legislation and recently enacted laws relating to Children's Environmental Health.

www.epa.gov/enviro/html/em. Link to Enviromapper, a mapping tool developed by the U. S. Environmental Protection Agency to map environmental information, including air releases, drinking water, toxic releases, hazardous wastes, water discharge permits, and Superfund sites.

www.scorecard.org. A project of Environmental Defense; generates a pollution report for your county covering air, water, chemicals, and more.

www.environmentalhealth.org. Website of Environmental Health Coalition, one of the oldest and most effective grassroots environmental justice organizations in the United States; working in the San Diego–Tijuana region.

[47] Cf. *Leone v. Town of New Shoreham*, 534 A.2d. 871, 874 (R.I. 1987) (the very foundation upon which due process rests is "an opportunity to be heard in a meaningful manner at a meaningful time").

[48] See *supra* III. For further suggestions on measures to enhance public participation by low-income and minority communities, advocates are encouraged to consult U.S. Environmental Protection Agency, Draft Final Title VI Public Involvement Guidance for EPA Assistance Recipients Administering Environmental Permitting Programs, 70 Fed. Reg. 10625 (March 4, 2005).